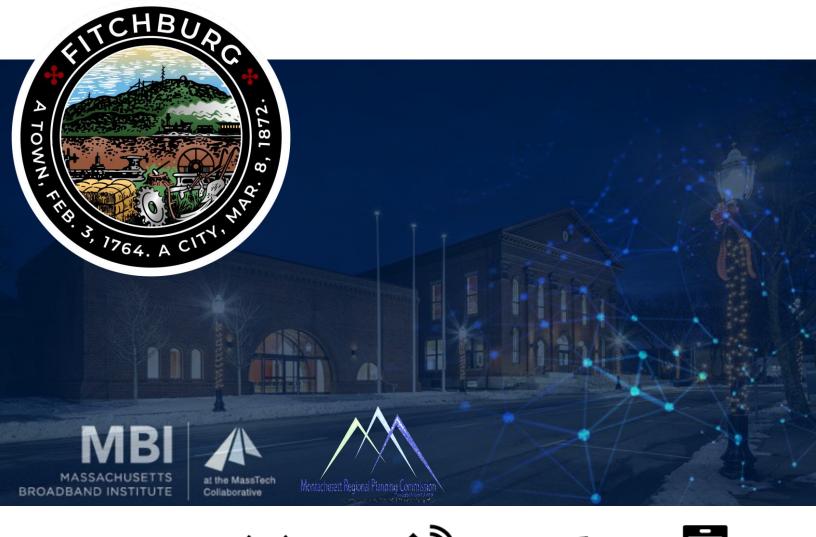
Municipal Digital Equity Planning Program:

Digital Equity Plan

City of Fitchburg, Massachusetts







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City of Fitchburg Digital Equity Plan



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Prepared by the Montachusett Regional Planning Commission *for* The City of Fitchburg

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City of Fitchburg

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Executive Summary

This executive summary provides an overview of the planning process, findings, and recommendations associated with the City of Fitchburg's Municipal Digital Equity Plan (2025). The summary provides a background on the Massachusetts Broadband Institute's Municipal Digital Equity Planning Program and a general introduction to digital equity planning. It outlines common values and practices associated with enhancing access to broadband internet, digital literacy, and digital technology and resources (Section 1 and Section 2), describes the planning and community outreach and engagement processes initiated by the City and its consultant, the Montachusett Regional Planning Commission (Section 3), evaluates the existing conditions of the City and region (Section 4), assesses community needs necessary to address or overcome identified challenges and barriers to digital access and inclusion (Section 5), and provides strategic recommendations through implementable goals and actions intended to enhance digital equity in Fitchburg (Section 6).



City of Fitchburg Digital Equity Plan – Executive Summary

Digital City of **Equity Plan** 2025

Fitchburg

INTRODUCTION TO DIGITAL EQUITY PLANNING 1

Section 1 describes the Municipal Digital Equity Planning program and demonstrates the meaning and importance of digital equity, the digital divide, and digital inclusion. The section also introduces and defines the Digital Equity Act and the eight designated covered populations of the Act. Further, it provides a summary of the growth of broadband internet and digital technology in the 21st century to demonstrate the significance of technology to our everyday lives. Finally, it validates the importance of overcoming the digital divide and enhancing broadband internet access through increased availability, affordability, and adoption.

Below is a summary of important aspects and considerations of Digital Equity Planning:

- The City of Fitchburg aims to achieve digital equity through a Municipal Digital Equity Plan, focusing on access, affordability, and adoptability, the "Three A's".
- Over 4 billion people globally have internet access, highlighting the need for equitable digital opportunities.
- In 2024, daily data creation is estimated at 400 exabytes, emphasizing the growing reliance on digital technologies.
- Digital equity efforts target various populations, including lower-income households, aging individuals, and those with disabilities.
- The Digital Equity Act of 2021 establishes programs to empower covered populations and enhance broadband access and digital literacy.
- The vision for Massachusetts includes universal high-speed internet access for all residents, ensuring full participation in society and the economy.
- The digital divide presents challenges related to internet supply, demand, and digital literacy, affecting individuals' opportunities for success.
- Addressing digital inequity is essential for social and economic justice, as it impacts education, employment, and overall quality of life.

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:



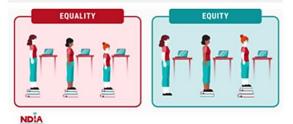
Internet Connection: Do all populations experience internet connection that is affordable, fast, and reliable? Can all populations access the internet?



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?



Digital City of Equity Plan 2025

Fitchburg

DIGITAL EQUITY VALUES & BEST PRACTICES 2

Section 2 discusses the purpose of digital equity planning and its guiding principles. The section introduces digital equity values, best practices, and strategic approaches for improving broadband access and digital equity and inclusion in Fitchburg. Further, it describes the importance of understanding and addressing the "Three A's" to narrow the digital gap and enhance digital inclusion and equity. To fully understand and address broadband access disparities among various demographic groups it is essential to understand the underlying principles, values, and best practices associated with improving digital equity and broadband internet access.

Below is a summary of several aspects of those guiding principles, or Digital Equity Values & Best Practices:

- The Digital Equity Planning process aims to assess community needs and develop a comprehensive action plan for improvement.
- Fitchburg's gaps in broadband access and digital inclusion are influenced by geographic, social, economic, and educational opportunity factors that are evaluated and assessed throughout this Plan; Adherence to the guiding principles and practices provided herein will allow the City to fully understand those factors and take measures to overcome challenges and barriers to broadband internet access and digital inclusion.
- Relative to broadband internet and digital literacy, the term "access" is inclusive of availability, affordability, and adoption of broadband internet and digital technologies, relative to broadband internet service, digital devices, digital technologies, and digital literacy skills and opportunities.
- Digital Equity Plans are intended to align with existing community development efforts to enhance digital inclusion and equity; An effective Plan should emphasize a complete evaluation of existing conditions and assessment of community needs and aim to establish measurable objectives to reduce the digital divide, focusing on Digital Equity infrastructure, programs, and services.
- The National Telecommunications & Information Administration's (NTIA) 'Internet for All' program's Digital Equity Plan Guidance document, recommends that digital equity plan objectives align with the objectives of existing community plans and goals,



Identify a core team of digital equity champions, pursue increased funding, and become a leader in digital equity.



Expand community outreach and strengthen partnerships.



Promote access to affordable devices and broadband internet.



specifically within: Economic Development; Education; Healthcare & Wellbeing; Civic and Social Engagement; Delivery of Municipal, Government, and Community Services.

- NTIA also recommends ongoing assessment using measurable objectives of broadband internet availability and affordability, online accessibility and inclusivity, digital literacy, online privacy, safety, and security, and device availability and affordability.
- Municipal leaders should consider investments in both infrastructure-based and programming- or service-based solutions.
- The plan provides a general list of best practices and strategic approaches for City leaders to implement the goals and objectives of a Digital Equity Plan most effectively.
- Municipal officials should implement policies and programs focused on digital access, affordability, and digital literacy.
- The FCC E-Rate program is a beneficial cost-saving program • available to municipalities through public schools and libraries.
- Ongoing community engagement is essential to understand the digital equity needs of diverse groups and covered populations.
- Maintaining a map of unserved areas will help accelerate broadband deployment and identify strategic corridors for improvement.
- incorporate high-speed Public projects should internet infrastructure in all public projects and large-scale developments.
- A robust program for refurbishing digital devices can provide lowincome households with necessary technology for digital access.
- Municipalities are encouraged to deliver online services to improve efficiency and reduce environmental impacts from vehicle trips.
- Coordination with state and federal legislators to adapt traditional funding mechanisms for community cable access television (CATV) programs in response to changing communication, news, entertainment, and digital media delivery and consumer access methods is critical to ensuring the future success and effectiveness of CATV and their service to the community.
- A committee or coalition of digital equity leaders and partners should be established to ensure successful Plan implementation.
- Establishing and building partnerships with local organizations, schools, and community centers is key to providing digital resources and Digital literacy training opportunities that address the needs of covered populations.







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



Track the local broadband market to advocate for consumers and promote job opportunities locally.

Digital City of Equity Plan

Fitchburg 2025

THE PLANNING PROCESS 3

Section 3 discusses the Municipal Digital Equity planning processes undertaken by the City and MRPC in the development of a Digital Equity Plan, which focused on community and stakeholder outreach, engagement, and input.

Below is a summary of several aspects of the Planning Process, including stakeholder and public outreach and engagement:

- A core team or advisory working group was established to guide and inform the process and Plan development.
- The Digital Equity Planning process involves local and regional partners to assess community needs and develop actionable strategies.
- A stakeholder questionnaire and interview process were initiated to gather information and input from essential stakeholders; Separate from Core Team and Focus Group meetings, over 20 individual stakeholders were interviewed as part of the planning process and 14 completed a stakeholder questionnaire.
- · Several focus group meetings were also conducted to gather information related to certain covered population groups.
- Focus group meetings included the Fitchburg Public Library, School • Department, Senior Center, Commission on Disability, Social Services Organizations and Businesses, Social Services Organizations serving Racial & Ethnic Minority Groups, Community Development, and Municipal Information Technology.
- According to information gathered at tech-help workshops conducted at the Fitchburg Library and Senior Center, Digital literacy training is an essential need, especially for aging adults.
- The planning process included extensive community engagement, with surveys translated into multiple languages to reach diverse populations.
- Focus groups revealed that veterans and low-income households face unique challenges in accessing digital services and devices.









Digital City of **Equity Plan** 2025

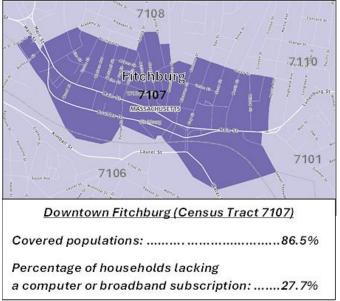
Fitchburg

EXISTING CONDITIONS EVALUATION 4

Section 4 evaluates the existing conditions around digital equity, broadband access, and the demographics of Fitchburg's covered populations. In addition, the section identifies Critical Digital assets (i.e., a digital computer, communication system, or network that is a component of a critical Information System), Community Anchor Institutions, and Digital Hubs that support digital literacy and access in Fitchburg.

Below is a summary of Fitchburg's Existing Conditions relative to broadband internet access and digital equity and inclusion:

- Fitchburg faces significant digital equity gaps in broadband access, affordability, and adaptability, particularly among covered populations.
- Approximately 70.5% of Fitchburg's population belongs to one or more covered populations of the Digital Equity Act.
- Challenges barriers and are exacerbated within some areas of Fitchburg where "covered populations" of the Digital Equity Act are as high of 86.5% of the



population, specifically within Downtown Fitchburg (Census Tract 7107).

- 93.3% of households have a computer, while 88.3% have a broadband internet subscription, but access varies significantly by neighborhood.
- In some Census Tracts, up to 27.7% of residents lack a computer or broadband connection, highlighting a notable digital divide.
- Fitchburg has a population of 41,946, with a median income of \$65,963, and 13.9% living below the poverty line.
- 21.9% of households are classified as covered households, earning below 150% of the poverty level.
- The Affordable Connectivity Program (ACP) was a crucial internet saving program that ended in June of 2024, resulting in increased internet costs for 3,576 households in Fitchburg.
- 15% of Fitchburg's population has one or more disabilities, with 37.2% in the Downtown area alone, a covered population that faces significant digital equity challenges.

COMMUNITY NEEDS ASSESSMENT 5

Section 5 assesses digital equity needs associated with addressing or overcoming identified challenges or barriers affecting access to broadband internet and digital literacy, devices, and technology in Fitchburg, and among certain covered population groups.

Below is a summary of Community Needs relative to identified challenges and barriers:

- Increased access to digital devices (i.e., computers) and/or broadband subscription is needed, especially in areas with higher proportions of covered populations.
- More affordable internet is needed; The average internet cost in Fitchburg is \$93.91, with • 6.6% of respondents finding it "very hard" to pay for internet service.
- The Fitchburg Public Schools maintain 150 internet hotspots for eligible students, primarily those under the McKinney Vento program but more internet hotspots are needed for both the public schools and library.
- Digital literacy training is needed, specifically among aging adults over 60 and individuals with a language barrier.
- Tech help sessions may be more beneficial to aging adults than traditional digital literacy courses.
- Internet safety and security classes are needed, especially among aging adults and youth.
- Increased access to public internet, public computers/workstations, and public charging stations are needed.
- Access to reliable transportation can be a challenge or barrier limiting access to broadband ٠ internet and digital resources (including digital literacy classes) for many residents, particularly those who are members of a covered population group.
- Public transportation, accessible locations (geographic proximity to public transit and walkability, as well as ADA accessibility) and the possibility of online digital literacy training should be considered to provide equitable access to broadband internet, digital devices, and digital literacy training opportunities.





DIGITAL EQUITY RECOMMENDATIONS 6

Section 6 of Fitchburg's Municipal Digital Equity Plan provides a set of recommended goals and actions, and a compiled list of tools and resources necessary to enhance digital equity and inclusion within the City.

Below is a summary of the goals, actions, tools, and resources provided within Section 6:

- Fitchburg has the potential to become a regional hub for digital literacy and inclusion, and a statewide Digital Equity leader or Champion.
- Section 6 outlines seven Digital Equity Goals focused on increasing broadband internet access through increased availability, affordability, and adoption, and providing public internet and workspaces, and opportunities for digital literacy training, tech help, and skills.
 - Improve the effectiveness, efficiency, and quality of local initiatives that promote and enhance digital equity, literacy, and inclusion.
 - Increase access to affordable, fast, reliable internet.
 - Expand internet access and digital literacy through community engagement and inclusion to overcome existing barriers and challenges.
 - Further develop the municipality's technological resources and public digital workspaces.
 - Seek and secure funding opportunities for investment and long-term support of digital equity programs and services.
 - Become a municipal leader in digital equity through collaboration, inclusion, education, and programming.
 - Provide digital literacy training and skill building opportunities for people of all ages and abilities, and those that are part of a covered population.
- Section 6 presents an Action Plan Implementation Matrix that identifies and recommends 28 potential actions to achieve the seven established Digital Equity Goals.
- The Action Plan prioritizes public access to internet and new computer workstations at the ٠ library, senior center, Veterans center, and City Hall, digital literacy and tech help assistance, additional hotspots for public loan through the library, and recommends public wi-fi in outdoor spaces, including Downtown areas and parks and playgrounds.
- Fitchburg's Municipal Digital Equity Plan provides strategic guidance and recommendations for the City to enhance digital equity through increased access to broadband internet and digital devices, digital literacy and inclusion partnerships, and targeted support for vulnerable groups.



- The city aims to improve digital literacy and access through partnerships with organizations like UMass Lowell, MOC Youth Innovation Center, and MassHire, and ongoing collaboration with the Montachusett Regional Planning Commission (MRPC).
- Fitchburg is eligible for up to \$100,000 in funding through the MBI Municipal Digital Equity Implementation Grant program to support these initiatives and additional potential funding through the MBI Launch Pad program.
- A comprehensive compendium of digital equity funding programs and resources is provided.

CONCLUSION AND DIGITAL EQUITY VISION & MISSION

Fitchburg's Digital Equity Plan identified several factors affecting digital equity and inclusion including gaps in reliable internet service, diverse socioeconomic demographics affecting income and opportunity, higher-than-average internet services costs limiting access and affecting affordability, and limited access to public internet and digital workspaces, affordable devices and technology, and digital literacy training and tech help. However, with a clearly defined Digital Equity Vision and Mission, Fitchburg has the potential to develop a municipal framework to better support digital inclusion and enhance digital equity and literacy, and to become a leader, and champion of digital equity and access.



City of Fitchburg Digital Equity Vision

The City of Fitchburg envisions itself as a Digital Equity and Inclusion Leader and will implement and promote the Goals and Actions of this Plan to champion initiatives and create and pursue new opportunities in a way that honors that commitment and is deserving of such recognition as "The City of Digital Equity and Inclusion".

City of Fitchburg Digital Equity Mission

With thoughtful and inclusive planning, it is our mission, through the implementation of this Plan, to promote Digital Equity through increased access to affordable services and programs. We are confident that this mission can be accomplished by providing the City's residents and visitors with the tools, resources, programs, services, and opportunities needed to achieve higher levels of digital inclusion and literacy. We believe the City's vision and mission can be further advanced through the establishment of free, open, yet secure public access to reliable, high-speed internet and internet-connected digital devices and workstations and providing digital navigation and training services to advance digital literacy, safety, security, and individual levels of comfort and convenience among people of all ages and abilities.



1 AN INTRODUCTION TO DIGITAL EQUITY PLANNING

The Municipal Digital Equity Planning Program



1.1 PLAN BACKGROUND & OVERVIEW

The City of Fitchburg received technical assistance from the Montachusett Regional Planning Commission (MRPC), 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, improving digital equity and inclusion 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 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, and increasing staffing and hours to those spaces, or, providing convenient, connected outdoor workspaces in places where hours or staffing are limited. In Urban areas where housing insecurity and affordability issues exist, it may focus on providing access to free, internet-connected workspaces and devices to unhoused individuals.

Increasing digital inclusion or bridging the digital divide to achieve digital equity is dependent upon adopting an established framework of sound practices aimed at increasing access to broadband internet and digital technology, devices, knowledge, and skills. This Plan provides that framework for the City of Fitchburg.

Section 1 of the Plan serves as an **Introduction to Digital Equity Planning**; it defines "digital equity", describes the existence of a "digital divide", explains the importance of "digital inclusion", and summarizes the "Digital Equity Act", a Federal Law intended to increase internet access and the adoption of broadband internet among covered populations through targeted planning and programming.

Section 2 provides a comprehensive overview of **Digital Equity Values and Best Practices** necessary to overcome existing challenges and barriers currently limiting inclusion or affecting equity.

Section 3 describes the public Planning Process that informed the Plan.

Section 4 evaluates the Existing Conditions around digital equity in the City of Fitchburg.

Section 5 assesses the **Community Needs** required to overcome any challenges or barriers contributing to digital inequities or limiting digital inclusion.

Finally, **Section 6** identifies **Recommendations** (Strategic Vision, Goals, Actions, and Resources) for increasing digital inclusion, bridging the digital divide, and enhancing digital equity in Fitchburg.

Without a comprehensive understanding of the issue, potential pathways to solutions, existing conditions, and community needs, it is impossible to establish a vision and identify effective strategies to overcome the challenges and address the needs of the community. Enhancing Digital Equity is the overall vision, intended purpose, and desired outcome of this planning process.

Section City of

Fitchburg

1.2 BROADBAND INTERNET AND DIGITAL INFORMATION & TECHNOLOGY HERE AND NOW

The first two decades of the 21st century have been defined by the emergence of global economies, increasing private enterprise, wide-scale technological and telecommunications 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!^{1,2} 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.)³

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

Broadband internet, digital information, and digital technologies are more important now than ever, and urban areas and Gateway Cities, like the City of Fitchburg play an important role in setting local and regional standards and providing access to broadband internet, free public wi-fi, and digital literacy and inclusion resources and opportunities. Gateway Cities serve as regional "hubs" and "champions" of digital equity and inclusion – places where accesses to broadband internet, digital literacy resources, and digital equipment, workspaces, and public wi-fi are not only more broadly available and more conveniently accessed, but also more highly prioritized and promoted as universally necessary and essential needs of everyday life and living. Attaining and safeguarding the City of Fitchburg's status as a local and regional digital equity and inclusion center, or "hub", and local and regional leader, or "champion", is one of the overarching visions and primary purposes of this plan.

¹ "Digital in 2018: World's internet users pass the 4 billion mark". We Are Social. 30 January 2018.

² "Eric Schmidt: Every 2 Days We Create As Much Information As We Did Up To 2003". 4 August 2010.

³ https://explodingtopics.com/blog/data-generated-per-day



1.3 DIGITAL EQUITY & INCLUSION

The Challenge, Opportunity, and Vision:

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?".

1.3.1 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.

1.3.2 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



To enhance the equitability of digital access you must first understand the problem, otherwise known as the "Digital Divide", only then can you see the opportunity it presents – improved "Digital Inclusion" through greater access to broadband internet and digital devices.

1.3.3 The Challenge: Digital Divide

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).⁴ This plan examines the existing conditions of the City of Fitchburg, with a focus on social and economic demographics of populations or groups determined to be most susceptible to digital inequity.

Digital Equity Gaps Impact:

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

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.

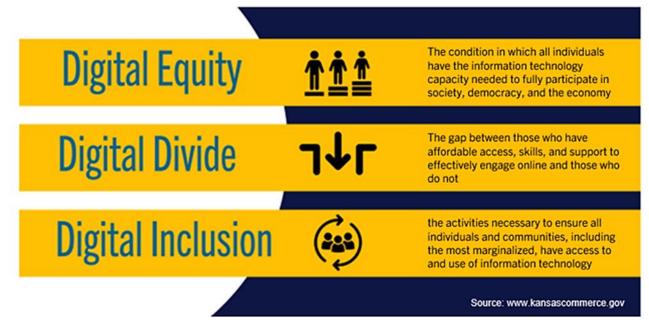
1.3.4 The Opportunity: Digital Inclusion

The importance of access to reliable broadband internet service and overall access through 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 important, if not critical to how individuals participate in the society, economy, and civic institutions of the United States, and is essential to accessing personal health and wellness services and obtaining education and building careers. There are high societal and economic costs associated with digital inequality and exclusion. A person's opportunity for economic success, 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 socio-economic, demographic factors can increase such exclusions and exacerbate existing wealth and

⁴ 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



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.



1.3.5 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 <u>Massachusetts</u> <u>Internet for All Plan</u>,⁵ 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."



⁵ Massachusetts Internet for All Plan, Massachusetts Broadband Institute, 2024: <u>https://broadband.masstech.org/sites/default/files/2024-03/MA%20SDEP%20FINAL_3.26.24.pdf</u>



1.4 THE DIGITAL EQUITY ACT

The Digital Equity Act [47 USC 1721(8)] of 2021⁶ 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 for those populations
- Implement digital literacy training programs that teach basic, advanced, and applied skills and other professional & workforce development knowledge, skills, and abilities
- 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 is consistent with the purposes for which the Program is established

As an initial step in the development of such programs for digital equity improvements, as with most publicly funded planning initiatives, a community engagement and public involvement process was established. The community engagement process was then 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 and increasing digital inclusion to enhance digital equity. The resulting Digital Equity Plan is intended to provide a strategy to enhance digital equity community-wide, and particularly among certain "covered populations" of the Digital Equity Act. The eight covered populations⁷ of the Digital Equity Act, listed above, are defined below:

1.4.1 Definitions of Covered Populations of the Digital Equity Act

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

⁶ <u>https://uscode.house.gov/view.xhtml?hl=false&edition=prelim&req=granuleid%3AUSC-prelim-title47-chapter16-subchapter2</u>

⁷ Actual proportions of residents covered by each of the eight covered populations relative to Fitchburg's total populations are provided within Section 5, Existing Conditions, of this Plan.

level, as determined by using criteria of poverty established by the Bureau of the Census.

Aging Individuals

The term "aging individual" has the meaning given the term "older individual" in section 102 of the Older Americans Act of 1965 (42 U.S.C. 3002),⁸ within which the term "older individual" means an individual who is 60 years of age or older.

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.

Veterans

The term "veteran" means "a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable", as defined within section 101 of title 38, United States Code.⁹

Individuals with Disabilities

The term "disability" means, "with respect to an individual - a physical or mental impairment that substantially limits one or more major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment", and any other circumstances or scenarios as defined within the Americans with Disabilities Act of 1990 (42 U.S.C. 12102).¹⁰

Individuals with a Language Barrier

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 language is English or another language and whether or not the barrier is due to spoken or written language.

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.

Individuals who Primarily Reside in a Rural Area

The term "rural area" means a city, town, or incorporated area that has a population of less than 20,000 inhabitants and is otherwise consistent with the definition of the term given within section 601(b)(3) of the Rural Electrification Act of 1936 (<u>7 U.S.C. 950bb(b)(3)</u>).¹¹

⁸ <u>http://uscode.house.gov/quicksearch/get.plx?title=42§ion=3002</u>

⁹ https://uscode.house.gov/view.xhtml?req=granuleid:USC-2015-title38-section101&num=0&edition=2015

¹⁰ <u>http://uscode.house.gov/quicksearch/get.plx?title=42§ion=12102</u>

¹¹ http://uscode.house.gov/view.xhtml?req=(title:7%20section:950bb%20edition:prelim)



2

2 DIGITAL EQUITY VALUES AND BEST PRACTICES

The Purpose of Digital Equity Planning



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. Within urban areas, and medium to large sized Cities, specifically Massachusetts' Gateway Cities, like Fitchburg, digital equity and inclusion gaps are often exacerbated by income- and demographics-based



socioeconomic characteristics associated with certain covered population groups such as "Covered Households", "Individuals with Disabilities", "Individuals with a Language Barrier", and "Racial and Ethnic Minority Groups". In Fitchburg, a City with a high proportion of residents represented by one or more "covered population" group, these digital equity and inclusion "gaps" exist City-wide, but are particularly noticeable in certain areas (Census Tracts, or neighborhoods) with higher proportions of covered populations, as shown later within **Section 4** of this Plan.

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 City of Fitchburg is undergoing a Digital Equity Planning process to better understand the needs of the community. According to the National League of Cities, <u>Digital Equity Playbook</u>, assessing community needs and reporting on the findings is the first step City Leaders can take to "bridge the digital divide".¹² The outcome of this planning process, presented here, is a full evaluation of the digital equity landscape in Fitchburg and a Digital Equity Action Plan that establishes a community vision, and 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 small- to medium-sized Cities, broadband internet accessibility and connectivity issues currently do exist in Fitchburg and are related to various factors, including gaps in reliable internet service, diverse socioeconomic demographics affecting income and opportunity, higher-than average service costs limiting access and affecting affordability, convenient access to affordable devices and technology, gaps in digital literacy and available training or tech-help opportunities, other general accessibility issues, and a lack of free public internet spaces and digital resources and programs. These challenges and barriers, or gaps in digital equity, preclude access for many individuals. Further, Fitchburg's population demographics include a high proportion of individuals representing a covered population of the Digital Equity Act¹³.

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.

¹² <u>https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/digital_equity_playbook.pdf</u>

¹³ https://www.congress.gov/bill/117th-congress/house-bill/1841/text



2.2 BROADBAND INTERNET ACCESS:

Availability, Affordability, Adoptability

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.

The Three Components of Access— Availability, Affordability, Adoption

Availability: Is there sufficient infrastructure and coverage to deliver reliable, high-speed wired or wireless broadband service and technology tools for learning?

Affordability: Can learners and families/caregivers pay for the total cost of maintaining reliable, high-speed broadband service and technology tools for learning?

Adoption: Do learners and families/caregivers have the information, support, and skills to obtain regular, adequate access to reliable, high-speed broadband service and technology tools for learning?

Source: 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.

Identifying challenges and barriers related to broadband internet access (i.e., availability, affordability, adoptability) within the City of Fitchburg, and understanding the needs of the City's residents to overcome those challenges and barriers, within certain neighborhoods and among specific covered population groups, is essential. Understanding or evaluating existing conditions and assessing community needs are two of the primary purposes of this Plan.

According to the U.S. Census Bureau, the digital divide was an omnipresent issue in 2018,¹⁴ continued to be an issue in 2019,¹⁵ and the factors disproportionately affecting certain segments of the population were exacerbated and highlighted by the Covid-19 pandemic in 2020¹⁶, 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) actually 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,

¹⁴ https://www.census.gov/content/dam/Census/library/working-papers/2018/demo/SEHSD-WP2018-12.pdf

¹⁵ <u>https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-15.pdf</u>

¹⁶ https://www.census.gov/library/stories/2022/05/mapping-digital-equity-in-every-state.html



technology, and devices). The Covid-19 pandemic illustrated the need for creating community resiliency and providing the necessary amenities needed to thrive in today's world, including enhanced access to broadband infrastructure and a need for increased affordable broadband internet, and free access to public internet and digital technology and literacy programs, services, and resources.

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, including within racially and ethnically diverse areas of Cities, Towns, and developed metropolitan areas. 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 socioeconomic demographic factors referenced above. Income is often an indicator of internet service availability and strongly correlated with affordability and adoptability of service types. This trend is noticeable when comparing the Census Bureau's map of distribution of Covered Populations Under the Digital Equity Act and Massachusetts Environmental Justice (EJ) Area map within Fitchburg. The correlation is particularly striking when comparing the US Census Bureau's map layer for Population Lacking Computer or Broadband with EJ Areas.

Since 2020 and the COVID-19 pandemic, people rely more on broadband internet and online, webbased 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 lower-income and racially and ethnically diverse areas of Gateway Cities, like Fitchburg.

2.2.1 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 2015¹⁷. 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 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".

A community specific evaluation of internet availability is provided within **Section 4.3** of this Plan.

2.2.2 Broadband Internet Affordability

According to a recent report published by the National Skills Coalition¹⁹, 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-economically 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.

 $^{^{\}rm 17}$ FCC News, Office of Media Relations, Press Release dated March, 14, 2024:

https://docs.fcc.gov/public/attachments/DOC-401205A1.pdf

¹⁸NTIA BEAD Program, Program Documentation:

https://www.ntia.gov/funding-programs/internet-all/broadband-equity-access-and-deployment-bead-program¹⁹ 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/

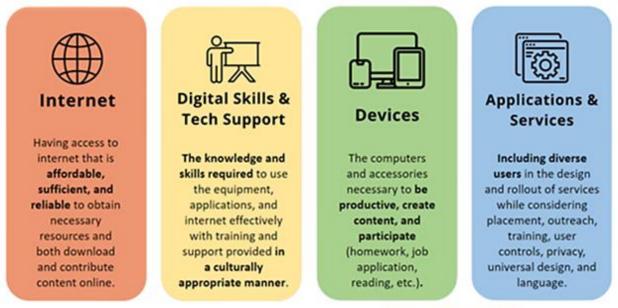


According to the survey, 77% of respondents say losing their ACP benefit would cause a critical disruption in their lives by causing them to have to change their plan or drop internet service entirely. Approximately three-fourths report using their internet service for work, health care appointments, job applications and schoolwork. Finally, when asked how losing their ACP benefit would affect them, many said they would need to cut other basic expenses such as food or gas if they had to pay an additional \$30 for their internet service. Others said they would have to drop their internet service.²⁰

A community specific evaluation of internet affordability is provided within Section 4.3 of this Plan.

2.2.3 **Broadband Internet Adoptability**

Digital adoptability and connectivity are 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).



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

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 broadband adoption barriers apart from availability and affordability. Learners who have immigrated to the U.S. and learners from multilingual homes face language barriers and other unique socio-economic and cultural

²⁰ https://www.ncsl.org/state-legislatures-news/details/without-federal-program-whats-the-outlook-for-affordablebroadband



challenges that limit access to broadband internet and digital devices. Children with disabilities, who disproportionately live in low-income households, also 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.²¹

A community specific evaluation of internet adoptability is provided within **Section 4.3** of this Plan.

2.3 ALIGNMENT WITH EXISTING EFFORTS THROUGH STRATEGIC VISIONS

A primary purpose of this Plan is to create strategic visions for achieving digital equity that are in alignment with existing efforts already underway or established as a component of other sectorbased community development efforts.

In line with the National Telecommunications and Information Administration (NTIA), Internet for All program's Digital Equity Plan Guidance, this Digital Equity Plan recognizes existing local and regional efforts and strives to align its recommendations with the goals of existing plans or established frameworks to achieve enhanced outcomes related to the following critical aspects or sectors of economic and community development and well-being:



| - | Economic and Development Workforce Development Goals, Plans, and Outcomes |
|---|---|
| | Educational Outcomes |
| Ð | Health Outcomes |
| Ë | Civic and Social Engagement |
| | Delivery of other Essential Services |

²¹ 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>)



As recommended by NTIA, the 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 dimensions or disciplines of digital equity and inclusion:



Broadband Availability & Affordability



Online Accessibility & Inclusivity



Online Privacy &



Digital Literacy

To become a municipal leader in digital equity and inclusion a City, 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 | |
| City-owned conduit | Affordable (and free) home internet | |
| Dark Fiber | Public networks and connections | |
| Lit Fiber | Affordable and free devices | |
| Community (Municipal) Broadband | Digital Navigators (trainers) | |
| Fixed Wireless Network | Digital Literacy Training & Skills Building | |
| Wireless Mesh Network | Tech-Support | |

The following two **Sections**, **2.4** and **2.5**, offer a set of Best Management Practices and a Strategic Approach or Frameworks to guide Fitchburg's City Leaders in their effort to enhance digital equity and inclusion City-wide and to successfully implement the goals and actions set forth in **Section 6**.

2.4 BEST PRACTICES FOR MUNICIPALITIES

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

Municipal Digital Equity Best Management Practices

• Promulgate policies and programs that facilitate digital access, through increased availability, affordability, and adoptability to broadband internet and digital devices through



inclusion, digital literacy programs and education, and capital investment in deployment and adoption by residents to overcome challenges and barriers to achieving digital equity.

- Develop and adopt policies and measures to promote and facilitate efficient broadband deployment and adoption and increase access to reliable high-speed 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.
- Post on City website and distribute information to low-income residents about internet access, digital literacy, affordable home Internet service offers and lower-cost devices.
- Recognize remote workers (city staff and working residents, alike) and the importance of broadband internet access to support remote work as workforce development strategy and sustainability and pollution reduction 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.
- Conduct ongoing community engagement to Aging Adults over 60, Veterans, lower income households, individuals with disabilities, ethnic and racial minority groups, individuals with language barriers, including lower levels of literacy, previously incarcerated individuals, and rural residents, to continue to understand their varying Digital Equity and broadband access needs.
- 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.
- Coordinate and Partner with MBI, ISPs and Regional and Statewide Partners, and Leadership Groups for middle- and Last-mile broadband infrastructure planning.
- Identify strategies, adopt policies, and seek funding to accelerate broadband deployment and adoption, including coordinating, negotiating, and partnering ISPs to connect unserved areas and assist low-income residents and other covered population groups.
- Continue to reference the MBI Mass Broadband Map and Massachusetts Internet for All Plan as guidance and pursue funding to implement goals, strategies, and actions identified within the Municipal Digital Equity Plan.
- Adopt implementing ordinances for policies and plans that promote and facilitate investment and development for digital infrastructure, digital equipment and technology, digital literacy programs and services, and other digital equity measures.



- Maintain enrollment in the E-Rate Program for public schools and public library. The Fitchburg School Department is currently enrolled in the FCC E-Rate Program at an 85% rate which provides subsidized funding to supply wireless internet connectivity at all schools. The Fitchburg Public Library partners with a library consortium, CW MARS, for internet access and other resources. As part of the consortium, they receive a 63% savings rate from the FCC E-Rate program and an additional 20% savings from a Massachusetts Board of Library Commissioners (MBLC) Telecommunications grant on all of their telecommunication services and infrastructure, including broadband internet services.
- Enact procedures to streamline broadband project approvals and permitting, including priority focus for partnerships with ISPs.
- Incorporate high-speed Internet infrastructure (including conduit) into all public projects, especially major transportation, affordable housing, parks & recreation, and public utility projects.
- Purchase and utilize technology which can enable residents to access public information and services digitally.
- Develop a robust "green technology ecosystem" to refurbish and reallocate retired computing devices 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.
- Purchase computing devices and hotspots in bulk to be loaned and/or sold at a discounted price for residents in device lease, adoption, or distribution programs.
- Provide information and services digitally and online through broadband internet to increase convenience and promote the relevance of technology to consumers to encourage adoption, increase access to services, and reduce impacts on the environment.
- Provide online access to all municipal informational materials, policies, plans, ordinances, and services, including remote participation in public meetings.
- Deliver as many public services as possible "online" to reduce vehicle trips and improve efficiency, productivity, affordability, and convenience.
- Encourage and support schools to implement effective technology and Digital Literacy and Inclusion programs.
- Coordinate with state and Federal legislators to ensure that funding mechanisms for Community Cable Access T.V. providers evolve and advance in conjunction with the evolution and advancement of the provision and consumption of streaming media and digital services in response to declining cable T.V. subscriptions.
- 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.

2.5 A 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.

2.5.1 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 City of Fitchburg. 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.



Identify a core team of digital equity champions, pursue increased funding, and become a leader in digital equity.

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 Mayor, City Council, 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 is treat the implementation of this Plan's recommended goals and actions as a high 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 award program. In addition to their ongoing pursuit of digital equity and inclusion, they 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.



2.5.2 Community Engagement & Partnerships

The City of Fitchburg should continue to improve upon the City's processes for community engagement and building digital equity and inclusion partnerships. This should be considered when disseminating information (physically and virtually), collecting feedback, and announcing public events, especially those related to digital equity and inclusion. When disseminating information or promoting events around digital literacy, it is often overlooked that some segments of the population you are intending to serve may not have a computer or internet access or are not comfortable receiving information digitally. For this reason, the City should consider existing alternative (traditional) methods of outreach and engagement such as physical postings, yardboards, digital notification displays, posting in the Senior Center Calendar/Newsletter, in tax bills, and on the Fitchburg access Television (FATV) digital message board. Digital methods of outreach, such as social media and new, innovative methods like video "shorts" or other digital media content created for posting on City's Social Media accounts or Cable Access channel(s) should be used, but these should not be the sole method of communicating with the public. Hybrid methods



Expand community outreach and strengthen partnerships.

of engaging with the community to deliver important information or notices, such as through 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 City 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 City's websites and draft a onepage fact sheet 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 City of Fitchburg's Digital Equity Leaders should maintain and improve relationships with community partners dedicated to increasing digital equity throughout the City 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 FATV and nearby Ash-West Community Media (AWCM), Leominster.TV (LTV), 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, and Fitchburg Public Schools and the School's Family & Students Community Center should also be listed as an important regional digital literacy and inclusion resources. Further, other organizations and community assets providing 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.

2.5.3 Access to Broadband Internet and Digital Devices

The City of Fitchburg should strive to establish and build upon existing coordinated partnerships to



Promote access to affordable devices and broadband internet.

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 Fitchburg Public Library, City Hall, Fitchburg Housing Authority residential property common areas and community rooms, Fitchburg Senior Center and Veterans Center, and at other public areas and meeting spaces, including outdoor public spaces downtown and City parks and playgrounds. Another way 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 City Hall, Fitchburg Senior Center (Councils on Aging), and potentially through partnerships with the Housing Authority and Youth Innovation Center/MOC, inc. The inventory of hotspots publicly available (outside of schools) should be at least 50

units. (The Public Library currently has approximately 20-25 hotspots and an additional 26 units are recommended as part of this Plan.) 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 at the Public Library and School Department's Students and Families Community Center. The City of Fitchburg's Public Safety Departments (Police, Fire, Emergency Management) may also consider purchasing hotspots or satellite internet equipment and services to provide emergency on-site internet access during emergency responses to natural disasters or declared state-ofemergencies.

The City 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 Fitchburg Public School Department and Montachusett Regional Vocational Technical (Monty Tech) High School should continue to identify and address inequities, and other challenges and barriers experienced by students by continuing to provide free access to hotspots for students who



request them, to the greatest extent possible so that access to broadband internet and digital devices exists at a level greater than pre-Covid-19 levels.

Finally, the City 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 Fitchburg Access Television, Monty Tech, and the MOC, Inc.'s Youth Innovation Center, who could potentially provide opportunities for digital literacy training, refurbishing devices, and potentially establish additional partnerships and/or a regional network for digital device refurbishment and distribution.

2.5.4 Digital Literacy Training & Opportunities

The City of Fitchburg should continue to create, strengthen, and expand digital literacy opportunities and partnerships throughout the community and Twin City and Montachusett Regions. The City, 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 (Council on Aging luncheons), Veterans Center, and at other public community gathering locations like the School's Student & Families Community Center, and Fitchburg Housing Authority Common Areas or Community Rooms).





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 skillbuilding related to various applications from business, everyday living, to digital art, media, music, 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 benefits, social security benefits, Medicare benefits, healthcare appointments, medical results, Massachusetts Registry of Motor Vehicles' online applications, renewals, and administrative 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 its public survey.

The City should seek to 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 City and surrounding region, for whom Fitchburg is an information and resources "hub". The City 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.



Fitchburg

As part of the City's Digital Equity & Inclusion webpages described within subsection 5.2.1, above, a Digital Literacy Resources subpage and associated map should be created, highlighting related training resources and opportunities.

In consultation with a Digital Navigator or the Youth Innovation Center and other related partners, the City should develop and distribute digital literacy resources and guidance documents on the City website and at City Hall, the Senior and Veterans Community Centers and Public Library, as well as at the location of other Digital Equity and Inclusion partners, stakeholders, and Community Anchor Institutions.

Digital Inclusion:84 The activities that are necessary to ensure that all individuals in the United States have access to, and the use of, affordable information and communication technologies, such as-

- Reliable fixed and wireless broadband internet service;
- Internet-enabled devices that meet the needs of the user; and
- Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration; and
- Includes—
 - Obtaining access to digital literacy training;
 - The provision of quality technical support; and
 - Obtaining basic awareness of measures to ensure online privacy and cybersecurity.

Source: 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.

2.5.5 Addressing the Needs of Covered Populations

The City of Fitchburg should provide targeted support for vulnerable segments of the community,



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

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, and Veterans.

The City 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 Fitchburg Public Schools and Monty Tech School District, in coordination with the City should work to strengthen digital skills training for students in public schools and continue to track and improve



curriculum, courses, and training programs, both for teachers and students, based on identified needs. Private schools, charter schools, and parents who home-school their children should be encouraged to provide similar training to their students and public educational materials and information should be provided, if needed or requested by those entities.

The City, in consultation with a Digital Navigator or in partnership with the Youth Innovation Center and 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, Housing Authority community rooms, and/or Youth Innovation Center.

In addition, the City 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, Youth Innovation Center, MWCC, and other potential partners focused on inclusion and overcoming specific barriers and challenges faced by covered populations. Courses or skills-building opportunities should be based on the needs of specific covered populations, such as Veterans, aging adults, Individuals with disabilities, covered households, ethnic and racial minority groups, English-learners and individuals with a language barrier or lower levels of literacy, and incarcerated individuals or former inmates transitioning back into society.

2.5.6 Commercial & Economic Community Development

The City should promote local economic development opportunities related to digital literacy and



Track the local broadband market to advocate for consumers and promote job opportunities locally. 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, Youth Innovation Center, 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.

Section 1 and **Section 2**, presented above, provided an introduction and overview of Digital Equity Planning and introduced several core concepts, values, and principles demonstrating the importance of planning for and pursuing enhanced access to broadband internet and digital devices, technologies, and services. The following section, **Section 3**, describes the Digital Equity *Planning Process*.



3

3 DIGITAL EQUITY PLANNING PROCESS

Community engagement was an essential component of the development of the City of Fitchburg's 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.





To assist with the Digital Equity Planning Process, the Massachusetts Broadband Institute (MBI) partnered with Lead for America to provide an AmeriCorps member to the MRPC. Lead For America, American Connection Corps, is a national AmeriCorps program with the mission of promoting economic and community development through the promotion of digital equity. Through this program, MBI sponsored AmeriCorps members to be placed at host sites throughout the state of Massachusetts. These host sites all play a role in promoting digital equity.

The AmeriCorps member hosted at MRPC joined in the beginning stages of the planning process and was responsible for some initial outreach and stakeholder engagement, which was crucial for understanding existing conditions and building a comprehensive plan. MRPC also employed two planning interns during the planning process. These interns also played an important role in community engagement and outreach.

In addition, the Digital Equity Core Team Working Group (the Committee) is a team of municipal staff and local service agencies with a stake in providing information and technology resources throughout Fitchburg. The Committee includes representatives from City Hall, the Library, the Senior

Center, Veterans Services, and numerous social services agencies. With MRPC, the Committee provided guidance and oversight on developing the Plan and relayed community sentiment and expressed Digital Equity needs.

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.

As described above, the Digital Equity Core Working Group and project stakeholders provided valuable input, relayed comments from residents and community stakeholders, and participated in meetings throughout the Digital Equity planning process.

The Digital Equity Core Team Working Group met on the following dates and included the members listed in the table below:





- Kick-Off Meeting: April 24, 2024
- Planning Process Overview Meeting: June 20, 2024
- Community Vision Meeting: September 12, 2024
- Goals & Actions Scoping Session: November 13, 2024
- Goals & Actions Scoping Session: December 2, 2024
- Goals & Actions Review Meeting: December 12, 2024

| Fitchburg Digital Equity Planning Core Team | | | | | |
|--|--|--|--|--|--|
| Name Organization, Title | | | | | |
| Kimberly Leblanc | City of Fitchburg, Community Development Coordinator | | | | |
| Mary Jo Bohart | City of Fitchburg, Economic Development Director | | | | |
| Michele Marino | City of Fitchburg, Veterans Services Officer | | | | |
| Zuly Fernandez ACTION @ CHC Fitchburg, Administrative Supervisor | | | | | |
| Ayn Yeagle Growing Places, Executive Director | | | | | |
| Deborah Hinkle Fitchburg Public Library, Director | | | | | |
| Amanda Koeck City of Fitchburg, Council on Aging/Senior Center, Direct | | | | | |
| Colby Obrien | Making Opportunity Count (MOC), inc. | | | | |
| Stephen Adams | Community Foundation of North Central MA | | | | |
| Dolores Thibault-Munoz | NewVue Communities, (former) Deputy Director | | | | |
| Nate Glenny | Fitchburg Access Television (FATV), Director | | | | |
| Brianna Boulay | Fitchburg Housing Authority, Residents Coordinator | | | | |
| Trevor Bonilla | City of Fitchburg, IT Director | | | | |

DIGITAL EOUITY CORE TEAM WORKING GROUP

3.2 PUBLIC ENGAGEMENT

MRPC staff implemented a two-step stakeholder engagement process that included a questionnaire and follow-up interview. Commission staff also conducted a diverse range of community outreach and engagement activities, including attendance at community pop-up events. 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 & Community Workshops (Digital Literacy/Tech-Help Forums)
- Digital Equity Core Team Working Group Meetings

A public presentation of the Plan was made to the City of Fitchburg City Council at their meeting on April 1st, 2025.



A 15-day public review and comment period was held in conjunction with the public presentation.

The Digital Equity planning process included several community and stakeholder engagement popup events that allowed the City of Fitchburg to distribute information to the public regarding Digital Equity planning activities and promote the statewide and local Digital Equity surveys. The process also gathered critical input that helped to develop the goals and recommendations in this Plan. The Plan relied heavily on information collected through various means as outlined in the following sections.

3.2.1 Statewide Digital Equity Surveys

The city requested that the Statewide Digital Equity survey be translated to Spanish, Portuguese, Haitian Creole, French, and Hmong. Staff members from the University of Massachusetts – Amherst, Translation Center completed this task, and the translated surveys were distributed to the City. In addition, paper and digital copies of the survey were distributed to the Youth Innovation Center (MCO, inc.), LUK, inc., and the Massachusetts Department of Development Services North Central Area Office (MassAbility, Mass Department of Transitional Assistance), and paper copies of the survey and survey collection boxes were placed at:

- City Hall
- Senior Center
- Library

Survey promotional fliers were distributed by email to identified stakeholder organizations and posted and distributed at area businesses with a focus on the Downtown area. Additionally, Fitchburg has a community "Constant Contact" digital subscriber mailing list that was used for community engagement "mailings" early in the project to spread awareness and promote the survey. The school system also distributed Digital Equity information materials through their social media sites as a community partnership. The project and survey were also promoted by CHNA9 and FATV on their digital mailings and postings. Survey results are discussed in detail within **Section 5**, *Community Needs Assessment*, of this plan and examples of all fliers, leaflets, and outreach and engagement materials can be found within the *Appendix*, presented as **Section 7**.

3.2.2 Community Events and Pop-ups

MRPC staff attended several community pop-up events to conduct community outreach and engagement related to the Digital Equity Planning process and to promote the Digital Equity surveys. These associated events activities are listed in the Table below:

| Community Events | Date | Activity |
|------------------------------------|-----------|-----------------------------------|
| Community Health Connections Event | 3/6/2024 | Survey Box and Outreach Materials |
| First Thursday Pop-up | 3/7/2024 | Survey Box and Outreach Materials |
| Earth Day Celebration | 4/21/2024 | Table/Survey /Outreach Materials |
| Civic Days Block Party | 7/3/2024 | Table/Survey /Outreach Materials |
| Peace Walk/ Baseball Tournament | 9/28/2024 | Survey Fliers/Outreach Materials |
| Fitchburg Health Fair | 10/17/24 | Survey/Outreach Materials |

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3.3 STAKEHOLDER ENGAGEMENT

3.3.1 Digital Literacy Workshops

Working with AmeriCorps, MRPC scheduled digital literacy training on four occasions. AmeriCorps representative gave a presentation/demonstration of the Northstar Digital Literacy program to interested seniors as part of a scheduled senior luncheon on two separate occasions. An AmeriCorps representative gave a similar presentation/demonstration at the Fitchburg Library. One event was given to staff only and the other for patrons. Nine residents attended one or more of the sessions in total.

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for free!

| Digital Literacy Workshop | Date | Covered Population or Focus Group |
|--|-----------|--|
| Fitchburg Library - Northstar | 4/12/2024 | Library Staff; Residents; All Covered Populations |
| Fitchburg Senior Center – Tech Help | 5/14/2024 | Aging Individuals (60 and over) |
| Fitchburg Senior Center – Tech Help | 5/21/2024 | Aging Individuals (60 and over); Lower- income/Covered Households; Racial & Ethnic Minority Groups; English-learners, Individuals with a disability, Veterans |
| Fitchburg Library – Northstar/Tech Help | 7/16/2024 | Residents; All Covered Populations |



April 12, 2024 – Fitchburg Library Digital Literacy Workshop

The first technical help session was conducted by an AmeriCorps representative for Library personnel. The session aimed at training members of the staff to host digital literacy training events and become familiar with the "Northstar" digital literacy program. Information from the Computer Skills Self-Paced Guide Toolkit compiled by NDIA was also included in the presentation.

May 14, 2024 – Fitchburg Senior Center Digital Literacy Workshop

All participants had differing levels of digital literacy, which is common with this demographic. For example, one individual did not know how to add and delete icons within an app, and another individual needed help reporting something on Facebook. The needs will vary every time you offer support, but a qualified digital equity planning professional or digital navigator will usually be able to solve their problems or provide meaningful solutions. This approach proved successful, and the tech-help session offered the participants a comfortable place to chat, ask questions, and gain confidence using their devices.

May 21, 2024 – Fitchburg Senior Center Digital Literacy Workshop

Based on lessons learned from the May 14th workshop and this session, we found that creating a stress-free environment is crucial to providing digital literacy training to aging adults. Further, an open agenda or unstructured teaching and learning environment focused on answering various techhelp questions, rather than giving instruction on a specific task allows for better communication between the trainer and trainee which then led to increased understanding of challenges and more meaningful solutions. Further, this approach resulted in the sharing of stories and experiences creating deeper connections and greater knowledge and appreciation of needs and solutions. *Shared experiences and common understanding is critically important to the learning process for aging adults, and allows individuals to feel comfortable asking questions*. It takes patience and a qualified trainer cannot approach tech help sessions with the mindset of "get in, answer questions, and get out". Additionally, we found that digital literacy levels vary a lot in older individuals and one of the main reasons aging adults lack digital literacy is because they fear making a mistake that cannot be easily undone or asking a question that may seem foolish or "dumb". Overcoming these fears and providing a comfortable learning environment is critical to serving aging adults.

July 16, 2024 – Fitchburg Library Digital Literacy Workshop

Much like the tech help session on April 12, 2024, this session focused on the "Northstar" digital literacy program and its benefits. However, this session was open to the public as well.

3.3.2 Stakeholder Engagement: Focus Group Meetings

The MRPC team conducted several focus Group meetings to discuss the needs of the covered populations within the respective organization's mission. Fliers for each of the focus groups were distributed through the various means outlined in **Section 3.2.1**. In addition to the aforementioned outreach strategies, the Social Services and Business focus group meeting fliers were hand delivered to approximately 25 businesses located within Downtown Fitchburg. A considerable amount of coordination with the City of Fitchburg Economic Development Director and the North Central Massachusetts Chamber of Commerce was also conducted to promote the event, which



included outreach to local businesses and community service organizations to inform them about the ongoing planning process and notify them of the event.

Below is a tabular list of focus group meetings conducted as part of this planning process and a summary of each associated event:

| Focus Group Meetings | Date | Covered Population or Focus Group |
|--------------------------------|------------|--|
| | 4/12/2024 | Low Income, Minority, Non-English, Disability, |
| Fitchburg Library | | Veteran, Aging Population |
| | 6/05/2025 | Low Income, Minority, Non-English, Disability, |
| Fitchburg Senior Center | | Veteran, Aging Population |
| Montachusett Veterans Outreach | 6/12/2024 | Low Income, Minority, Non-English, Disability, |
| Center | | Veteran, Aging Population |
| | 9/11/2024 | Low Income, Minority, Non-English, Disability, |
| Disabilities Commission | | Veteran, Aging Population |
| | 10/04/2024 | Low Income, Minority, Non-English, Disability, |
| Veterans | | Veteran, Aging Population |
| Fitchburg Public Schools | 10/23/2024 | Low Income, Minority, Non-English, Disability |
| | 12/11/2024 | Low Income, Minority, Non-English, Disability, |
| Business/Social Services | | Veteran, Aging Population |
| Business/Social Services – | 12/18/2024 | Low Income, Minority, Non-English, Disability, |
| Multilingual | | Veteran, Aging Population |

June 5, 2024 – Fitchburg Senior Center

The session revealed a strong need for digital technical resources, particularly following the loss of technical assistance aid at the Fitchburg Armory. Participants expressed interest in basic Digital Equity courses. The group, informed about the focus group through newsletters and bulletin postings, highlighted several challenges, such as the inability to opt out of MyChart for healthcare and difficulties navigating device interfaces. Despite these challenges, seniors found certain phonebased apps like Waze, Flight Radar, and Google's augmented reality camera features to be beneficial and engaging. While everyone had internet access, issues like dead zones and the high cost of ISPs in low-income housing were significant concerns. The meeting concluded with a conversational Q&A, where participants shared their experiences and suggestions.

June 12, 2024 MVOC – Regional Veterans Agency

All veterans' agents that attended the focus group are licensed to work with veterans but manage several of the covered Digital Equity target populations. Right from the start, agents were curious about what specifically the Digital Equity Program could provide. One veteran agent asked what digital equity meant and for specific goals of the program. Likewise, the veterans' agents generally agreed they spend a quarter of their days helping people navigate the digital world, zoom meetings, prescriptions, and medical appointments. This makes digital literacy important within the veteran community. If veterans have any digital questions they go to one of three places: another person (friend, relative, acquaintance), the library, or to the Veterans Services Office. All the agents agreed



Fitchburg

that if there were to be a digital help session at any place other than the Veterans Center, the library would be a good place to host because many Veterans visit the library frequently.

Veterans' agents went on to say, "If in the end getting digital help poses too many challenges or barriers for veterans, then they may choose not to engage with the internet and technology entirely. For example, if they do not trust the internet, then they stop going to therapy all together because it is over Zoom." This can lead to Veterans who choose not to engage with the internet; However, zero engagement with the internet is not feasible for Veterans because more and more services require the use of the internet. The Veterans that the agents serve are often lowincome, so the cost of a computing device is a real concern, and Veterans require a range of digital literacy help, so the region should be mindful of the Veteran population they are working with.



September 11, 2024 – Commission on Disability

The Fitchburg Disability Commission has an interest in Digital Equity. Their Commission members provided key insights into how the City can best support the digital needs of individuals with disabilities, and suggested potential actions or activities that would enhance digital amenities and services and better serve the needs of this important population group. In attendance at the meeting were six (6) Commission members (in person), including Amy Leblanc, Senior Project Manager for the City of Fitchburg's Community Development and Planning Department, and one (1) member of the Commission attending remotely (via teleconference speaker phone). Also in attendance, and presenting to the Commission, were two members of the MRPC planning staff. Through this meeting MRPC learned about and broadened its working definition of disability to include things like lack of reading and writing literacy.

Within tract 7107, 37.2% of the covered populations in the Digital Equity Act lacking a computer or Broadband internet service were individuals with disabilities and 30.0% were aging adults over 60. Tract 7107 was identified as an important area of interest due to its high concentration of individuals with disabilities and aging adults compared to the rest of the census tracts. Many individuals with disabilities within this census tract live at Fitchburg Housing Authority properties such as those located on Day Street, Davis Street, Marshall Street, and Wallace Avenue. A member of the Fitchburg Commission on Disability confirmed that each of those listed residences have access to public Wi-Fi, but only the Day Street property/residents had access to public computers (3) in a common area or community room. When the residents do not have access to Wi-Fi they go to the library, however, transportation is a significant challenge and often a barrier to traveling and getting access to public internet connections. If there were to be funding for better transportation services to Day Street and Wallace (Avenue) Towers residences, Fitchburg could break down a significant barrier to accessing the internet for a substantial number of individuals/residents, many of which are a member of one or more covered populations of the Digital Equity Act.



October 4, 2024 – Fitchburg/Leominster Veterans Services

Veterans in Fitchburg face challenges accessing digital services, often relying on libraries, career centers, and public spaces for internet use. When in need of online navigation help, Veterans frequently go to Veteran Agents Michele Marino and Rick Voutour for help accessing online services for Veterans using ID cards, benefits, and healthcare. This makes trainings oriented towards online navigation, general tech help, internet safety with a specific focus on scams, and job search skills beneficial to the Veteran community. Currently, there are no dedicated digital connectivity programs in Fitchburg that are specifically designed for Veterans.

October 23, 2024 – Fitchburg Public Schools

A focus group meeting was held with relevant staff of the Fitchburg Public School Department. The Focus Group included representatives of the Technology Department and the Community Engagement Coordinator.

During the Covid-19 pandemic, approximately 100-150 students in Fitchburg Public Schools lacked reliable internet and personal computing devices, highlighting a significant digital equity gap. Digital resources provided by public schools in Fitchburg vary in terms of device access, including shared Chromebooks in elementary schools, individual devices in middle schools, and personal, take-home Chromebooks in high schools. In addition, the district also maintains around 150 internet hotspots, primarily for McKinney Vento-eligible students²², with plans to expand access to additional families.

Digital literacy is integrated across curricula, and Fitchburg Public Schools is developing a Family Welcome Center to promote digital inclusion, offering resources such as tech support and internet access. As a top priority in the city's digital literacy efforts, cybersecurity funding is being sought through E-Rate grants to address growing digital equity and security needs. These initiatives align with Fitchburg Public School's commitment to closing digital gaps and providing equitable access to technology for all students and families.

December 11, 2024 – Social Services & Businesses

Of the seven social service agencies attending – Making Opportunity Count (MOC) Youth Innovation Center is the only one currently offering digital literacy training. The group acknowledges that the Youth Innovation Center is already doing the literacy program and wants to emulate it, assuring that all literacy curricula be inclusive. MOC mentioned the home-bound population and the need for mobile literacy training. The agency is currently seeking funding to continue their program that is short term funded through the



²² The McKinney-Vento Homeless Assistance Act is a federal law that ensures educational rights and protections for children and youth experiencing homelessness.



FSU/UMass Lowell partnership (sustainability of DL programs necessary) The Youth Innovation Center could (should) act as a model program. All in attendance want to work towards positioning Fitchburg as the Digital Literacy leader "Gold Standard" of the region.

December 18, 2024 – Social Services Organizations Serving Racial & Ethnic Minority Groups and English-learners

Three social service organizations that serve English-learners and racial and ethnic minorities, including a representative of the Spanish American Center attended the focus group meeting. Much like the December 11th focus group, the agencies expressed concern for the cost of internet subscriptions and devices and varying digital literacy needs. When asked if digital literacy classes are needed in languages other than English, one agency suggested that English is the goal language

and would prefer to teach in English. MOC has conducted a hybrid digital literacy class where the teachers were fluent in Spanish and classes were taught primarily in Spanish with English at varying times. Poverty was an overarching theme and discussion included considering treating internet subscription expenses as a necessary utility and should be included in a "Fuel Assistance" type of program.

Fitchburg Needs Your Input! ¡Fitchburg necesita su opinión!

The City of Fitchburg has been selected by the Massachusetts Broadband Institute (MBI) to conduct Digital Equity Planning under the Municipal Digital-Equity Planning (DeP) program. The MBI DeP program provides an opportunity for cities and towns to access free consultant services to undertake digital equity planning work and create a Municipal Digital Equity Plan.

La ciudad de Fitchburg ha sido seleccionada por el Instituto de Banda Ancha de Massachusetts (MBI) para llevar a cabo la Planificación de Equidad Digital bajo el programa Municipal de Planificación de Equidad Digital (DeP). El programa MBI DeP brinda una oportunidad para que las ciudades y pueblos accedan a servicios de consultoría gratuitos para realizar trabajos de planificación de equidad digital y crear un Plan Municipal de Equidad Digital.

3.3.3 Stakeholder Engagement: Questionnaires & Interviews

The MRPC Team facilitated several stakeholder interviews with members of various stakeholder groups and/or received questionnaires from digital equity stakeholders. Many other stakeholders participated in the planning process as Core Team members or by participating in Focus Group Meetings and provided considerable information related to key challenges, barriers, needs, and opportunities of those they serve.

A summary matrix of stakeholder engagement, including core team meetings, focus group meetings, and stakeholder questionnaires and interviews is presented on the following page.

The following section, **Section 4**, **Existing Conditions Evaluation**, provides an in-depth evaluation and summary of the existing conditions about broadband internet and digital inclusion and literacy access (availability, affordability, and adoptability) within the City of Fitchburg.

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|-----|-----|-----|

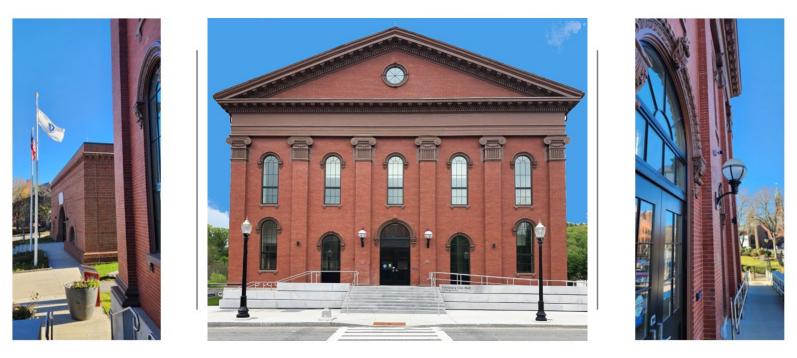
| Stakeholder Organization or Department/Board/Commission | Representative | Core Team | Focus Group | Questionnaire | Interview |
|---|------------------------|--------------|--------------|---------------|--------------|
| City of Fitchburg IT Director | Trevor Bonilla | \checkmark | \checkmark | | \checkmark |
| City of Fitchburg Community Development & Planning | Kimberly Leblanc | \checkmark | \checkmark | | ~ |
| City of Fitchburg Council on Aging/Senior Center | Amanda Koeck | \checkmark | \checkmark | ~ | < |
| City of Fitchburg Economic Development Coordinator | Mary Jo Bohart | | \checkmark | | ~ |
| City of Fitchburg Community Development & Planning | Maribel Cruz | | \checkmark | | |
| City of Fitchburg Disability Commission | Commission Members | | \checkmark | | |
| City of Fitchburg Health Outreach & Prevention Team | Sue Christensen | | | \checkmark | |
| City of Fitchburg Veterans Services | Michele Marino | \checkmark | \checkmark | \checkmark | \checkmark |
| Fitchburg Public Schools Family & Community Engagement Coordinator | Luisa Fernandez | | ~ | ~ | ~ |
| Fitchburg Public Schools IT Director | Eileen Spinney | | \checkmark | | ~ |
| Fitchburg Public Schools Information Technology | Dina Gagne | | \checkmark | | |
| Fitchburg Public Library, Director | Deb Hinkle | \checkmark | \checkmark | \checkmark | ~ |
| Fitchburg Public Library, Technology Librarian | Nicholas Glade | | | \checkmark | ~ |
| Fitchburg Public Access Television (FATV) | Nate Glenny | ~ | \checkmark | \checkmark | ~ |
| Fitchburg Redevelopment Authority | Meagen Donoghue | | \checkmark | | |
| Fitchburg Housing Authority | Brianna Boulay | \checkmark | | | łł |
| Clearpath for New England Veterans | Jonathan Vance | | | \checkmark | ~ |
| Action CAC – Fitchburg | Zuly Fernandez | \checkmark | | | łł |
| Community Foundation of North Central Mass | Steve Adams | \checkmark | | \checkmark | |
| Community Health Connections | Angel Cosme | | \checkmark | | |
| Fitchburg Fiber | Tristan Taylor | | \checkmark | \checkmark | ~ |
| Fitchburg Fiber | Andrew DeChristopher | | \checkmark | | |
| Growing Places | Ayn Yeagle | \checkmark | | | |
| LUK, Inc. | Eolann McMillan | | | \checkmark | ~ |
| Making Opportunity Count (MOC) | Shana Fitz | | \checkmark | | |
| Making Opportunity Count (MOC) | Leona Whetzel | | \checkmark | | |
| MassAbility | John Person | | \checkmark | \checkmark | ~ |
| MassHire North Central Mass Career Center | Jeff Roberge | | | | \checkmark |
| Monty Tech High School | Katy Whitaker | | | \checkmark | ~ |
| Mount Wachusett Community College | Jason Zelesky | | | | |
| NewVue Communities | Delores Thibault-Munoz | ~ | \checkmark | | |
| NewVue Communities | Madeline Mendoza | | \checkmark | | |
| NewVue Communities | Francisco Ramos | | \checkmark | | |
| Spanish American Center | Sonia Rodruguez | | \checkmark | | |
| UMass Lowell/Fitchburg State University Digital | Robin Toof | 1 | ~ | | ~ |
| Equity Partnership | | | • | | |
| UMass Lowell/Fitchburg State University Digital Equity Partnership | Carol McDonough | | ~ | | ~ |
| MOC Youth Innovation Center | Charles Barbera | | \checkmark | \checkmark | \checkmark |
| MOC Youth Innovation Center | Susan Le | | ▼ ✓ | Ť | ▼ ✓ |
| Work Inc. | Paula Collins | <u> </u> | ▼ ✓ | | ▼ ✓ |





4 EXISTING CONDITIONS EVALUATION

City of Fitchburg, Massachusetts



4.1 EXISTING CONDITIONS OVERVIEW

The overall purpose of this evaluation is to better understand the existing conditions around digital equity and digital technology, specifically broadband internet and internet-based computing devices, and the local levels of access, affordability, and adoptability of those services and technologies, particularly for covered populations, so that they may be best served by the recommendations of this Digital Equity Plan. In addition to providing information about available broadband internet services and devices, the analysis also aims to identify and evaluate the personal 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 those 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, lacking computer or other devices. Finally, 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 or affordability, and at times are related to a person's willingness to adopt such technology (services and devices, alike), rather than their ability or accessibility.

Establishing comprehensive and inclusive existing conditions, through a robust community outreach and stakeholder engagement process, allows for the development of a Digital Equity Plan that includes a set of meaningful, community guided recommendations that will best address the needs of those it is intended to serve.

The following Existing Conditions Evaluation and Community Needs Assessment (presented within **Section 5**) evaluate certain aspects of the City of Fitchburg's population demographics with specific regard to the eight (8) Covered Populations of the Digital Equity Act. The evaluation, and subsequent "needs" assessment, highlight vulnerabilities and inequities regarding broadband internet access relative to availability, affordability, and adoptability – the three pillars of digital equitability and broadband internet accessibility.

Much of the data for this analysis was obtained from input from the Digital Equity Planning Core Team members, stakeholder interviews, focus group meetings, digital literacy assessments and tech-help sessions, 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.



'Wall Breaking Ceremony' kicks off construction of Adrian Ford Center for Change Youth Innovation Center

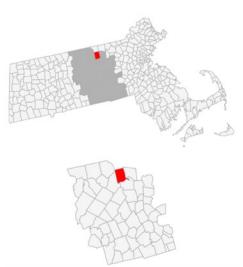


4.2 COMMUNITY CONTEXT

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.

4.2.1 The City of Fitchburg

Fitchburg is in North Worcester County and borders the City of Leominster, and the towns of Westminster, Ashburnham, Ashby, and Lunenburg. According to the City's US Census Bureau Profile, Fitchburg is home to 41,946 residents with a population per square mile of 1,492.7, more than the county (570.7) and statewide (901.2) population densities. The median household income in Fitchburg is \$65,963 which is below the Worcester County median income of \$88,524 and the state median income of \$96,505. Within Fitchburg, 13.9% of residents live below the poverty line, which is higher than the Worcester County average of 10.6% and statewide average of 10.4%. While 60.3% of all residents report as white alone, 7% report as black or African American alone,



4% report as Asian alone, less than 1% as American Indian and Alaskan Native alone or Native Hawaiian and other Pacific Islander alone, and another 14% report as some other race alone. Of the entire population, 14% report as being of two or more races. Of residents over the age of 25, 31.6% have completed a high school education and 16.2% have obtained bachelor's degrees or higher.





4.3 ASSESSMENT OF BROADBAND ACCESS IN FITCHBURG

According to the U.S. Census, computer and internet use in Fitchburg is comparable to the county and statewide averages with 93.3% of all households having a computer and 88.3% of households having a broadband internet subscription. However, in certain Census Tract areas in Fitchburg²³ the percentage of the population lacking a computing device or broadband internet connection is highly variable and ranges from 3.7% to as high as 27.7%, with 3 out of 10 Census Tracts (i.e., neighborhoods) having greater than 20% of the population lacking a computing device or broadband internet connection. For instance, in six out of ten of Fitchburg's Census Tracts greater than 10% of the population is lacking a computing device or broadband internet connection. A summary of Digital Equity Indicators for the City of Fitchburg is shown within **Figure 4-1** below.²⁴

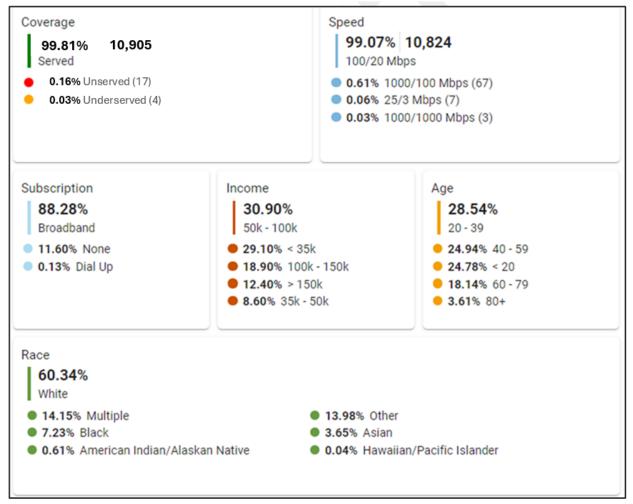


Figure 4-1: Broadband and Digital Equity Indicators, Fitchburg, MA.

²³ There are 10 Census Tract areas in Fitchburg which primarily correspond to distinct neighborhoods.

²⁴ Massachusetts Broadband Map: <u>https://mapping.massbroadband.org/map</u> (Accessed July 3, 2024); BEAD BSL list (Accessed February 25, 2025).



In Fitchburg, there is a noticeable relationship between the percentage of the population lacking a computer or broadband internet connection within a given Census Tract, or neighborhood, and percentage of people within that area belonging to one of the "covered" population groups of the Digital Equity Act. The percentages of the population belonging to at least one of the eight covered populations of the Digital Equity Act within Fitchburg's neighborhoods (i.e., Census Tracts) ranges from 53.7% to 86.5% of the population and 70.5% of the entire population, city-wide. This means that almost ¾ of Fitchburg's residents are a member of one or more covered population group of the Digital Equity Act. This is important given that covered populations identified within the Act are assumed to be at greater risk of digital inequities. Taking that into consideration, it becomes evident that at least 50% of the residents in every neighborhood (Census Tract) of Fitchburg, and 70.5% of people city-wide are at an increased risk of digital inequity contributing to a significant "digital divide" among many of Fitchburg's people and places. Such a digital divide affects opportunities, capabilities, and overall accessibility relative to availability, affordability, and/or adoptability of broadband internet and digital technology and devices.²⁵ Figure 4-2 below presents a map of Fitchburg's Census Tracts displaying the percentages of the population lacking access to a computer or broadband internet connection.

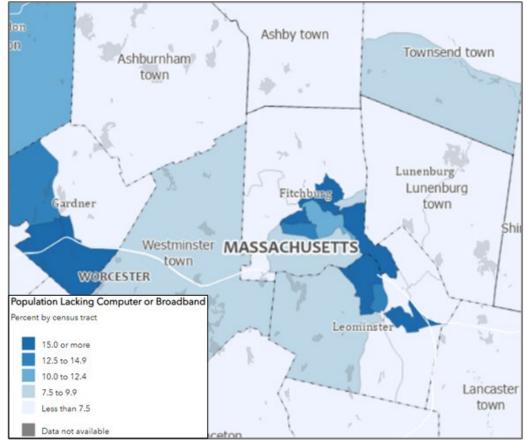


Figure 4-2. Map of populations lacking a computer or broadband internet.

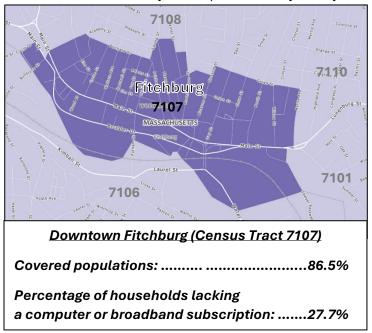
²⁵ It is assumed that the inequities experienced by covered populations of the Digital Equity Act pose certain challenges and barriers that limit people's ability to safely and conveniently participate in the necessary day-to-day activities of living which are now so closely aligned with, and dependent upon access to broadband internet and internet-connected, digital, computing devices.

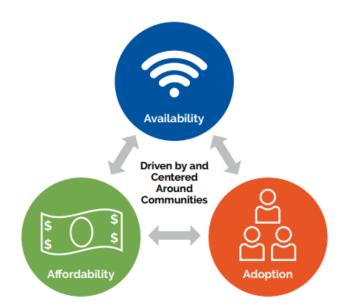


The digital inequities or challenges and barriers faced by certain covered population groups in Fitchburg results in a situation where greater than 10% of all residents in 6 out of 10 of Fitchburg's Census Tract Areas (i.e., neighborhoods) do not have access to a computer or broadband internet service at their home. In 3 of those neighborhoods (Census Tracts), the proportion of residents without a computer or broadband internet is above 20%. Within Census Tract 7107, which includes the Downtown area between Lower Main Street at Myrtle Avenue (in the vicinity of Moran Square and Fitchburg State University area) and Upper Main Street at Academy Street (in the vicinity of City Hall

and the Upper Common), 86.5% of the population are part of one or more covered population groups and 27.7% do not have a computer or broadband internet service. Of those people, in the Downtown area (Census Tract 7107), alone, 59.9% are covered households earning less than 150% of the poverty level, 51.9% are members of a racial or ethnic minority group, 41% are individuals with a language barrier (including lower levels of literacy), 37.2% are individuals with one or more disabilities, 30% are aging adults over 60, 19.2% are individuals over 5-yearsof-age who speak a language other than English, and 3.3% are Veterans.

Aside from the percentages of the population with access to a computer or broadband internet subscription, and/or proportions of residents who are part of a Covered Population of the Digital Equity Act, a more complete picture of broadband internet "access" can be attained by evaluating "The Three A's" of Broadband Access: Availability, Affordability, and Adoptability. An evaluation of the existing conditions within Fitchburg, relative to each of these three attributes, is provided within the following three subsections.







4.3.1 Availability of Broadband in Fitchburg

According to the Massachusetts Broadband Map and Broadband Equity, Access, and Deployment (BEAD) program's Broadband Serviceable Locations (BSL) list, with regard to the **availability of broadband internet service** in **Fitchburg**, the City has approximately five (5) to seven (7) Internet Service Providers (ISP) and **10,926 Total Serviceable Locations**, of which **10,905 (99.81%) are classified as "Served"**, **four (4) (0.03%) are classified as "Underserved"**, and **17 (0.16%) are classified as "Unserved"**. Xfinity/Comcast and Verizon FiOs are the two the primary ISP in Fitchburg. Xfinity uses copper coaxial cable to distribute their service across the network and Verizon FiOs uses fiberoptic cables to distribute their services. In addition, Fixed Wireless and mobile hotspot internet services are available from various cellular providers but those services often fail to meet the FCC minimum broadband standard in Fitchburg. Satellite internet may also be available from various providers such as HughesNet, Viasat, and Starlink. A locally owned commercial and residential intent service provider (ISP), Fitchburg Fiber, is also available in Downtown Fitchburg and some surrounding neighborhoods. Fitchburg Fiber offers a low-cost, reliable, high-speed internet option for residents and businesses with plans providing up to 1000/1000 upload/download speeds at the point of connection at a cost of only \$40/month. End-point user speeds will vary depending on individually owned networking equipment, but speeds of 600-700 mbps are typical.

Figure 4-3 below shows the total distribution of **Served**, **Underserved**, and **Unserved** locations in **Fitchburg**. **Figure 4-4** provides an expanded version of the map, allowing for a more complete visualization of the infographic map components and corresponding data.

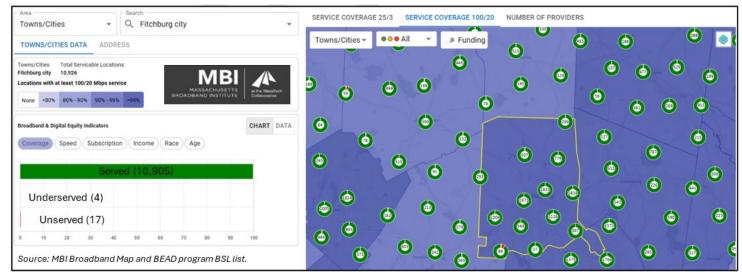


Figure 4-3. Broadband Coverage Map, Fitchburg, MA.



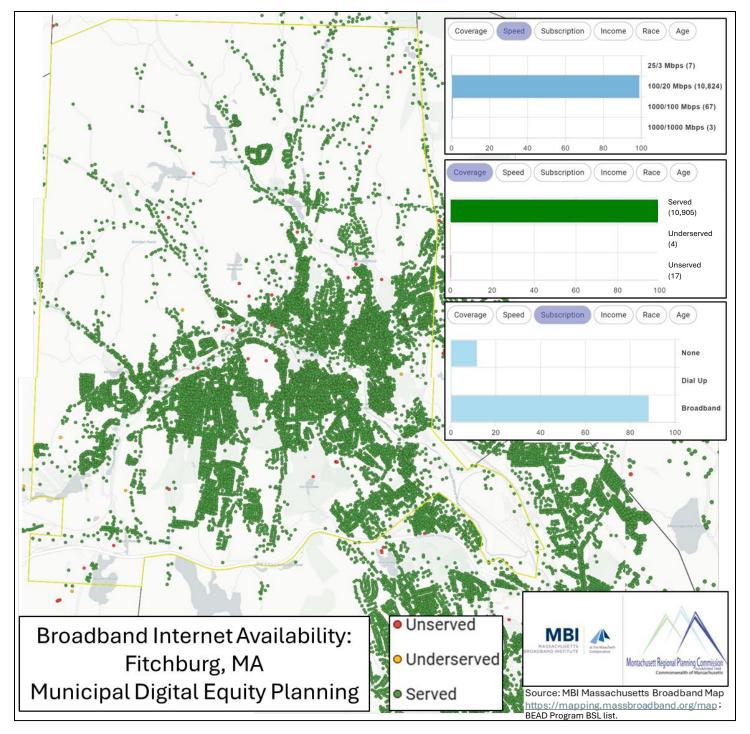


Figure 4-4. Expanded Broadband Coverage Map, Fitchburg, MA.



4.3.2 Affordability of Broadband in Fitchburg

The affordability of internet service subscriptions is a critical component of broadband internet access and Digital Equity. As for Internet Affordability, broadband prices vary by region, with areas with more ISPs exhibiting lower prices. According to the Massachusetts Broadband Institutes "Broadband Map", there are approximately five (5) to seven (7) Internet Services Providers (ISP) providing available broadband internet service to any part of Fitchburg. The number of providers available for service is dependent upon the location or area. It should be noted that the national average of available ISP providers is five (5) to six (6). According to **Figure 4-5** below, which shows the average for the lowest broadband price by region, Fitchburg, located within the northern part of Central Massachusetts, is located within a region that has the 4th highest average regional internet costs across the Commonwealth of Massachusetts.

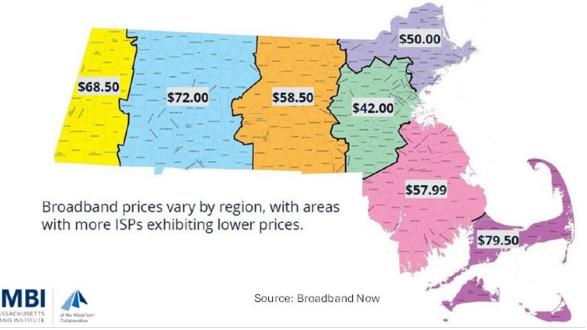


Figure 4-5. Statewide average broadband prices by region.

The Affordable Connectivity Program (ACP) was an FCC program which provided an internet cost reduction or subsidy to qualified households following the Covid-19 Pandemic. (Unfortunately, the Federally funded program has since ended leaving many former participants with higher internet costs than what they had become familiar with and budgeted for over the past few years.) Fitchburg residents had a relatively high rate of adoption of the ACP, relative to other cities statewide. Of the 7,923 households that were eligible for enrollment in the program, 3,576 (45%) of those households were enrolled, an impressive figure that approaches nearly half of all eligible residents.²⁶ Unfortunately, enrollment in the ACP program is now closed, and funding for previously enrolled households has ended. This means that 3,576 households that met the need-based eligibility criteria to receive lower-cost internet service, and who were enrolled in the program and receiving lower-cost internet, are no longer receiving those savings. In most cases, those residents are now

²⁶ https://www.educationsuperhighway.org/no-home-left-offline/acp-data/



paying the same or more than they were before the ACP program was initiated.

While the ACP program has ended, and its future is uncertain, other low-cost internet programs may still be available to residents, such as the Federal Communication Commission's (FCC) LifeLine Support for Affordable Communications (LifeLine Program)²⁷, Comcast/Xfinity's *Internet Essentials* Program²⁸, or Xfinity NOW Internet²⁹, and Spectrum's Internet for Low-Income Households option, *Spectrum Internet Assist*³⁰. For a list of such programs see the National Digital Inclusion Alliance's "Honor Roll of Low-Cost Internet Plans" webpage at the following address: https://www.digitalinclusion.org/low-cost-internet-plans/

Regardless of the various affordability programs and "affordable" internet service subscription options available, it is important to note that a minimum standard of 100 megabits per second download speed, and 20 megabits per second upload speed is the new benchmark of "reliable", "high-speed" internet, established by the Federal Communications Commission (FCC), for both subscribers and internet service providers. In the interest of Digital Inclusion and Equity, affordable internet programs should not only be affordable but should also meet that minimum standard benchmark for utility and function for all users across all programs and subscription rates.

4.3.3 Adoption of Broadband Internet in Fitchburg

Internet "adoptability" and "digital connectivity" is a combined measure of people accessing and utilizing the internet (particularly broadband internet) and digital devices at home and is often, but not exclusively related to digital literacy levels. Some factors that can be assessed to "measure" digital adoptability 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 with a Broadband Internet to their home that actually subscribe to the Service).

With regard to **broadband internet adoptability and digital connectivity**, Fitchburg is similar to the state and national averages, as shown in **Table 4-1** below.

| | Fitchburg Digital Connectivity Index | | | | | | |
|-----------|--|---|--|--|--|--|--|
| Fitchburg | Massachusetts | USA | | | | | |
| 2.5 | 2.5 | 2.7 | | | | | |
| 10% | 15% | 12% | | | | | |
| 94% | 95% | 94% | | | | | |
| 90% | 91% | 89% | | | | | |
| 80% | 81% | 73% | | | | | |
| 81% | 82% | 74% | | | | | |
| | 2.5 10% 94% 90% 80% 81% | 2.5 2.5 10% 15% 94% 95% 90% 91% 80% 81% | | | | | |

Table 4-1. Digital Connectivity in Fitchburg.

Source: ISP Reports (https://ispreports.org/) accessed July 5, 2024.

²⁷ https://www.lifelinesupport.org/

²⁸ <u>https://www.xfinity.com/learn/internet-service/internet-essentials</u>

²⁹ https://www.xfinity.com/now

³⁰ <u>https://www.spectrum.com/internet/spectrum-internet-assist</u>



This summary indicates that Fitchburg is consistent with statewide and national averages relative to certain measures of digital connectivity, however for a community with such a high rate of serviceable locations (99.71%) there is a notable difference between the percentage of serviceable locations and locations with a broadband internet subscription (88.28%). In fact, 11.6% of serviceable locations do not subscribe to broadband internet, indicating a gap in internet adoptability that may be related to affordability of internet service, individual levels of digital literacy, availability or affordability of digital devices, personal preference, or other potential barriers to digital equity and inclusion. Regardless, it should be noted that 11% of Fitchburg's households lack a computer or broadband internet service in their homes.

4.4 ASSESSMENT OF COVERED POPULATIONS

Definitions of covered populations of the Digital Equity Act of 2021 were provided within **Section 1**, *Introduction to Digital Equity Planning* above. It is important to note that individuals may be a member of more than one of the covered population groups. If an individual belonged to at least one of these populations, the individual was counted as part of the covered population; therefore, the percentages for the eight covered populations do not sum to the percentage of total covered population.

The U.S. Census Bureau's Digital Equity Act Population Viewer³¹ is an online interactive map application that displays proportions of the population covered by the Digital Equity Act. **Figure 4-6** below shows a summary of the city-wide percentages of the population for various indicators compiled by the US Census Bureau Digital Equity Act Population Viewer.

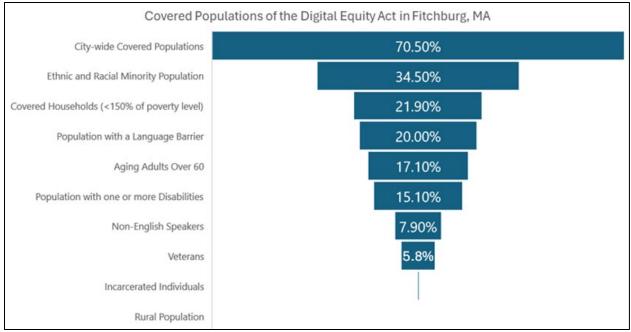


Figure 4-6. Percentages of the population as "Covered Populations of the Digital Equity Act.

³¹Digital Equity Act Population Viewer <u>https://mtgis-</u>

portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42 (Accessed July 8, 2024)



In many areas of Fitchburg, and throughout most of neighboring Leominster, less than 75% of the population is a "covered" population of the Digital Equity Act. However, within several Census Tracts³² located within the densely developed areas surrounding downtown Fitchburg along River Street (including lower Cleghorn), Kimball Street, South Street (to Electric Ave.), Mechanic Street, the (FSU) College Area, Lunenburg Street (to the Lunenburg border), and Water Street (Route 12, to the Leominster border), approximately 75.0% to 79.9% of the population exists as a "covered" population. Within Downtown Fitchburg (Census Tract 7107) 86.5% of the population is part of a "covered" group.

Table 4-2 below shows the distribution of percentages of the population as "covered populations of the digital equity act" by Census Tracts within the City of Fitchburg and provides a visual representation of the higher proportions of covered populations within certain neighborhoods (i.e., census tract areas) of Fitchburg. The colors provided within the color-coded Map of Census Tract Areas in Fitchburg, shown as **Figure 4-7** on the following page, correspond to those shown in the table below and, therefore, serve as a *Key to Table 4-2*.

| Census Tract# | Population | % Covered Population | % Covered Households | % Aging Adults | % Incarcerated | % Veterans | % with a Disability | % w/Language Barrier | % English Learner | % Racial or Ethinic Minority | % Population Lacking Computer or Internet |
|---------------|------------|-------------------------|-------------------------|----------------|----------------|------------|---------------------|-------------------------|----------------------|---------------------------------|--|
| 7101 | 3854 | 77.7 | 22.6 | 10.9 | 0 | 3.1 | 11.3 | 21.3 | 9.9 | 50.1 | 15.2 |
| 7102 | 7309 | 65.3 | 11.3 | 23.4 | 0 | 10.6 | 12.1 | 17.9 | 5.6 | 19.6 | 9.4 |
| 7103 | 3378 | 53.7 | 9.5 | 18.2 | 0.3 | 9.6 | 10.3 | 20.7 | 7 | 25.4 | 3.7 |
| 7104 | 2292 | 72.9 | 25.7 | 18.2 | 0 | 6.5 | 13.2 | 26.1 | 9.1 | 34.5 | 14.1 |
| 7105 | 3748 | 76.5 | 37.5 | 18 | 0 | 5.5 | 19.6 | 28.4 | 12.9 | 46.4 | 20.5 |
| 7106 | 7401 | 76.6 | 23.5 | 14.6 | 0 | 4 | 15.8 | 21.9 | 11.7 | 56.1 | 12 |
| 7107 | 1883 | 86.5 | 59.9 | 30 | 0 | 3.3 | 37.2 | 41 | 19.2 | 51.9 | 27.7 |
| 7108 | 4995 | 76 | 51 | 16.5 | 0 | 4.9 | 19.5 | 22.5 | 9.4 | 47.5 | 20.9 |
| 7110 | 3469 | 75.5 | 37.5 | 14.5 | 0.5 | 7.2 | 18.1 | 18.9 | 7.9 | 34.7 | 8.7 |
| 7111 | 6061 | 57.7 | 4.3 | 25.4 | 0 | 6.9 | 17.9 | 16.1 | 5.6 | 14.6 | 6.7 |
| Citywide | 44390 | 70.5 | 21.9 | 17.1 | 0.1 | 5.8 | 15.1 | 20 | 7.9 | 34.5 | 11.3 |

Table 4-2. Percentages of individuals as Covered Populations of the Digital Equity Act by Census Tract area in Fitchburg.

³² Census Tracts 7105, 7106, 7108, 7110, and 7101 contain 75.0% to 79.9% of the population as a "covered" population of the Digital Equity Act.



Key to Table 4-2

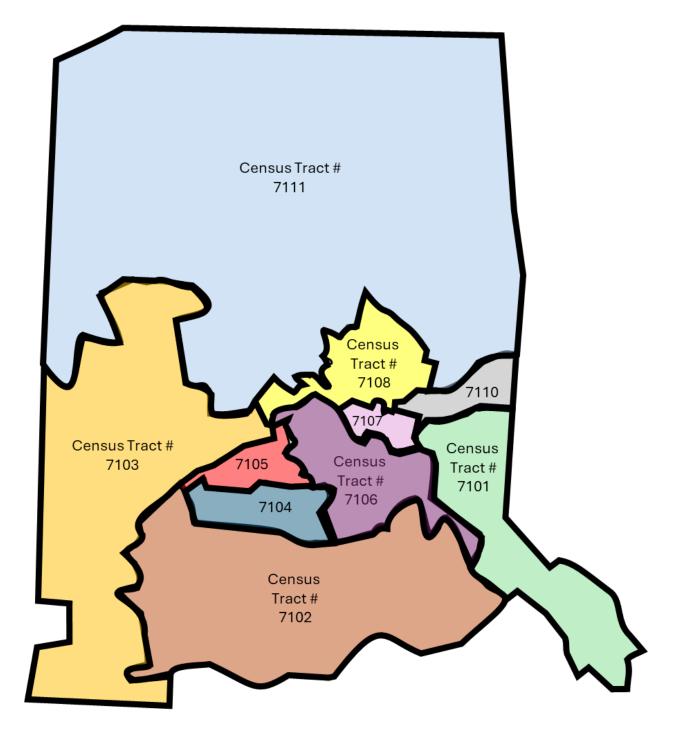


Figure 4-7. Color-Coded Map of Census Tract Areas in Fitchburg.

Fitchburg

4.4.1 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.

According to recent estimates of the U.S. Census Bureau, there are 16,645 households in Fitchburg. Figure 4-8 below provides a summary of household and income-based demographics for Fitchburg's households.

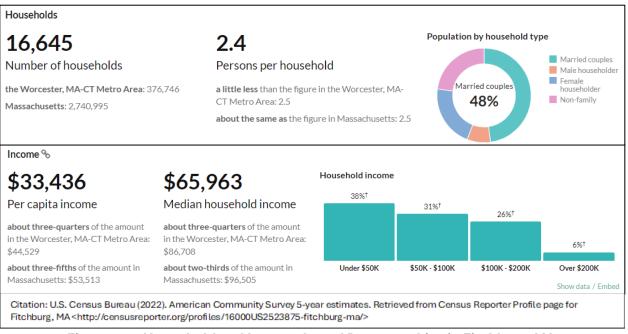


Figure 4-8. Household and Income-based Demographics in Fitchburg, MA.

For a family of four, the annual household income equivalent to one and a half times (150%) poverty level is \$46,800. More than a third (38%) of Fitchburg's households have an income that is below \$50,000, close to the poverty level for a family of four. (Fitchburg's average household size is only 2.4 people per household.) Regardless, 21.9% of Fitchburg's households do have an income that is below 150% of the poverty level and, therefore, are covered "households" under the Digital Equity Act. 33

4.4.2 Aging Individuals

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

The population of residents over 60 years of age is increasing nationally, statewide, and within the Montachusett Region. The City of Fitchburg has an aging population with approximately 22% of the population being over the age of 60 (Figure 4-9) and the median age growing from 34.7 to 37.2 years

³³ Source: U.S. Census Bureau, 2019 Modeled Total Covered Population Estimates. Digital Equity Act Population Viewer: https://mtgisportal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42



old from 2010 to 2020.³⁴ Therefore, nearly a quarter of the City's population are part of the "Aging Individuals" covered population group of the Digital Equity Act, and as such are an important focus of this Plan.

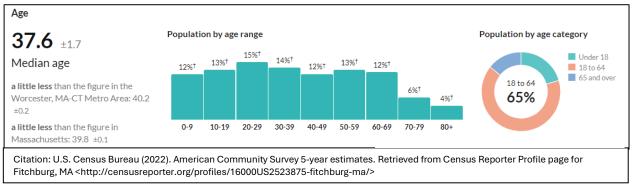


Figure 4-9. Population by age range in the City of Fitchburg, MA.

Outreach conducted through regional stakeholders, including the Senior Center, identified the primary needs of Fitchburg's aging population as affordability, internet safety & cybersecurity training, and internet navigation training and assistance. A common concern was the fear of online scams and a distrust for some aspects of digital technology and its uses or misuses. Expanded services in areas such as device usage, navigation of common software platforms, general computer skills, and comfort and trust of digital devices and technology would aid this population as well.

It was noted in several interviews that internet and device access are crucial for seniors to access telemedicine, financial services and banking, and other online services that are now part of daily life. For medical patients and people of all ages with disabilities, but especially for individuals 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 (i.e., remote, virtual medical appointments) 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 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.

³⁴ U.S. Census Bureau



Fitchburg

How COVID-19 Changed Older Adults' Work and Lifestyle

Older adulthood is often associated with economic and social transitions, including retirement, becoming a grandparent, and changes to health. And this decade, the COVID-19 pandemic brought about even more pronounced societal transformations.

A new U.S. Census Bureau data visualization explores changes across different social characteristics of older adults from 2019 to 2022, a year before the pandemic emergency officially ended, including: computer and internet use; living arrangements; employment; and working from home.



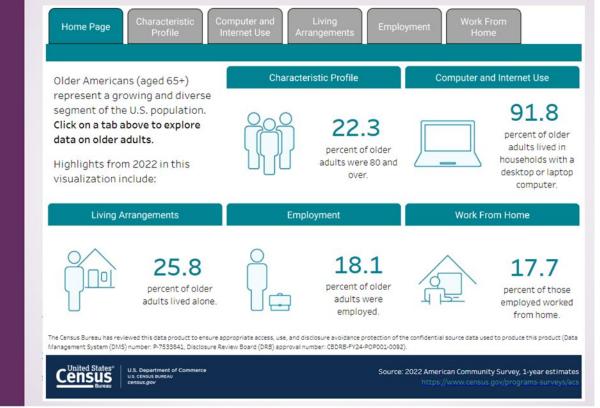
In 2022, 15.6% of employed adults ages 55 to 74 worked from home, compared to just 7.7% in 2019. This rate exceeded 20% in Washington, D.C. (32.7%); Colorado (23.3%), Washington (21.8%), and Arizona (21.5%).

Rates of working from home also varied by social characteristics among employed adults ages 55 to 74.

Source: U.S. Census Bureau, 2024

Older Adults in the United States: 2019 and 2022

https://www.census.gov/library/visualizations/interactive/older-adults-in-the-united-states.html





4.4.3 Incarcerated Individuals

Within the Digital Equity Act, inmates are defined as individuals incarcerated at state and county jails and correctional facilities. Individuals who are incarcerated in a Federal correctional facility are not designated as a covered population. The closest correctional facilities to Fitchburg are the North Central Correctional Institution in Gardner, MA, and the nearby Souza Bankowski Correctional Center and MCI-Shirley, located in Shirley, MA.

The Worcester County Sherriff's Office, Fitchburg Community Support Center (Re-Entry Program) is a community resource and support center for recently released, formerly incarcerated individuals, located in Fitchburg. As part of the stakeholder outreach for this plan, staff from that office noted the barriers and challenges faced by former inmates related upon release and re-entry into society. Of the many challenges they face, some are related to broadband internet accessibility and digital literacy relative to the availability, affordability, and adoptability (use) of the internet and internetconnected digital devices. Many inmates are not familiar with the internet or digital devices as the related technologies and current uses either did not exist or were far less advanced or common before they entered prison. Now, these technologies could be of great benefit to their current reentry needs, however, targeted training is needed to develop skills and build comfort and trust of the use of these technologies as part of their daily lives.

Inmates make up less than one percent of Fitchburg's populations at the time of this planning process and are not a primary focus of the Plan. However, coordination with the Worcester County Sherriff's Office, Fitchburg Community Support Center (Re-Entry Program) to identify digital literacy training and support needs of this Covered Population group is recommended. Potential future training classes could address substantial challenges and barriers faced by this group to reduce the digital gap they may be facing.

4.4.4 Veterans

Veterans make up 5.6% of Fitchburg's 18 and older population (**Figure 4-10**) and comprise a considerable portion of the population throughout the Montachusett Region.³⁵ Veterans are valued within the region and honored for their service. However, many veterans lack financial resources to afford the 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.

There are several Veteran's organizations serving the Montachusett Region, including the one-of-akind Montachusett Veterans Outreach Center. 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 Digital Equity Veterans Focus Group meeting for the Montachusett Region was recently convened by the Montachusett Regional Planning Commission as part of the planning process for this Plan and for other Digital Equity Plans being prepared for

³⁵ U.S. Census Bureau



municipalities within the Montachusett Region by MRPC under the MBI Municipal Digital Equity Planning program. The meeting was hosted by the MVOC and Veteran's Services Officers from Montachusett communities were invited to share their input on the challenges, barriers, and needs of the region's Veteran population. Those needs are described in detail within **Section 5** of this Plan.

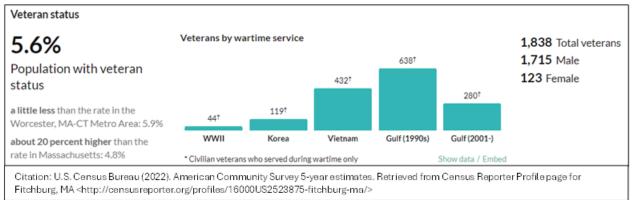


Figure 4-10. Population with Veteran status in Fitchburg, MA.

4.4.5 Individuals with Disabilities

Many residents of the Montachusett Region have one or more disabilities. According to the Massachusetts' Office on Disability, Fitchburg has 5,644 individuals with one or more disabilities, making up 15.0 percent of the total population, as a covered population of the Digital Equity Act.³⁶

It should be noted that within Census Tract 7107, Downtown Fitchburg, 37.2% of the population are individuals with one or more disabilities, far exceeding the city-wide percentage of 15% and all other areas which range from 10.3% to 19.6%, substantially lower. The specific challenges, barriers, and digital connectivity and literacy needs of the large "covered" population of individuals with disabilities in Downtown Fitchburg must be considered and have been incorporated into the recommended goals and actions of this plan. However, ongoing evaluation and assessment of the needs of the high percentages of covered populations residing within Downtown Fitchburg (Census Tract 7107) should be an ongoing effort both in the implementation and evolution of this plan.

Given the extreme occurrences of several covered populations within this concentrated area, it will be essential to continue to monitor, evaluate, and understand the digital equity needs of individuals that are among covered populations within this are so that appropriate goals and actions can be identified and developed to address the needs of this concentrated and important group over time. Consideration should also be given to the fact that these large occurrences of covered populations may be associated with Fitchburg Housing Authority properties like Wallace Towers, Prichard Street, and Day Street, where qualification for residency coincides with several categories defining covered populations.

4.4.6 Individuals with a Language Barrier

The City of Fitchburg has many residents who are English learners and/or who have lower levels of literacy, who are therefore "covered" populations as individuals with a language barrier. Within

³⁶ State of Massachusetts, Overall Disability (Accessed July 5, 2024)



Fitchburg, 20% of the population are classified as individuals with a language barrier and 5.6% are English-learners, and as such, are individuals covered under the Digital Equity Act. In addition, 8% of Fitchburg's population over the age of five years old report speaking another language, other than English, at home.

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 speakers have come to the Montachusett Region. Many of these individuals are also part of covered households who experience lower levels of income. An interview noted that these recent immigrants, particularly those from Haiti, may need help filling out government forms on library computers as part of their immigration process. The City of Fitchburg is primarily a white, English-speaking city with 71.3 percent of its residents only speaking English, however, this is slightly lower than the state average of 75 percent English speakers. Despite a high proportion of the population being white, English-speakers than other parts of the Massachusetts, with 22.3 percent of the population being Spanish-speakers compared to only 9.6 percent of the statewide population as a whole.³⁷

4.4.7 Individuals who are Members of a Racial or Ethnic Minority Group

The resident population of Fitchburg primarily identifies as white and white alone, with a near identical percentage of white residents as the national average (60.3% and 60.1%, respectively), and a lower percentage than the state (69.6%).³⁸ A full 28-31% of Fitchburg's population is Hispanic, 6-7.23% are black, and 2-3.7% are Asian. Of those, 14% are of multiple races or ethnicities and 10.2% of Fitchburg's residents are foreign born. As many as 35-40% of Fitchburg's residents are covered under the Digital Equity Act as members of a racial or ethnic minority group (**Figure 4-11 and 4-12**).

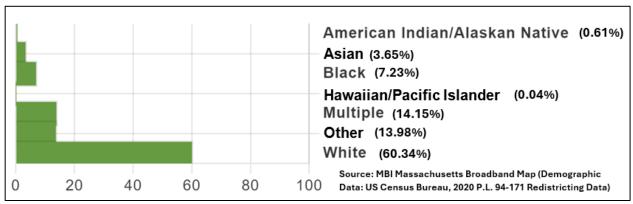
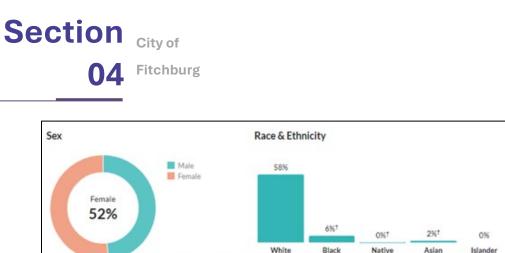


Figure 4-11. Race designations among Fitchburg's population.

³⁷ U.S. Census Bureau

³⁸ U.S. Census Bureau



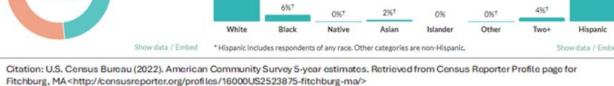


Figure 4-12. Population by race & ethnicity and foreign births in Fitchburg, MA.

4.4.8 Individuals who Primarily Reside in a Rural Area

For the purposes of the Digital Equity Act, the term "rural area" refers to a city, town, or incorporated area that has a population of less than 20,000 inhabitants and is otherwise consistent with the definition of the term given within section 601(b)(3) of the Rural Electrification Act of 1936 (<u>7 U.S.C.</u> <u>950bb(b)(3)</u>). While Fitchburg does have rural areas, particularly in its northern areas near Ashburnham and Ashby, these areas do not meet the definition of a "Rural Area". However, several towns within the Montachusett Region are classified as rural areas. Fitchburg in its role as a Gateway City and regional "hub" provides essential services to the residents of rural areas throughout the region. Therefore, Fitchburg should be considered an important regional hub, and an important digital equity asset, essential to providing critical resources and serving the Montachusett Region's rural communities.



4.5 CRITICAL DIGITAL ASSETS, COMMUNITY ANCHOR INSTITUTIONS, AND DIGITAL HUBS

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.

31%



4.5.1 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 systems-based 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 cyber-attacks and proper digital network security and access is crucial to their protection and function. **Table 4-3** below provides a summary list of the primary Critical Digital Assets located within the City of Fitchburg.

| Critical Digital Assets – City of Fitchburg | | | | | | | |
|---|-----------------------------------|-------------------------|--|--|--|--|--|
| Facility Type | Organization | Location | | | | | |
| Public Services | Fitchburg Public Works Dept. | 301 Broad Street | | | | | |
| Public Safety | Fitchburg Fire Department | 33 North Street | | | | | |
| Public Safety | Fitchburg Fire Station 1 | 42 John Fitch Hwy | | | | | |
| Public Safety | Oak Hill Fire Station | 234 Fairmount Street | | | | | |
| Public Safety | Police Department | 20 Elm Street | | | | | |
| Post Office | United States Postal Service | 881 Main Street Suite E | | | | | |
| Post Office | United States Postal Service | 477 Main Street | | | | | |
| Other Government Buildings | DTA Fitchburg Center Transitional | 49 Nursery Lane | | | | | |
| | Assistance Office/MRC Fitchburg | | | | | | |
| Other Government Buildings | Fitchburg Wastewater Plant | 24 Lanides Lane | | | | | |
| Other Government Buildings | Fitchburg Falulah Water | Rindge Road | | | | | |
| | Treatment Facility | | | | | | |
| Other Government Buildings | (Fitchburg) Regional Water | Hager Park, Westminster | | | | | |
| | Treatment Facility | | | | | | |
| Other Government Buildings | Fitchburg City Hall | 718 Main Street | | | | | |
| Other Government Buildings | Fitchburg Legislative Building | 700 Main Street | | | | | |
| Communication Service Provider | Verizon (Switching Building) | 676 Main Street | | | | | |
| Communication Service Provider | Fitchburg Fiber | One Wood Place | | | | | |

Table 4-3: Critical Digital Assets within Fitchburg and the surrounding region.

4.5.2 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. **Table 4-4** below provides a summary list of the primary Community Anchor Institutions located within the City of Fitchburg.

| Community Anchor Institutions - Fitchburg | | | | | | |
|---|--|---------------------------------|--|--|--|--|
| Facility Type | Organization | Location | | | | |
| City Hall | City of Fitchburg – City Hall | 718 Main Street | | | | |
| Community | City of Fitchburg – Senior Center | 14 Wallace Avenue – First Floor | | | | |
| Center | , | | | | | |
| Community | City of Fitchburg – Veterans Center | 14 Wallace Avenue – Second | | | | |
| Center | | Floor | | | | |
| Community | Fitchburg Public Schools – Students & Families | TBD | | | | |
| Center | Community Center | | | | | |
| Community | Youth Innovation Center and Adrian L. Ford | 18 Fairmount Street | | | | |
| Center | Center for Change (formerly Cleghorn | | | | | |
| | Neighborhood Community Center) (MOC) | | | | | |
| Community | Spanish American Center | 112 Spruce Street, Leominster | | | | |
| Center | | | | | | |
| Faith-based | Faith Christian Church: Our Fathers Table | 40 Boutelle Street | | | | |
| Organizations | | | | | | |
| Faith-based | Catholic Charities | 196 Mechanic Street, Leominster | | | | |
| Organizations | | | | | | |
| Government | City of Fitchburg – Disability Commission | 718 Main Street | | | | |
| Organization | | | | | | |
| Government | City of Fitchburg – Human Rights Commission | 718 Main Street | | | | |
| Organization | | | | | | |
| Government | City of Fitchburg – Legislative Building (City | 700 Main Street | | | | |
| Organization | Council Chambers and Public Meeting Hall) | | | | | |
| Government | Massachusetts Department of Transitional | 49 Nursery Lane | | | | |
| Organization | Assistance (Fitchburg Office) | | | | | |
| Government | MassHire North Central Mass Career Center | 100 Erdman Way | | | | |
| Organization | | | | | | |
| Governmental | Fitchburg Housing Authority | 50 Day Street | | | | |
| Authority | | | | | | |
| Governmental | Fitchburg Redevelopment Authority | 166 Boulder Drive | | | | |
| Authority | | | | | | |
| Library | Fitchburg Public Library | Temporary Address: 166 Bouder | | | | |
| | | Dr., Suite 108; 718 Main Street | | | | |
| Non-profit | North Central Massachusetts Chamber of | 860 South Street | | | | |
| | Commerce | | | | | |
| Non-profit | Community Foundation of North Central MA | 649 John Fitch Highway | | | | |
| Non-profit | Fitchburg Community Action Team (Substance | 130 Water Street | | | | |
| | Abuse Services) | | | | | |
| Non-profit | Fitchburg Access Television | 780 Main Street | | | | |
| Non-profit | The Arc of Opportunity | 564 Main Street | | | | |
| Non-profit | Boys & Girls Club of Fitchburg & Leominster | 365 Lindell Avenue, Leominster | | | | |
| Non-profit | LUK, Inc. | 554 Westminster Street | | | | |

Table 4-4: Community Anchor Institutions within Fitchburg and the surrounding region.

Section City of

04 Fitchburg

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|---|----|---|---|---|---|----|---|

| Non-profit | NewVue Communities | 470 Main Street | | |
|-------------------|---|---------------------------------|--|--|
| Non-profit | Making Opportunity Count (MOC) | 601 River Street | | |
| Non-profit | Fitchburg Family Resource Cener (MOC) | 76 Summer Street | | |
| Non-profit | Montachusett Homecare Corporation | 680 Mechanic Street, Leominster | | |
| Non-profit | Seven Hills North Central Family Support Center | 1460 John Fitch Highway | | |
| Non-profit | United Way of North Central Massachusetts | 649 John Fitch Highway | | |
| Non-profit | Work, Inc. (AVP Fitchburg Employment) | 473 Main Street | | |
| Nursing Home | Fitchburg HealthCare | 1199 John Fitch Highway | | |
| School | Applewild School (Private) | 120 Prospect Street | | |
| School | Sizer (Charter) School | 500 Rindge Road | | |
| School | Montachusett Vocational Technical High School | 1050 Westminster Street | | |
| School | Fitchburg Public Schools | 376 South Street | | |
| School | South Street Early Learning Center | 376 South Street | | |
| School | Crocker Elementary School | 200 Bigelow Road | | |
| School | McKay Elementary School | 67 Rindge Road | | |
| School | Reingold Elementary School | 70 Reingold Avenue | | |
| School | Longsjo Middle School | 98 Academy Street | | |
| School | Memorial Middle School | 615 Rollstone Street | | |
| School | Fitchburg High School | 149 Arnhow Farm Road | | |
| School | Goodrich Academy | 111 Goodrich Street | | |
| School Admin | Fitchburg Public Schools Superintendents Office | 376 South Street | | |
| Offices | and Administrative Offices | | | |
| School Resource | McKinney-Vento Program | 376 South Street | | |
| School/University | Fitchburg State University | 160 Pearl Street | | |
| School/University | Fitchburg State University Idea Lab | 717 Main Street | | |
| Resource | (Collaborative Digital Workspace) | | | |
| School/College | Mount Wachusett Community College: | 326 Nichols Street | | |
| | Fitchburg Dental Campus | | | |
| School/College | Mount Wachusett Community College: Adult | 100 Erdman Way, Leominster | | |
| Ma dia al Oliaia | Education and Professional Development | | | |
| Medical Clinic | Community Health Link/UMass Memorial Health | 100 Erdman Way, Leominster | | |
| Medical Clinic | Fitchburg Family Medicine | 155 Franklin Road | | |
| Medical Clinic | Fitchburg Primary Care | 370 Lunenburg Street | | |
| Medical Clinic | UMass Fitchburg Family Medicine Residency/ | 275 Nichols Street | | |
| | HealthAlliance-Clinton Hospital Fitchburg | | | |
| Medical Clinic | Campus CareWell Urgent Care Fitchburg | 380 John Fitch Highway | | |
| Medical Clinic | ACTION Community Health and Urgent Care | 130 Water Street | | |
| | Center | | | |
| Medical Clinic | Community Health Connections – Fitchburg | 326 Nichols Road | | |
| | Community Health Center/Family Practice | | | |



4.5.3 Digital Hubs & Partnerships

A digital hub is a central point where various digital resources, services, and technologies converge to facilitate collaboration, innovation, and knowledge sharing. In a greater sense, and according to today's needs, a digital hub is more than just a physical location where individuals can access digital services and knowledge; It is a coordinated network, or ecosystem that connects individuals, organizations, technology, teaching, and learning providing opportunities and enrichment across multiple sectors and socio-economic demographics. In terms of enhancing digital inclusion and equity, at the municipal or regional level, a digital hub can be essential for providing access to high-speed internet for key segments of the population, allowing them to overcoming barriers or challenges they may face relative to availability, affordability, and adoption of broadband internet and technological devices. For many people digital hubs provide access to online resources, such as medical records, allow them to participate in virtual meetings, communicate with family and friends, and share data and information, activities essential to everyday life in today's digital world.

Whether a digital hub is focused on technology, innovation, education, or providing community services, they are essential to enhancing digital inclusion and digital literacy in any community, but especially in socially, economically, and culturally diverse Gateway Cities, like Fitchburg. Gateway Cities themselves are civic hubs, places where there is a concentrated collection of not only people, but also the essential services, facilities, and resources most needed by those people. In areas like this, digital hubs provide many benefits and often lead to several desired outcomes including economic growth, social impact, individual empowerment and professional development, technological advancement and innovation, entrepreneurship, and local, regional, statewide, national, and global connectivity and collaboration.

Below are several examples of Digital Hubs and Partnerships in Fitchburg:

Fitchburg Public Library

The Fitchburg Public Library plays a key role in broadband internet and computer access for a large proportion of the City's population. The library has a librarian assigned to the role of addressing digital needs and providing technical assistance, or tech-help to the greatest extent possible. There is a great need for computer literacy among many of the library's patrons, particularly among aging adults over 60. Many aging adults need basic internet navigation and computer skills. Similarly, many patrons need internet safety and security skills and are vulnerable to potential hacks and scams,

particularly those targeted at aging adults, families with lower levels of income, or English learners. Barriers to improving digital skills include language, affordability, literacy levels, and access to fast, reliable broadband internet and up-to-date, fully functional digital devices. The library would be an ideal place to provide enhanced digital literacy training opportunities, however, barriers exist that limit that potential opportunity including staff capacity, funding/budget, lack of

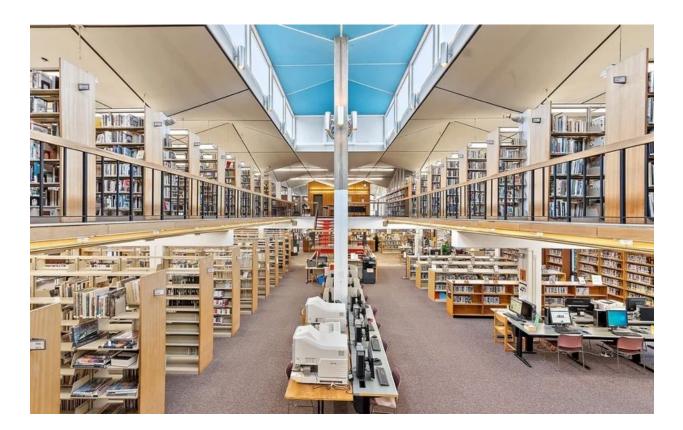




equipment/computer workstations, and lack of space and resources. Hopefully, the new library (currently under construction and anticipated to re-open in 2026-27) will address some of those barriers.

Additionally, there is a need for providing technical assistance or digital/tech help when it comes to navigating and filling out government documents or websites. This need is particularly evident among ethnic and racial minority groups, English learners, aging adults, and Veterans. Of note, is the fact that many of the questions related to navigating government websites are specific to the Massachusetts Registry of Motor Vehicles webpage and their license and registration renewal process. Specific training on navigating the Mass RMV webpage should be made available by Commonwealth of Massachusetts at local libraries statewide.

The need for digital literacy classes at the library cannot be overstated and the proposed improvements at the new library, currently under construction, will be critical to overcoming existing barriers related to staff capacity, budget/funding, equipment, and availability of training spaces. Similarly, funding from the MBI Municipal Digital Equity Implementation program and Launch Pad program will benefit the Fitchburg Public Library and its patrons. In summary, technology is a clear barrier in Fitchburg and the Fitchburg Public Library is a critical Digital Hub capable of addressing needs and overcoming challenges and barriers. Investment in digital resources at the current temporary library space, and especially at the new library currently under construction will be essential to meeting Fitchburg's short-term and long-term digital literacy and technology needs.





Fitchburg Public Schools

During the beginning of the Covid-19 pandemic in 2020, approximately 100-150 students in Fitchburg Public Schools (FPS) lacked reliable internet and personal computing devices, highlighting a significant digital equity gap. To address that gap, the School Department provided digital hotspots to the families of students most in need. Currently, the FPS maintains 150 internet hotspots that are supplied to certain eligible students, primarily those who qualify under the McKinney Vento program, a program designed to assist housing insecure students and families. Since 2020, approximately forty percent (40%) of FPS's curriculum involves online learning (i.e., internet-based educational learning tools, applications, and cloud-based platforms). Digital resources provided by public schools in Fitchburg vary in terms of device access, including shared Chromebooks in elementary schools. In addition, the district also maintains around 150 internet hotspots, primarily for McKinney Vento-eligible students, with plans to expand access to additional families.

Digital literacy is integrated across curricula, and Fitchburg is developing a Family Welcome Center to promote digital inclusion. When the Family Welcome Center opens during the 2025-2026 school year, it will offer resources such as tech support, digital literacy training, collaborative workspaces, and computer and internet access for students and their families. As a top priority in the city's digital literacy efforts, cybersecurity funding is being sought through E-Rate grants to address growing digital equity and security needs. These initiatives align with Fitchburg Public School's commitment to closing digital gaps and providing equitable access to technology for all students and families.

Fitchburg State University ideaLab

The Fitchburg State University (FSU) ideaLab, located at 717 Main Street in the old Theater Block, across from the City Hall Campus is a state-of-the-art digital studio space with high-tech digital workstations (or creation-stations). It is an open, collaborative, workspace intended to inspire

creativity and innovation for students, specifically those enrolled in FSUs game design program.

The space was imagined and designed with input from faculty and students through the work of Boston-based ICON Architecture – the same architectural firm that conceptualized and designed the award-winning renovation of Fitchburg's City Hall, Legislative Building, and Campus. The space includes an open layout with lots of light from windows overlooking Main Street and the downtown area, complete with comfortable and functional seating areas and collaborative workspaces, together comprising the game studio and idea lab.





UMass Lowell Digital Equity Partnership



Though the Massachusetts Broadband Institutes, Digital Equity Partnerships program, UMass Lowell and a group of higher education community partners, including student workforce partners established as a "Digital Equity Partnership" with the mission of to driving outreach, engagement, and delivery of digital services to critical sectors of the population with several Gateway Cities of North Central and Northeastern Massachusetts within the Montachusett and Merrimack Valley regions. The program included training a cohort of student

digital navigators who, along with UMass Lowell and other partner faculty and staff, created a multitiered digital literacy and navigation initiative that established a regional help desk at UMass Lowell and cooperatively advanced new digital literacy and device distribution programs throughout the service area. The device distribution component of the program included 1,200 new or refurbished devices distributed to participants who completed a series of digital literacy and skills-building classes. The Gateway Cities of Leominster, Fitchburg, Lowell, Haverhill, and Lawrence, as well as other communities of the Merrimack Valley, Northern Worcester County, and the North Shore were served under the Partnership between 2023 and 2025.

Youth Innovation Center at the Adrian L. Ford Center for Change (MOC, Inc.)

The Youth Innovation Center (YIC) is a youth-lead, youth-driven facility and philosophical model that goes beyond and elevates the traditional concept of an after-school program. The YIC embraces equity at its core and strives to connect youth to creative resources, including state-of-the-art digital technology that can be used to transform traditional forms of art, music, performance and enhance those disciplines through access to high-tech digital equipment, computers, 3-D printers, cameras, drones, and other related technology. In short, Fitchburg's Youth Innovation Center is a sight to behold, and a model to uphold.

Upon entering the Center, you can tell that the YIC is a special place. Staff and youth leaders are attentive and welcoming as a guest enters the door and it is obvious that they have worked hard to create a unique space and place that is equally functional and comfortable. When you enter the door, you see a workspace that beckons your inner self to imagine..., to explore...., to create. The guiding principle of the YIC is youth-led, youth-driven initiatives focused on a "growth mindset methodology" that encourage creativity and exploration of ideas, visions, and dreams thorough technology, and traditional and alternative methods of art, music, design, and performance. In every imaginable way the mission and goal aim to provide opportunities to create, through individual and collaborative paths, allowing for individual and collective transformation - a building of confidence, knowledge, skills, and ability - to overcome barriers and achieve individual or common goals and, through that path, to reach a desired (or unexpected) destination. Both the vision and the space are all about self-exploration, collaboration, discovery, and personal and professional growth through positive creativity and creation. It's exactly the type of place that every adult wishes they had when they were a kid, tween, teen, or young adult; And I suspect, the type of place that makes young adults feel a little more like a kid at times and a little more like an adult at other times. In other words, it's the kind of place that allows us to be ourselves and become ourselves all at the same time.



Fitchburg

The space is a creators dream and includes an art room (digital and conventional media), a music and podcast room (digital and conventional instruments, including a keyboard, digital mixer and beatbox machine, and four-mic setup, two high-performance computers with monitors and a largescreen T.V./monitor), and a central common collaboration and "chill" area that acts as a living room. The central, common area is open and inviting and is used to meet, create, and make collaboratively. So, it is a creative, collaborative, makerspace, consultation area which includes several tables/work benches (one with Lego projects in progress), a conference and dining table, and a sectional seating area with lounge furniture and a wall-mounted large screen television and built-in media cabinet. Across the room there is a "green" wall with a "Youth Innovation Center" neon light, another large screen television, a karaoke station, and an additional seating area. There is a bank of computer workstations along the wall with printers, scanners, cameras, and all kinds of other tech gadgets, tools, and equipment neatly stored throughout the YIC. The space is neat and organized enough to feel welcoming, but not too neat and so organized that you would mistake it for an office rather than the creation center that it is.



The YIC recently partnered with the UMass Lowell Digital Equity Partnership program to teach digital literacy classes to Fitchburg youth and aging adults. The Center has the potential to continue such classes and could play a key role in future digital equity and literacy opportunities and pathways in the City of Fitchburg (and throughout the Montachusett Region). The YIC is a true digital "Hub" and a benefit to its local community; However, we are confident that it can also serve as a model or even a virtual, remote, regional hub for other parts of the Montachusett Region in both urban and rural communities.



Figure 4-13 below is a map showing the locations of all Critical Digital Assets and Community Anchor Institutions located within the City of Fitchburg, as listed in the tables above.

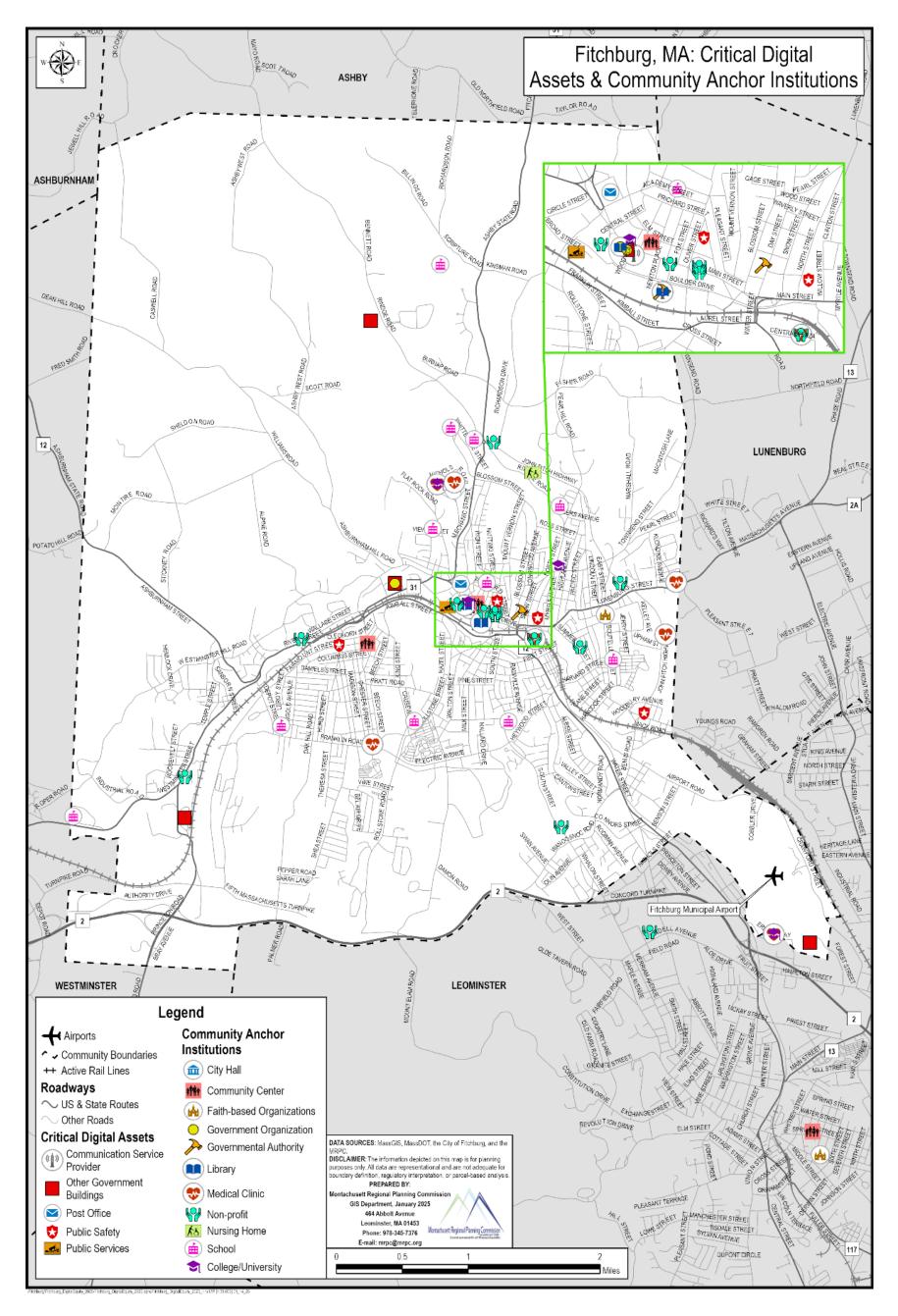


Figure 4-13. Critical Digital Assets & Community Anchor Institutions.



4.6 PUBLIC BROADBAND INFRASTRUCTURE

4.6.1 MBI Last Mile Broadband Infrastructure

The Last Mile Program is a broadband internet infrastructure initiative and funding program aimed at providing residential broadband access in 53 Last Mile Towns, including 44 unserved Western and Central Massachusetts towns that lacked any residential broadband service and an additional 9 underserved Western and Central Massachusetts towns that were partially served by cable. The Commonwealth of Massachusetts, with the support of the Massachusetts Legislature, appropriated funds to support the MBI's mission to develop access to broadband service throughout the Commonwealth through public and private partnerships.



Last Mile is an industry term that describes the local network infrastructure closest to the end-users (e.g., the residents, businesses and community facilities). They are typically built off of middle mile networks.

The two maps presented below as **Figure 4-14** and **Figure 4-15** illustrate Last Mile Project Partners and Pathways and Last Mile Project Status, respectively.

MBI Last Mile Programs broadband.masstech.org/last-mile-programs

In May 2016, then-Governor Baker and Lieutenant Governor Polito met with legislative leaders, MBI officials, and local representatives from unserved municipalities to discuss a <u>strategic</u> <u>pathway forward</u> for the Last Mile program, an effort designed to accelerate progress. A new Last Mile project <u>leadership team</u> was also announced to guide the MBI's highspeed internet accessibility efforts and appropriately disperse state capital Last Mile funds to approved projects. <u>View</u> <u>the complete Program Policy</u>.

The MBI, Commonwealth, and Executive Office of Housing & Economic Development (EOHED) built a flexible framework that would help all Last Mile towns achieve broadband access, allowing for a range of project models, including multi-town collaborations, locally owned networks, and industry partnerships. Project models allowed for many technology and operational choices, as long as they meet core speed, affordability, and sustainability standards.

The Commonwealth and EOHED launched the Last Mile Infrastructure Grant Program for Last Mile towns that seek to build a municipally-owned broadband network. MBI administers the Flexible Grant Program that provides grants to private providers to build, own and operate broadband networks in Last Mile Towns. MBI also administered the Broadband Extension Program for partially served cable towns, which was completed in September 2018.



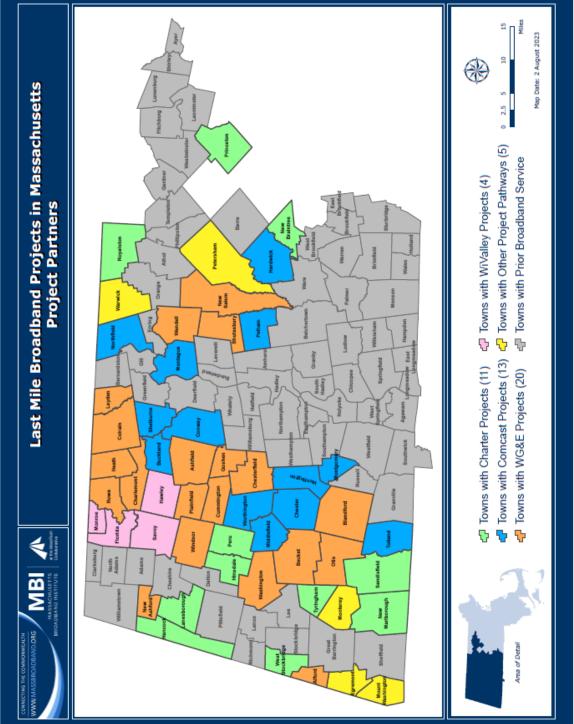
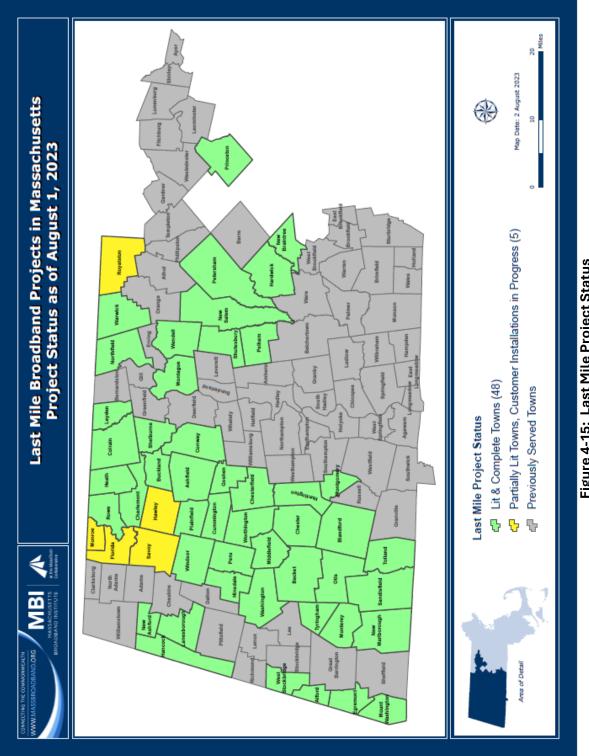


Figure 4-14: Last Mile Project Partners and Pathways.



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4.6.2 MassBroadband 123

MassBroadband 123 is an open access, fiber-optic "*middle mile*" network in western and north central Massachusetts, designed, built, and operated by MBI in early 2014.



Middle Mile is an industry term that describes the network infrastructure that connects last mile (i.e., local) networks to other network service providers, major telecommunications carriers, and the greater internet. It does not typically connect the majority of end-users.

broadband.masstech.org/massbroadband-123

About the MassBroadband 123 Network

- Designed, built, and owned by Massachusetts Broadband Institute (MBI)
- Operated by Local Linx (formerly KCST USA)
- Consists of approximately 1,200 miles of fiber, connecting 120+ communities in western and north central Massachusetts
- Provides direct connectivity to hundreds of public facilities in Berkshire, Franklin, Hampden and Hampshire Counties and parts of Worcester County
- Covers more than one-third of the geographic area of Massachusetts, which has more than 400,000 households and businesses and more than one million residents

About the MassBroadband 123 Network

Local Linx provides wholesale services on the network to local retail Internet Service Providers (ISP) that may offer consumer services in the region.

- ISPs use the network to offer broadband services to public safety entities, schools, libraries, medical facilities, town halls, and other Community Anchor Institutions (CAI) already connected to the network.
- ISPs may request quotes from Local Linx to build new extensions to connect additional CAIs and businesses in the region.
- IPSs can purchase dark fiber connections, high speed lit services to facilitate backhaul for Fiber to the Premise (FTTP) networks, and collocation services to house equipment within MassBroadband 123 facilities.

MassBroadband 123 is an open-access, *middle mile* fiber-optic network that stretches across 120+ western and central Massachusetts communities (**Figure 4-16**). It was the first step in bringing high-speed internet to all parts of the state and is now used as a building block to design and build last mile connections to residents and businesses in areas that still lack high-speed internet services, including parts of Fitchburg (**Figure 4-17**).





Fitchburg

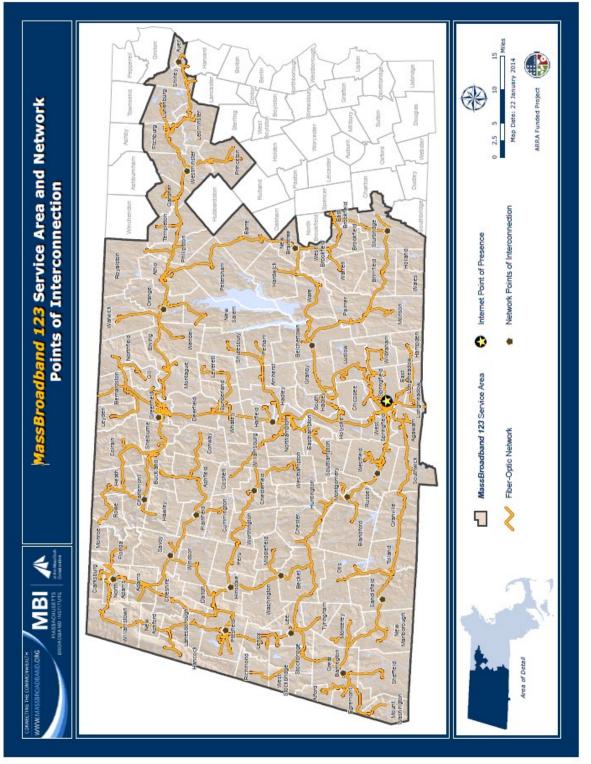
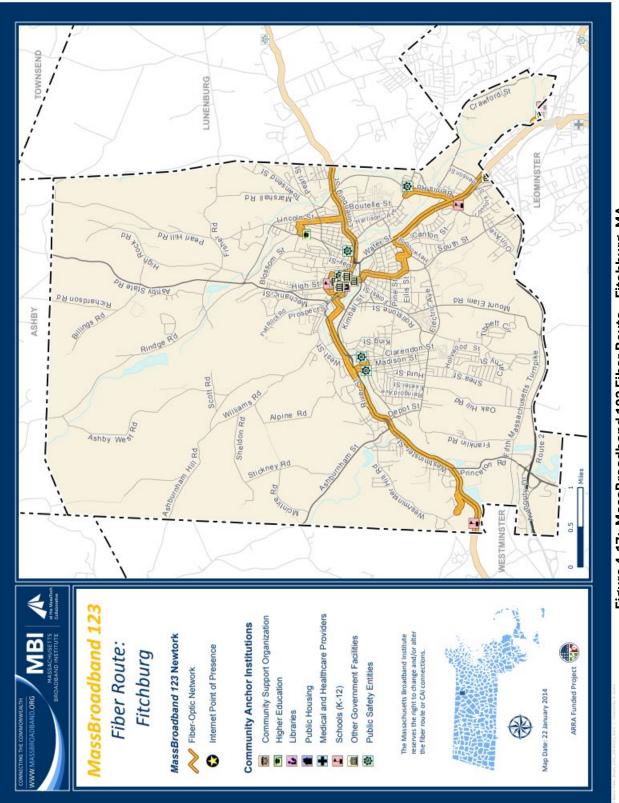


Figure 4-16: MassBroadband 123 Service Area & network.







5

5 COMMUNITY NEEDS ASSESSMENT

City of Fitchburg, Massachusetts



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 and interviews, and local and regional 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 City of Fitchburg's and surrounding region's digital literacy opportunities, and the community's level of digital literacy or knowledge, skills, abilities. Further, it also assessed existing levels of comfort, confidence, and willingness to adopt broadband internet and digital technologies among individuals and covered populations groups. So, community needs were assessed generally based on existing conditions within the City is surrounding region, but also with specific regard to the status and needs of covered populations. In particular, the needs of households earning less than 150% of the poverty rate, individuals and households who are members of a racial or ethnic minority group, individuals who have a language barrier, and individuals and families who are without housing or experiencing housing-affordability challenges were evaluated and carefully considered.

5.1 SUMMARY OF COMMUNITY NEEDS

The Existing Conditions Evaluation presented within **Section 4** assessed the digital assets of the communities and evaluated the existing conditions concerning availability, affordability, and adoption of broadband internet. The Assessment of Community Needs presented here within **Section 5** provides an analysis of existing challenges and barriers affecting access to broadband internet, digital literacy and inclusion needs related to digital skills, internet safety and security, digital inclusion needs related to general computer and technology adoption and use, and access to digital devices and technologies.

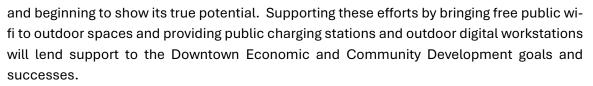
Improved Access (Availability, Affordability, Adoptability) to Broadband Internet and Digital Devices:

- Lack of personal digital devices and home internet In Fitchburg, greater than 10% of households in 5 out of 10 Census Tracts (neighborhoods) do not have a computer or broadband internet subscription and in 3 of those Census Tracts the proportion is above 20%.
- Unavailable or unreliable internet in some critical areas Broadband internet availability and reliability (speed and connectivity) issues have improved greatly in the past few years throughout the Montachusett Region and in parts of Fitchburg, such as along the Boulder Drive corridor. However, there are still reports of inconsistent reliability (speed and connectivity) and a few areas where service is limited or unavailable. For example, downtown Fitchburg, the City's commercial and government center, still experiences sub-par internet service regarding speed and reliability. This occurrence is due to aging infrastructure and the fact that the copper cable lines used to run the internet throughout downtown Fitchburg were installed years ago (an early adoption of that technology) below ground in that district. Exposure to the moist environment of Fitchburg's aging downtown, underground infrastructure has resulted in cable internet lines that are exposed to corrosion and in need of maintenance, upgrades, or replacement which could be physically and financially challenging. As such continuing to document reliability issues will be critically important to locating areas of concern and justifying the need for improvements related to



infrastructure or equipment maintenance, upgrades, or expansion. An effort should be made to address areas without access to service and those experiencing unreliable service. A Fitchburg City Ordinance requires that new (empty) conduit for future communication lines is installed during certain underground excavations or repairs of roadways and subgrade infrastructure within City rights-of-way. This requirement is a wise, proactive approach to facilitating future expansions and improvements of broadband internet distribution infrastructure.

- 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 Fitchburg there are between 5 7 ISPs available, however competition is still limited as not all providers have service available in all areas and overlap of services areas is limited. Lower cost internet service is available through a local ISP; however, their service is currently limited to only a small area primarily in and around Downtown Fitchburg. In general, the internet is expensive in Fitchburg and throughout the Montachusett Region and there are few or no 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. There is an overall concern for rising costs over time, especially among covered households, and those with fixed incomes such as individuals with disabilities and aging adults. The Internet is now considered an essential service, or utility, like heat, electricity, and water, and therefore, it should be available and affordable to all.
- Affordability of Digital Devices Many important Community Anchor Institutions that serve as public internet access points (libraries, Veterans' Center, Senior Center) and residents, including aging adults and Veterans, cannot afford to replace outdated or broken devices. There is a need for more affordable laptops, scanners, and telehealth equipment. This also includes a need for updated computers and digital equipment and workspaces to access the internet in public spaces, like libraries, senior centers, and Veterans Centers.
- Access to free public internet, digital workstations, and public charging stations for digital devices in Downtown Fitchburg's Downtown was once a thriving community center and commercial and cultural destination. Downtown Fitchburg is currently undergoing a transition to revitalize and reclaim that distinction. In recent years many improvements have been made including the redevelopment of Fitchburg's City Hall into a fully functional and welcoming community service center. Other recent successes include the development and continued improvement to Riverfront Park, the Mill Street and Cushing Street pedestrian corridors and public plazas (including a public wi-fi mesh network in 2021), and the successful realignment and reconfiguration of the Downtown traffic flow pattern. With those improvements and the recent influx of small and microenterprise businesses focused on ethnic food and service-based commerce and publicly supported downtown housing initiatives like the Artist Housing at Fitchburg Arts Community, and the Apartments at Moran Square bookending downtown, the revitalization of Downtown Fitchburg is well underway



- Access to free public internet, digital workstations, and public charging stations at City **Parks and Playgrounds** – Fitchburg's parks and playgrounds are well situated and easily accessible within each neighborhood throughout the community. Parks like Coolidge Park, Parkhill Park, and Coggshall Park offer some of the finest examples of urban and suburban community parks throughout all of Massachusetts, the region, and beyond. Improving the functionality and opportunity for people to connect and engage digitally at City Parks and Playgrounds is needed and will provide a substantial opportunity for further enhancement of these already noteworthy and engaging places. Through installation of public wi-fi mesh networks and public charging stations, the public will be better able to enjoy these locations while remaining connected to important information that could enhance their experience and safety.
- Access to free public internet and digital workspaces at Community Anchor Institutions and Public Housing Properties – Unfortunately many public spaces do not have the resources, equipment, funding or staff capacity to take on a high demand of digital access and literacy help needs. For example, the library has limited computers and workstations, equipment at the Senior Center is limited to 1 or 2 computers, and there are no alternative public spaces where public internet and digital workstations are freely available for public use. Increasing the number of available public workspaces at the library could require increased staff capacity or responsibilities that might be challenging to an institution with a fixed budget and limited staff capacity, however it is a critical need to enhance digital access. Meeting this need and finding other ways to expand public internet and digital workspace offerings such as outdoor public wi-fi mesh networks and computer "labs" or classrooms at other public facilities such as City Hall, Common Areas of Public Housing Properties, or Community Centers is an essential goal of this Plan. Community Anchor Institutions should also consider providing access to public internet-connected spaces and workstations that offer some "privacy" for people using these resources. Privacy could be provided by having enclosed spaces such as conference- or meeting-rooms, fully enclosed booths or "cubes", or other soundproof spaces. Privacy is important and should be available to individuals who need to use public internet and workspaces for personal matters such as telehealth appointments, legal hearings, or other private or sensitive matters.
- Access to Assistive Technology and Devices It was noted by the Fitchburg Disability Commission that many government webpages and public computers and workstations are not fully "accessible" to individuals with disabilities. Even government webpages, including the City of Fitchburg's webpage 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. Improved digital and internet ADA accessibility through enhanced web content meeting the ICT standards and improved public access to assistive digital technology and devices is needed.

Digital Literacy education and online safety & security training focused on improving trust and confidence affecting "willingness to adopt" digital technologies - There is a fear or distrust of internet use due to cyber security & online safety concerns among many individuals and covered population groups, particularly aging adults and Veterans. Some of these concerns can be attributed to a lack of knowledge or awareness regarding staying safe online, others can be attributed to a general distrust of the internet and technology. Regardless, this fear, lack of trust, or lack of knowledge and awareness are preventing some residents from adopting the internet and digital devices. An assessment of regional and community needs indicated that, regarding digital literacy, a person's ability or knowledge of how to use a computer or other internet-connected digital devices is not the only digital literacy factor affecting a person's adoption of broadband internet and digital devices. In many cases, personal comfort and trust levels also affect adoption rates and that means that often adoption is a matter of preference, not solely skills or ability. In some cases, a limited awareness results in limited confidence and lower comfort levels. In other cases, people choose not to learn or increase their skills and comfort because they not only lack personal confidence, but they also lack fundamental confidence and trust in technology or their ability to remain safe while using it. These are real and justifiable concerns, and the internet and digital devices can expose people to certain digital scams, exposure of personal information or data, and even targeted incursion of sensitive personal identification data and information, including in some cases medical records, financial data, and even social security numbers. While some mal-intentioned entities do use the internet and digital technology to perpetrate scams and "steal" personal data and information, it is important to know that there are certain steps you can take to reduce risks, protect your personal data and information, and avoid such scams. With increased knowledge, skills, and overall digital literacy, comes increased comfort and confidence, and through that increased digital literacy, it is possible, and beneficial to reduce risk and increase personal internet safety and security.

Increased Access to Digital Literacy Training & Tech Help Services and Programs:

Access to digital literacy resources, programs, and services – Digital Literacy Training is needed in the region. There are no professional digital literacy organizations or service providers in the Montachusett Region except for a few social services organizations, institutions of higher education, or workforce development agencies who provide some digital literacy training services as part of their mission. Even those cases are limited and usually dependent upon intermittent funding to provide those services when such funds are available. The recent UMass Lowell Digital Equity Partnership funded by the Massachusetts Broadband Institute (MBI) through their Digital Equity Partnerships program is the first major,



Fitchburg

focused, adequately funded effort on enhancing Digital Literacy and Digital Inclusion in this region and, without taking away from its successes, it has had a very limited scope that has focused almost entirely on the Gateway City of Fitchburg in this region. Building upon and expanding the focus area of the UMass Lowell Digital Equity Partnership could have substantial positive impacts on the region. In Fitchburg, the recently established Youth Innovation Center provides an opportunity for this expanded and continued partnership by building upon their existing mission and ongoing partnership with the UMass Lowell Digital Equity Partnership. Using the curriculum and teaching and learning framework or model established by that program, and with the incorporation of other local stakeholders and partners, it can be expanded within the Cities of Fitchburg and Leominster and throughout the Montachusett Region to great effect. Communities who have participated in and prepared a Plan though the Municipal Digital Equity Planning program will be better prepared and have access to funding through the Municipal Digital Equity Implementation grant program to develop such partnerships and implement such programs to provide local digital literacy and inclusion opportunities.

- Help 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. In particular, it was noted that assistance was needed with the following:
 - a. DMV Forms (license and registration renewals)
 - b. Immigration Services Forms
 - c. Online bill or tax payments
 - d. Online Medical Records/Telehealth
 - e. Online banking and financial management (including credit and loans)
- 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 City's and region's residents need, and could benefit from, basic instruction or assistance navigating the internet. Individuals with a language barrier or lower levels of literacy, aging adults, and incarcerated or formerly incarcerated individuals may face increased challenges and barriers to accessing and acquiring basic internet skills and other digital literacy needs.
- Setting up digital devices and accessing and changing device settings Many people noted that sometimes the hardest part of using a digital device can be setting it up or finding and changing settings within the device. While some people are comfortable operating and using a digital device like a cellphone, laptop, computer, tablet, Smart T.V., or other internetconnected digital devices, they are not comfortable enough to set one up if they need to



purchase a new device or upgrade an old one. Even finding the appropriate setting can sometimes involve navigating through multiple menus and screens that are not always logical or intuitive. This can be intimidating or stressful for most people, often prohibiting them from making necessary changes or updating old, out-of-date technology. Out-of-date devices, or software and security programs that are not fully updated or no longer supported are exposed to greater security risks and pose a threat to the digital safety and security of the individual using the device with regard to the protection of their personal data and information.

- Basic Computer Skills It was noted that many residents, particularly aging adults need basic computer skills. Something as basic as using a mouse and keyboard may be challenging to many people. Often, digital literacy and computer classes assume that people already know what may seem like common knowledge to others. Similarly, many classes are based on using specific software programs or conducting tasks often associated with school or work and as such are geared toward students or professionals. However, 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. Further, there is now a greater need for teaching people how to use the internet and digital devices for conducting crafts and hobbies and exploring knowledge and satisfying curiosity. For example, visual search can now be used to help people identify plants, animals, or birds, or even antique vases. A visual search is often easier for someone to use than a text search, and in many cases returns better, more relevant results. Things like using a mouse or keyboard, entering search criteria or web addresses, navigating the internet, or sending an email or chat message can be challenging to some people. There is a need for unstructured courses or tech help sessions that teach, practice, and reinforce these basic skills that are often overlooked or taken for granted as "common" knowledge. This need is greatest among aging adults, and individuals with language barriers and lower levels of literacy who are not "tech" savvy or computer "literate". However, it should be noted that there is also a need for basic computer skills for younger people, who are considered to be tech savvy or proficient using the internet and digital devices. Often, the actual computer "literacy" levels of this group are overlooked, and while they may know how to use certain aspect of the internet and computers well, such as app-based or cloud-based services, they may not know how to use important computer hardware and software functions like creating, saving, and managing files locally on a hard-drive.
- Managing online subscriptions and accounts Creating online accounts, subscribing to an online streaming media service, creating an email account, an Amazon profile, or Prime Account, a Netflix, Hulu, AppleTV, and/or Disney+ account, online bill paying, an online store account, etc. The need for more and more online accounts to accomplish everyday tasks creates a whole other challenge, managing these accounts, usernames, and passwords. This can be a challenge for anyone, but especially for people who do not have a high level of



Fitchburg

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 rather than a credit or debit card, or worse, if you do not remember or have access to the password. These types of issues were noted as a challenge for people of all ages and with varying degrees of digital literacy and confidence.

- Cyber-Security & Internet Safety Cyber-security and internet safety were common topics of concern raised during stakeholder interviews, public engagement, and focus group meetings. Internet safety and security was noted as being particularly important to aging adults and Veterans.
- How to use a handheld device It was noted that touch screens are harder for some people to use due to touch sensitivity and other physical characteristics or disabilities which may affect touch screen usage. Challenges may be even greater for aging adults who sometimes find touch screens difficult to use and who noted that "accidental" touches can be frustrating, confusing, and difficult to navigate or "back out" of.
- Creating online media content, including videos, digital art, music, and editing digital photos or videos - It was noted that many people are interested in digital literacy training related to digital photo, video, and other digital media content creation. They would like to use the internet to explore these topics, but their skills and confidence are limiting them.

Improved Digital Inclusion and Equity:

- Improve broadband internet and digital device access, service, and connectivity -Improving access to digital devices is dependent upon overall broadband internet and device access (availability, affordability, adoptability) discussed as part of "barriers to accessing broadband internet" and "digital literacy needs" discussed above.
- Improve Wi-Fi internet speed, strength, and coverage area within public buildings, particularly at City Hall, Senior Center, Libraries, and other public community spaces, including outdoor spaces – Promoting digital inclusion in a Municipal Digital Equity Plan must first focus on ensuring that public spaces have reliable access to internet and that public wi-fi and digital workspaces are made available to the public in public buildings and outdoor spaces, like parks, commons, gazebos, and outside of public buildings.
- Extend Wi-Fi internet to 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 public wi-fi in outdoor public spaces such as outside of City Hall, the Public Library, and community buildings like the Senior Center and Housing Authority Community Rooms, and at parks and playgrounds. This need is especially true and amplified in "government centers" of urban areas where libraries and public buildings may have limited access to devices, charging outlets, and free public internet, yet often require internet-based client-interaction, communication, and submission of forms and applications. In such



instances, it is very beneficial to make public wi-fi and charging stations available outside of public locations regardless of their normal operating business hours, so that clients, patrons, residents, and all of the general public can access the internet to conduct necessary activities and follow-up communications without the concern or stress caused by a lack of internet access or a low or dead battery on their personal device(s). Free public wi-fi and charging stations downtown, especially within the "government center" portion of Main Street should be an essential service within a Gateway City.

- Increase access to affordable, up-to-date 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 (known as "Digital Navigators"), it is recommended that public device distribution programs require the completion of a Digital Literacy training course to receive a device. Such programs ensure that people are familiar with and comfortable using the device before they receive it. This is a responsible approach that gives the individual the proper training, skills, and confidence to use a device and ultimately leads to greater levels of satisfaction and increased use and overall success of the program.
- Access to free public internet and digital literacy resources With existing conditions consisting of high proportions of lower-income households and considerable proportions of the population as individuals with disabilities, racial or ethnic minorities, and individuals with a language barrier, approximately 70% of Fitchburg's population is part 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, it is recognized that increased access to public internet and computer workstations as well as enhanced digital literacy programs that are easily accessible and affordable (low- or no-cost) are essential to improving digital equity and inclusion. Strong, coordinated partnerships to promote and provide digital literacy training and leadership will be needed to successfully implement and maintain training programs and provide useful digital literacy resources. To meet the urgent and important need for digital literacy training for such a large percentage of Covered Populations with limited capacity and resources, it is recommended that partnerships with existing digital literacy training organizations and Digital "Navigators" be established. It is also recommended that additional available resources and funding opportunities 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 City of Fitchburg or partner organizations. A comprehensive list of such programs, resources, and associated funding opportunities are provided within Section 6.4.2 of this Plan.



Municipal Leadership and Community Partnerships are Needed to Overcome Barriers and Enhance Community Digital Equity, Literacy, and Inclusion:

- **Establish Digital Equity Champions & Navigators** Recognize the importance of pursuing and achieving the values, visions, goals, and actions established within this plan and
- Address Technology & Infrastructure Gaps Aging digital networking equipment, computers, and workstations in public spaces like the Senior Center, Veterans Center, and Library need to be updated with modern, up-to-date equipment and technology. Aging, damaged, outdated and un-maintained ISP distribution lines, particularly underground lines exposed to the influences of corrosion, like in Downtown Fitchburg, should be repaired and/or replaced, accordingly. Improving public and private broadband infrastructure in Downtown Fitchburg should be a top priority given the significance of this location as the Government Center, Central Commercial District, and area of high densities of individuals who are part of a Covered Population of the Digital Equity Act.
- Continue to Improve Teleconferencing Equipment for Participating in and Streaming Remote Virtual Meetings – Teleconferencing and virtual meeting technology and equipment should be available to the public at all Community Anchor Institutions providing public internet and workstations, including Senior Center, Veterans Center, and Library, not just to City Officials at City Hall and the City Legislative Building. Similarly, related technologies and equipment supporting fully functional computer workstations, such as digital scanners, copiers, webcams, and microphones should be available at all public digital workstations.
- Build Partnerships, Grow Partnerships, and Strengthen Partnerships Consider developing partnerships with the Youth Innovation Center/MOC, Mount Wachusett Community College, and MassHire Career Center to coordinate, build upon, and improve existing Digital Literacy programs for future, long-term sustainability.
- Define your Role by Knowing the Needs of those you Serve Continue to improve the City's understanding of Digital Equity & Inclusion "needs" to better define the roles of municipal departments and organizational partners relative to broadband internet access, digital equity, digital literacy, and digital inclusion in urban areas, specifically among covered populations of the Digital Equity Act, economically and socially disadvantaged individuals and families, and Environmental Justice (EJ) areas/neighborhoods of the City. Remember, knowing is half the battle... in order to provide useful services you must know the needs of those you aim to serve.
- Needs are different in Urban Gateway Cities Recognize and address the differences between digital equity and inclusion needs (and opportunities) in Gateway Cities relative to surrounding suburban and rural areas versus those in rural areas. Recognize that Fitchburg, like other Gateway Cities may serve as a Digital Equity "Hub" for surrounding rural and suburban Towns of the Montachusett Region of North Central Massachusetts.

Section City of



- Enhance Digital Equity, Inclusion, and Literacy in Gateway Cities and EJ Areas Identify ways to bridge the "access" gap to bring digital technology and services to disadvantaged populations and neighborhoods. Take advantage of the opportunity to improve access by promoting and improving availability, affordability, and adoptability of broadband internet and digital devices and technology. Become a municipal leader in Digital Equity and Inclusion.
- Greater percentages of Covered Populations and increased need should be viewed as greater opportunity to overcome challenges, not a barrier to success - As a Gateway City and regional hub, Fitchburg has abundant resources, including many well established and impactful social services organizations that are a strength of the community and a potential mechanism for improving digital inclusion, literacy, and equity throughout the City and region. These well-established, dedicated, coordinated, and successful social service organizations are well-suited, prepared, and capable of serving the digital literacy needs of the community and the specific needs of each covered population group. The "strength" of the City's diverse population provides the opportunity and instrument to overcome many (or most) of the digital equity and inclusion challenges and barriers they face. Having the "strength" and organizational opportunity to overcome any existing challenges or barriers (i.e., "weaknesses") associated with access to broadband internet, digital devices, and digital literacy training presents a unique opportunity for Fitchburg to position itself as a Digital Equity leader or "Champion" among other municipalities in the region and among all of Massachusetts' Gateway Cities. Having the necessary "machinery" to manufacture opportunities and turn challenges into chances and barriers into benefits will be the defining characteristic of the City of Fitchburg's path toward Digital Equity for all. It should be remembered and noted that Fitchburg, a City of so many hills of hard stone, is known for overcoming challenges and barriers and turning them into successes. Just as its past industries, powered by the Nashua River and hard work and will of its people, have given rise to so many successful endeavors, products, inventions, and innovations, a new era of enhanced access to broadband internet and digital devices and literacy programs can lead the way to future successes of the City, its residents, its economy, and overall community well-being.

5.2 STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND CHALLENGES <u>STRENGTHS</u>

• Diverse staff and strong leadership from the Mayor's Office to the Department of Community Development and Planning, City and School Information Technology Departments, School Department, Fitchburg Access Television, Library, Senior Center, Veterans Center, Housing Authority, and Redevelopment Authority form a Community All-Star Team capable of successfully implementing Digital Equity and Inclusion initiatives and making Fitchburg known as a leader in Digital Equity.



- Fitchburg
- Fitchburg, as a Gateway City and regional hub, has many resources including wellestablished and successful social services organizations capable of providing services and resources to enhance Digital Equity and Inclusion among all residents, and specifically among the many Covered Population groups of the Digital Equity Act.
- Social service organizations are well-suited, prepared, and capable of serving the digital literacy needs of the community and, potentially, the region.
- Downtown Fitchburg is a neighborhood in transition and on a path of redevelopment and revitalization with many new and exciting businesses, residential developments, and diverse business owners and residents.
- Fitchburg has highly engaged and proactive directors and staff at the Library, Senior Center, and Veteran's Center who are committed to serving the needs of the City's residents and Covered Populations of the Digital Equity Act under their respective purviews.
- Highly engaged and proactive Family Resource Coordinator and supportive programs at the Fitchburg Public Schools.
- MOC Youth Innovation Center is a model example of a youth-driven, youth led, community center, digital hub that offers unlimited potential for future digital equity and inclusion community development improvements as an independent organization and community partner.
- The City offers vibrant educational and social programs at the Fitchburg Senior Center, • Public Library, and through the Public Schools' Family Resources Coordinator and will likely expand future programming for students and their families at the proposed Student & Families Community Welcome Center anticipated to open during the upcoming school year.
- Fitchburg has a vast public transportation network of MART buses, and a centralized, walkable government center providing access to Community Anchor Institutions and digital equity resources, even for those with mobility, transit, or transportation needs.

WEAKNESSES

- Unreliable internet service in the downtown area related to aging and/or un-maintained broadband infrastructure
- Coaxial cable broadband infrastructure is an older technology and is susceptible to corrosion leading to degraded service, like in the downtown area
- Limited fiberoptic network in some areas like downtown is limiting quality of service and performance and reliability potential
- City webpage does not currently meet all ADA compliance requirements
- Low levels of digital literacy among many individuals and Covered Population groups
- High percentages of Covered Populations could stretch the Cities physical and financial resources (However, a strong network of social services organizations and established stakeholder partnerships will help to offset this concern.)



OPPORTUNITIES

- Hills and Valleys landscape of Downtown Fitchburg and the layout of Main Street and surrounding cross streets and buildings provides for ample and ideal "lines-of-sight" for potential future buildout of public, private, and/or co-op mesh networks and fixed wireless internet access points at many or most locations throughout the entire downtown.
- A diverse array of public housing which is both centrally located and spread throughout many parts of the City offers many opportunities for providing affordable internet to residents, many of whom are members of Covered Populations of the Digital Equity Act and for providing public access to internet and computer workstations in community common areas.
- Engage with and continue to promote and support the mission of established Community Anchor Institutions and Digital Hubs, like the MOC Youth Innovation Center and similar partners, who currently serve the community as digital equity champions/digital navigators providing digital literacy training and programs for the community and its covered populations.
- Future Fitchburg Public Schools Students & Families Community Resource Center will provide opportunities for digital inclusion and literacy programs and other digital equity initiatives.
- Promote inter-generational and multi-cultural relationships through digital literacy programs through the Senior Center and Fitchburg Public Schools Students & Families Community Center
- Traditional "downtown" area with a favorable traffic pattern, adequate parking, public pavilions and parks, and large, well-maintained sidewalks (providing pedestrian access and accommodations for public spaces) provides opportunities for public wi-fi and outdoor workstations and charging stations.
- Downtown area in the process of economic redevelopment and revitalization efforts that can benefit from and support public wi-fi and other digital inclusion and equity enhancements.
- Fitchburg is in a position to become a Digital Equity Leader or Champion by improving access to public internet, digital resources, and computer workstations at community anchor institutions, throughout Downtown, in public spaces, parks, and playgrounds, and by building upon strong partnerships with established social services organizations and related stakeholders to provide digital literacy training and digital inclusion opportunities for all residents City-wide.

CHALLENGES

- Affordability High cost of internet service and devices especially for lower-income households and/or fixed income individuals such as Veterans, aging adults, or individuals with disabilities.
- Confidence, comfort, or willingness to adopt digital technologies by some individuals or covered populations.



- Barriers preventing new, or competing, internet service providers from entering the market and offering competitive or lower cost alternatives.
- Availability of funding to sustain long-term municipal digital literacy, inclusion, and equity programs and services.
- Willing partners and available funding to support social services organizations for providing ongoing digital literacy, inclusion, and equity programs and services.

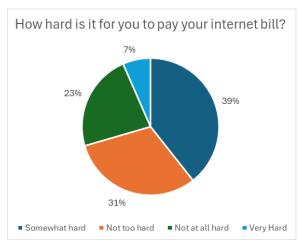
5.3 **PUBLIC SURVEY**

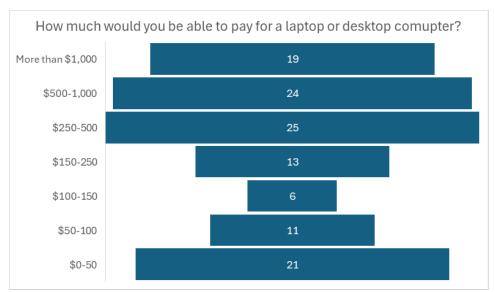
5.3.1 Statewide Digital Equity Survey Results and Local Digital Equity Surveys

At the time of the completion of the Existing Conditions Evaluation phase of this planning process (August 2024), there were 148 responses to the Statewide Digital Equity Survey from residents of the City of Fitchburg. 97% of respondents reported having internet service in their home. Of those, 55% received their internet service from Verizon, 38% from Xfinity/Comcast, 2.2% from AT&T, 1.4% from Fitchburg Fiber, 1.4% from T-Mobile, and 0.01% from another source listed as "Other". According

to the 102 respondents who answered the question, the average cost of internet in Fitchburg was \$93.91 and ranged from \$9.95 to \$300.

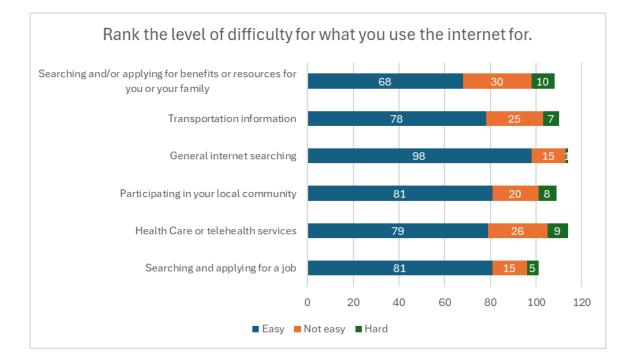
Of the 122 respondents who answered the followup question, 8 found that it was "very hard" to pay for an internet subscription (6.6%), 48 thought that it was "somewhat hard" (39%), 38 thought that it was "not too hard" (31%), and 28 thought that it was "not at all hard" (23%). Below is a graphic representation of this and the results of several other important survey questions indicative of digital equity, inclusion, and literacy needs in Fitchburg:

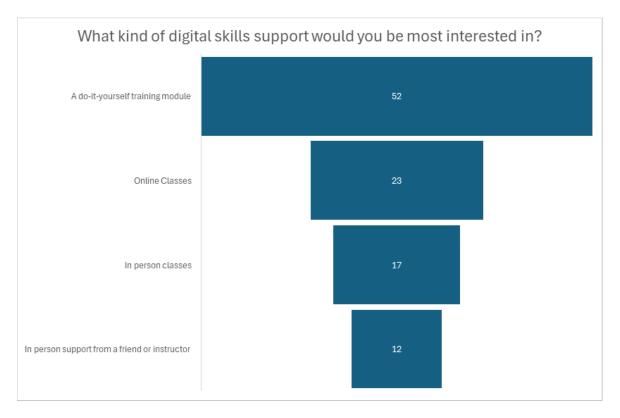




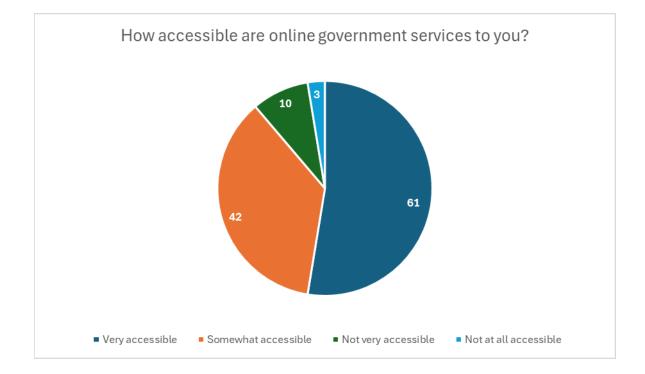


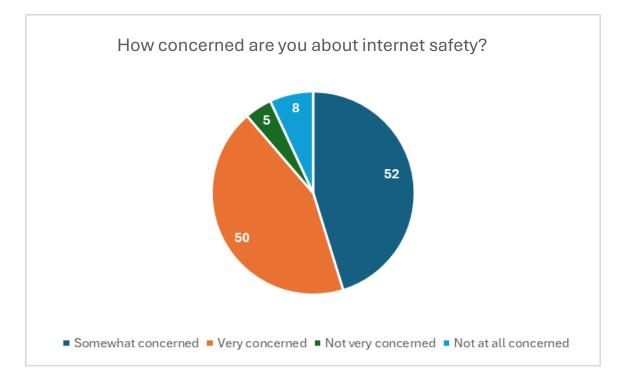




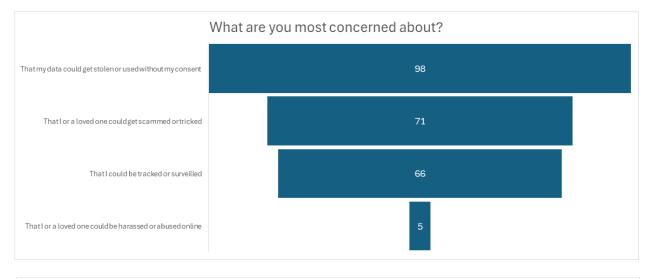


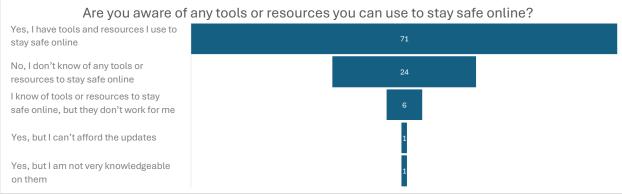
















5.4 ASSESSMENT OF COMMUNITY NEEDS BY COVERED POPULATION GROUPS

To assess the digital equity needs of individual covered population groups with regard to digital literacy and inclusion, MRPC engaged with many stakeholders and the community throughout the planning process. A summary of community needs based on overall outreach and engagement was provided within **Section 5.1**, above; A summary of community strengths, weaknesses, and opportunities related to those needs was provided within **Section 5.2**, above. (For details on the community engagement process and individual stakeholder interviews and community events that were part of that process, please refer to **Section 3** of this Plan, *Community Planning and Engagement Process*.)

Section 5.4, herein, provides a specific "Assessment of Community Needs", or focused summary of the digital equity-, inclusion-, and literacy-related challenges and barriers affecting specific Covered Populations of the Digital Equity Act within Fitchburg, and the associated "needs" to overcome those limitations for each group. The needs of each covered population group are assessed within individual tables presented as subsections **5.4.1** through **5.4.8**, below. The assessment for each group is presented categorically based on the "Three A's" of broadband internet, digital literacy, and technology "access": *availability, affordability*, and *adoptability*.

5.4.1 Needs of Individuals who live in Covered Households

Income-based challenges and barriers are recognized as having an impact on Digital Equity and Inclusion, and as such household incomes below 150% of the poverty line are recognized as "Covered Households", a covered population group under the Digital Equity Act. Approximately 21.9% of Fitchburg's households (City-wide) are classified as Covered Households under the Digital Equity Act. To put that percentage into perspective, of the 16,645 households in Fitchburg, approximately 3,645 households earn an income that is below 150% of the poverty level. In fact, seven out of 10 of Fitchburg's Census Tracts have percentages of Covered Households over 20%, with the two highest areas exceeding 50% (Census Tract 7108 [51%]; Census Tract 7107 [59.9%]).

For covered households made up of families with children who are in school, affordability is especially important considering that access to the internet and digital devices are now essential to in-school and at-home learning activities for students of all ages. Eileen Spinney, IT Director, and Luisa Fernandez, Parent and Community Engagement Coordinator of **Fitchburg Public Schools** (**FPS**) both submitted a Stakeholder Questionnaire and participated in a Stakeholder Interview/Focus Group Meeting as part of this planning process. Fitchburg Schools serve many of the City's Covered Households and other covered populations like Racial & Ethnic Minority Groups, Individuals (and families) with a Language Barrier, and Individuals (and families) with Disabilities, equating to thousands of individuals served each year.

Below is a summary of the current and ongoing digital equity support and needs of the FPS:

• During Covid-19 approximately 100-150 students did not have access to an internet service, or a reliable high-speed connection. The number of students who did not have a personal computing device dedicated for their personal use was probably higher.



- **Fitchburg**
- Currently, the FPS maintains 150 internet hotspots that are supplied to certain eligible students, primarily those who qualify under the McKinney Vento program, a program designed to assist housing insecure students and families.
- Approximately 40% of FPS curriculum involves online learning.
- All students have access to an individual computer for inclass and/or home learning as described below:
 - Elementary School (K-5) students: All students have access to a computer (Chromebook) in class during the school day. The devices are not specifically assigned to a student, but each class has a cart with devices available for students. The carts and devices are stored in the classroom and students can use the devices in the classroom but cannot take them home.
 - Middle School (6-8) students: All students have access to a computer (Chromebook) that they have access to in class and carry with them throughout the day from class to class. The devices are stored in their advisory (homeroom) classrooms and the student is responsible for picking up and dropping off the device each day.
 - High School (9-12) students: All students have access to a personal take-home computer that is assigned to each student and that can be used during school and at home for homework and out-of-school educational learning and studying activities. Students are responsible for proper care of their devices and for bringing the device to and from school each day.



- The School Department's inventory of student-education Chromebooks is approximately 5,200 devices.
- According to the Fitchburg Public Schools, IT Director, as of March 31, 2025, the current cost of New Chromebooks is approximately \$210 per device, with an additional \$86 for a 3-year accidental damage protection warranty and \$31 Google Chrome Education license for each device, bringing the total cost to \$327 per device. This cost is consistent with cost-estimates



provided by the Massachusetts Broadband Institute in 2024, which estimated \$200-\$359 per device for a Chromebook.

- Chromebooks now support updates and software support for up to 8-years (previously 3 to 4-year lifespan).
- The School Department currently has annual funding to purchase/replace approximately 800 new devices per year.
- The School Department also owns/maintains ~150 internet hotspots.
 - Hotspots are primarily funded by and utilized (prioritized) for students covered by the McKinney Vento Act, Federal program authorizing education and educational support/resources for students of families experiencing homelessness or housing insecure youth.
- There is an interest in additional hotspots/subscriptions for provision to students/families of covered households other than those of the McKinney-Vento program, or to lend additional support/funding to that existing program.
- The School Department also provides a limited number of cell phones (with phone and data service) for McKinney Vento program families.
- The School Department is currently enrolled in the FCC E-Rate Program (85% rate) which provides subsidized funding to supply wireless internet connectivity at all schools.
- DLCS (Digital Literacy & Computer Science) Standards are followed by Fitchburg School Department at all schools.
 - Libraries/Librarians provide digital literacy training/resources at Elementary Schools.
 - Middle Schools have Library Media Aids and Digital Literacy and Technology incorporated into the curriculum of some Science classes and digital/internet safety and well-being incorporated as a component of Health classes.
 - High School curriculums include Computer Science courses.
- The Fitchburg School Department currently has plans (and funding through the Student Opportunity Act grant program) to develop a Family Welcome Center that will provide families with a centrally located, accessible place to engage in student enrollment activities, and other student/family resource including, community engagement and development opportunities for students *and* their families.
 - The new Family Welcome Center is planned for the 2025-2026 School Year and could include digital literacy, digital equity, and digital inclusion opportunities and resources.
- Once the School Department's Family Welcome Center is established and operational, it is likely that FPS would be interested in that location serving as a digital hub or digital navigator site where free public access to the internet and digital computing devices is offered. Digital literacy training classes and/or tech help sessions/services could be funded/facilitated through future rounds of the Municipal Digital Equity Implementation Grant program, the



Student Opportunity Act grant program, NDIA digital inclusion grant programs, or other potential funding sources.

- Cyber Security is the greatest concern of the City of Fitchburg/Fitchburg Public Schools Technology Department currently.
 - E-Rate grants are currently available to fund Cyber Security improvements.
 - Cyber security and Internet Safety should be a high priority and grant funds to expand capabilities and improve security and safety should be pursued as technology needs increase and as services, programs, and equipment responsibilities grow to meet Digital Equity and Inclusion needs of the City of Fitchburg and Fitchburg Public Schools.

Katy Whitaker, Development Coordinator of the Montachusett Regional Vocational Technical High School (Monty Tech) also submitted a Stakeholder Questionnaire. Access to Digital Devices is a critical need for students at Monty Tech. Currently, Monty Tech can help meet that need by providing every high school student with a Chromebook that they can use both in school and at home. However, access to reliable, high-speed broadband internet service at home is also essential and is sometimes a limiting factor for some students who do not have access to such services or whose access is limited or restricted. The affordability of broadband internet services plays a role in this limitation. A high number of Monty Tech students are members of lower income and rural households, both of which are covered population groups of the Digital Equity Act which may not have equitable access, availability, or financial resources to maintain regular, high speed internet services. Fortunately, most or all students at Monty Tech are very willing and able to adopt digital technology and several of the school's vocational programs focus on digital technology, particularly Information Technology, Engineering Technology, CAD/Drafting & Design, Graphic Communications, and Business Technology, and several other vocations utilize specialized hightech systems and therefore require specialized training and knowledge of such technologies. Monty Tech also has a student Cyber Security and Internet Safety club/team that participates in regional academic competitions and learning opportunities. Many members of this club and students of the





IT vocational program are well-suited to become future leaders in Digital Equity, Literacy, and Technology fields and may even have the necessary skills to serve as volunteer or paid youth peerleaders and digital navigators during their vocational training or as part of their certification requirements. Such training and skills would be beneficial to all students at Monty Tech, and to all sectors of covered population groups and the general public.

With so many students and families served by Fitchburg's Public Schools being covered households and other covered populations, the need for funding to provide equitable access, inclusion, and digital literacy training is an ongoing consideration of significant importance. One potential solution to improving digital equity among covered households is through the development of a Students & Families Community Center, or Family Welcome Center, an initiative that is currently underway through a grant funded project under the Student Opportunity Act grant program. The Family Welcome Center will provide families with a centrally located, accessible place to engage in student enrollment activities, and other student/family resources and community engagement and development opportunities for students and their families, like digital literacy training and access to free public internet and computer workstations.

Affordability is the biggest barrier when it comes to improving or providing digital services for schools and households in the region, both at home and in the classroom. Therefore, it is important that schools have access to less costly options to improve online access and access to digital devices, technology, and training. Unfortunately, FPS has limited access to hot spots as the primary source of funding for this service is provided by Federal funding that limits its application to McKinney-Vento program eligible students. Funding additional hotspots through other sources that can be more broadly applied to other covered population groups, particularly income-eligible Covered Households would enhance Digital Equity among many of Fitchburg's students and families. Since Covid-19, many households within Fitchburg (3,576) signed up for and were receiving reduced-cost internet service through the Federal Communication Commission's, Affordable Connectivity Program (ACP). However, that cost-saving program is no longer available, and those families are now paying higher rates (some higher than before they enrolled in ACP) or seeking alternative programs or options. Promoting and supporting local, statewide, and Federal, programs and legislation for current or future internet-affordability programs is essential to internet affordability for many Covered Households.

The Fitchburg Public Library is also a critical asset and Community Anchor Institution for meeting the needs of Covered Households. Currently the Library is under a full renovation and is housed in a temporary, but sufficient space. Once completed, the new library will be a state-of-the-art facility offering additional computer workstations and with great potential for additional digital literacy programs and resources. Currently the library provides access to free public internet and approximately 15 computer workstations. For Covered Households and individuals who do not have access to or cannot afford these services at home, the Fitchburg Public Library and its staff members provide an essential service that is of benefit to not just covered population groups, but the entire community.

According to Nicholas Glade, a librarian and technology coordinator at the Fitchburg Library, there are many residents, and in some cases larger percentages of people from some neighborhoods, that



have gaps in terms of access to digital resources and digital skills and abilities. Some residents struggle with being able to afford the internet, so the library is "on the front line of helping" with various digital needs. Deborah Hinkle, Library Director, noted that Library staff help walk-in patrons with technology and digital literacy issues daily and that the library's technology coordinator is available by appointment to assist with more complex tech-help issues or questions. She also added that the library is interested in offering more structured digital literacy classes if funding and staff capacity are available to support those initiatives. The library currently loans out hotspots, but they are popular and almost always fully reserved. They would like to acquire an additional 20-26 hotspots *and* laptops that could be made available for loans. Currently (2025), the library could use up to 11 computer workstations to update existing equipment. The library also has future needs for updating and expanding the number of computer workstations once the new library opens in 2027. These needs include:

- 28 Computers
 - 12 for Computer Lab
 - 12 for Public Computer Area
 - 2 for Children's Area
 - 2 for Teen Area
- 12 Laptops for Makerspace
- 20 hotspots (for additional devices and as replacements for older devices)

The current needs of the Public Library are important, but future needs will be even more important and imperative to achieving the library's full potential once the newly renovated building is re-opened in 2026 or 2027.



Below is a summary of existing digital equity challenges and barriers facing Individuals in Covered Households and associated "needs" to address or overcome those issues:

Section _{City of}

05 Fitchburg

| City of Fitchburg | Individuals in Covered Households | | | | | |
|-----------------------------|--|---|--|--|--|--|
| Digital Equity Factor | Challenges & Barriers | Needs | | | | |
| Availability | Lack of locations of free, public Wi-Fi Lack of internet in public housing communal spaces Lack of available internet in individual public housing apartments Lack of public charging stations Limited resources in public facilities (access to computer workstations and hotspots) | Additional Public Wi-Fi locations Public charging stations Wi-Fi in Public Housing Wi-Fi options for homebound individuals Additional hotspot availability | | | | |
| Affordability | Cost of internet service Cost of devices Housing insecurity ISP programs that offer low cost but inadequate internet service | Low-cost/free internet programs Device distribution programs (must include a digital literacy component) Equitable ISP programs | | | | |
| Adoptability | Lack of digital literacy Lack of affordability Lack of trust for the internet Lack of technical knowledge to use devices effectively Lack of accessible formats where public internet resources and information is disseminated | Digital literacy classes Device distribution (once digital literacy program complete) Internet Safety Classes One on one tech help Live tech help line Hard copy (and on-line) information pertaining to available digital resources | | | | |

Other entities that submitted a Stakeholder Questionnaire or Interview, or who participated in a Focus Group meeting related to Covered Households (and other covered population groups) included Fitchburg's Senior Cener Director Amanda Koeck, the Fitchburg Disability Commission, Eolann McMillan, LUK, inc., Michele Marino, Veterans Services Commissioner, among others. Notes from their responses are included in the summaries of other Covered Population groups representative of those they primarily serve, such as Aging Adults, Individuals with Disabilities, Members of Racial & Ethnic Minority Groups, and Veterans, respectively.

Fitchburg

5.4.2 Needs of Aging Individuals

As part of this planning process, MRPC conducted a focus group meeting with eight (8) patrons of the Fitchburg Senior Center and a one-on-one interview with the Executive Director, Amanda Koeck. Koeck was also helpful in promoting the survey through the monthly newsletter/bulletin, postings, and the survey box provided. MRPC also conducted two tech help sessions at the Fitchburg Senior Center to better understand the needs of the City's Aging Adult residents.

During those interviews and engagements, it was revealed that there is a strong need for digital technical resources particularly following the loss of a former Senior Center staff person who previously provided considerable technical assistance to the Center's patrons. Pre-covid, the Fitchburg Armory served about 700 residents monthly, today it services 400 to 500 people per month. The digital needs and concerns vary within the senior population; however, it was agreed between the seniors at the focus group meeting that the top needs were affordability, cyber security, and internet navigation/help. Many of the seniors mentioned how expensive it was to replace their computer device or pay for internet connectivity. For instance, a participant considered dropping her internet all together because of the cost. The Wi-Fi for affordable housing is priced at market rate and service is not highly reliable which makes it both inaccessible for lower-income households and undependable for meeting everyday needs. Access to affordable and reliable internet options is essential for residents to participate fully in day-to-day life. This means that there should be other affordable alternatives for Fitchburg residents, especially Aging Adults and other lower-income residents and individuals on fixed or limited incomes.

Another primary concern is the fact that many aging adults feel increasingly "forced" and provided with no other choice than to use the internet to accomplish many of their day-to-day "living" tasks. In some cases, there is no longer an alternative "off-line" or "in-person" method to accomplish some tasks. Thus, an affordable, stable, or fixed cost is not the only thing needed to make the internet accessible and equitable for aging adult residents. Digital Literacy training in a variety of subjects and skill levels may also be needed. The Aging Adults in attendance at the Focus Group meeting and Tech Help workshops had varying levels of digital literacy and confidence in their digital skills. However, despite varying degrees of confidence, many aging adults expressed an interest in additional tech-help or digital literacy training to better navigate the internet or other online services. They specifically indicated the need for help navigating social media sites, operating and setting up their hand-held devices, cyber-security and scam avoidance, and storing or archiving information to the cloud. Of particular interest and need was digital literacy training related to "online safety" and general "tech-help" questions.

Fitchburg's Aging Adults use the internet for a variety of reasons, the most common being for family and social connection, using video conferencing/calling applications, text messaging or chatting, and viewing social media. In addition to connecting with family and friends, senior center patrons also use their devices for GPS navigation, and to view interesting or educational online applications like star maps, hobby-based websites, plant-id applications or webpages, listening to music, viewing videos, movies, or shows, and conducting online searches. Patrons reported using online search engines, social media platforms, and video streaming websites/applications to explore their hobbies. For instance, one woman was using the visual search function of a common search engine



with her phone's camera to identify plants and flowers she saw in the wild or at plant nurseries. Many Aging Adults are familiar and experienced with digital platforms and use them occasionally or on a day-to-day basis; but the majority require some sort of assistance to fully utilize and operate the internet to the best of their ability.

Of significant importance is the need for increased training around telehealth and online medical services. Most older adults we spoke with noted that they need to use the internet more and more frequently for matters related to their medical and healthcare including scheduling or attending doctors' appointments, confirming appointments, registering or pre-registrations, receiving test results, or accessing other important medical records or information. However, many people find it difficult or inconvenient to use the internet for these purposes and worry that they may miss important information, or mistakenly enter incorrect information, click or toggle the wrong button, or worse that they may not be able to access important results or accurately report symptoms, medications, etc. The consequences of a lack of digital literacy, comfort, or confidence about this topic are of critical importance as a lack of knowledge or skills could affect the personal health or wellbeing of individuals required to use digital, telehealth resources as part of their healthcare.

Also of substantial importance, Aging Adults are fearful of being scammed. All participants at the meeting were concerned about their privacy and security online. For example, 8 out of 8 respondents answered "Yes" to the question, "Are you concerned about your privacy and security online?". All attendees expressed varying levels of online safety awareness, but everyone agreed that it would be beneficial if there were to be online safety and cyber security training offered either at the library or the senior center. Similarly, classes in basic computer navigation would also be helpful for Fitchburg's Aging Adults. It should be noted here that one member of the group was more digitally savvy and confident than others and it was suggested that peer-to-peer education or mentoring could be very beneficial at the Fitchburg Senior Center and for Aging Adults, in general. Senior Center Director, Koeck noted that it would be ideal if the senior center could host tech-help courses twice a month and that classes should focus on MyChart navigation, general digital literacy, online safety & cyber security, assistance with Department of Motor Vehicle online forms like registrations and license renewals, etc. Implementation of digital literacy classes would be beneficial to all of Fitchburg's Aging Adult population, not just patrons of the Senior Center, so it may be useful to promote them broadly, or consider offering training at other locations, like the library, too. It was agreed that the most ideal time and day to offer digital literacy training courses and/or tech-help sessions at the Fitchburg Senior Center would be on Monday mornings.

It should also be noted that Aging Adults expressed a need for assistance in finding a place to buy or fix computers for affordable prices. For example, many Aging Adults said that their computer is outdated and will no-longer receive updates or important security "patches", and in one case, no longer works properly. **Section 6.4.2** provides several related resources for *Aging Adults/Councils on Aging*.

The Fitchburg Armory building, where the Senior Center is located, also has poor internet connectivity in part due to the older, aging infrastructure, and brick interior and exterior walls, which make it hard to run internet cables throughout the building and even harder to transmit wireless signals. These limitations to wired and wireless (Wi-Fi) transmission and signal distribution, cause

drops in connection, fluctuations in speed, and overall signal and connection reliability issues. With additional funding the senior center would like to update the internal network cables and equipment and/or add signal-boosters or a mesh network to improve or boost the connection throughout the building.

Similarly, with funding, the Fitchburg Senior Center would like to provide more tech help sessions and/or digital literacy training courses to support their patrons. Participants in the Aging Adult focus group meeting and tech help sessions indicated that there is a need for digital training programs tailored specifically to Aging Adults in areas like online safety and security, online healthcare navigation, help in accessing and using medical records and results applications like, MyChart, Veterans benefits systems, DMV websites, and other critical online services, as described above. There is also a need for information and outreach materials on programs that offer subsidized, discounted, or otherwise affordable digital computing devices for Aging Adults to own and use at home. Finally, there is also a need for more digital computer workspaces and technology and equipment at the Senior Center such as computers, laptops, scanners, webcams, and microphones to support public access for participating in telehealth appointments and accessing medical records or results. This need includes the need for a private digital space (i.e., booth or pod) with access to the internet for participating in medical appointments or other private matters comfortably and conveniently when you have no choice but to use the internet in a public space like the Senior Center.



Most of the "needs" listed here are given with a focus on the Senior Center since that was the place where the greatest amount of outreach to this Covered Population group occurred. However, we believe the needs of this group can be applied to other public locations in Fitchburg, like the Library, Veterans Center, and Public Housing properties.

Below is a summary of existing digital equity challenges and barriers facing Aging Adults and the associated "needs" that must be met to address or overcome those issues for this Covered Population:

Section City of

05 Fitchburg

| City of Fitchburg | Aging Individuals Over 60 Years of Age | | | | |
|-----------------------------|---|--|--|--|--|
| Digital Equity Factor | Challenges & Barriers | Needs | | | |
| Avaitability | Lack of locations where free, public Wi-Fi is available Limited resources in public facilities (Public computers, Library hotspots) Lack of transportation options to digital resources Lack of ADA Accessibility Housing insecurity | More Public Wi-Fi locations Additional Hot Spot availability Wi-Fi options for homebound Transportation to digital resources | | | |
| Affordability | Cost of internet service Cost of devices Fixed/limited income Housing insecurity ISP subscription programs that offer lower cost internet but at reduced (lower) speeds | Low-cost/free internet programs Device distribution programs (must include a digital literacy component) Equitable ISP subscription programs | | | |
| Adoptability | Lack of digital literacy Lack of consistent digital literacy classes Lack of trust/comfort with using the internet No device Outdated device Lack of one-on-one tech help Lack of accessible formats where public internet resources and information are disseminated One on one tech Consistent/addi literacy classes Internet safety the safety t | | | | |

5.4.3 Needs of Incarcerated Individuals

Incarcerated individuals comprise less than 1% of the population of Fitchburg, and therefore the needs of that "covered" group are not specifically addressed as a primary consideration or focus group within the Goals & Actions of this Plan. However, given the unique challenges and barriers and specific needs associated with this covered population group, we have conducted an assessment of needs relative to availability, affordability, and adoptability. It should also be noted that the



Worcester County Sherriff's Office located in Fitchburg provides transitional support for formerly incarcerated individuals and would be a good resource to consult if future needs or goals of this Plan call for it, or if the public requests such information.



Below is a summary of existing digital equity challenges and barriers facing Incarcerated Individuals and associated "needs" to address or overcome those issues for this Covered Population:

| City of Fitchburg | Incarcerated or Previously Incarcerated Individuals Challenges & Barriers Needs | | | | |
|-----------------------------|---|---|--|--|--|
| Digital Equity Factor | | | | | |
| Availability | Lack of access to affordable broadband internet Exorbitant cost of access to broadband internet for incarcerated individuals Lack of locations of free, public Wi-Fi Lack of public charging stations Limited resources in public facilities (access to computer workstations and hotspots) Lack of transportation options to digital resources Lack of broadband subscription and (up to date) devices Housing insecurity | More Public Wi-Fi locations Public charging stations Additional Hotspot availability Transportation to digital resources Specific training for gaps in technology use/changes in technology | | | |

Section _{City of}

05

Fitchburg

| Affordability | Cost of internet service Cost of devices Fixed/limited income Housing insecurity ISP subscription programs that offer lower cost internet but at reduced (lower) speeds | Low-cost/free internet programs Device distribution programs (must include a digital literacy component) Equitable ISP subscription programs |
|---------------|--|--|
| Adoptability | Lack of digital literacy Lack of demographic targeted digital literacy classes Lack of trust/comfort with using the internet No device Outdated device Lack of one-on-one tech help | One on one tech help Content-specific digital literacy classes for recently released inmates as part of re-entry program Internet safety training Basic computer/internet use classes geared toward new users or earlier technology Device distribution (once digital literacy program complete) New uses of internet and technology training for individuals with long time-gaps in use and access |

5.4.4 Needs of Veterans Focus Group Meeting



According to the input provided by local Michele Marion, City of Fitchburg's Veterans Services Commissioner and input provided by other Veterans Services Officials at a Regional Veterans Focus Group Meeting held at the Montachusett Veterans Outreach Center (MVOC) in June 2024, many Veterans in the Montachusett Region, including 5-6% of Fitchburg's population, may be subject to additional challenges and barriers to accessing the internet related to their status as Veterans. For example, many Veterans lack internet access due to affordability, trust, and digital literacy barriers. Some Veterans may have a disability that further impacts

their digital equity. A large proportion of the regions Veteran's like other covered population groups have access to the internet through a mobile device such as a smartphone or tablet. Many others also have internet access at home, but a considerable proportion are believed to rely solely on mobile data as their primary source of internet. Additionally, many are concerned about online scams and internet privacy and security and choose not to subscribe to the internet or intentionally limit their access to their mobile device. The lack of "feeling secure" online may discourage many Veterans from accessing the internet at home.



Many Veterans possess specialized skills that make them proficient at various types of jobs, in some cases related to digital technology and the use of computers and software programs. However, some Veterans are faced with experiences that sometimes limit their ability to secure employment or hold long-term employment. Others are on a fixed income of a partial Veteran's retirement or disability claim due to being injured in the line of duty or other challenges associated with their dedicated service. For these reasons, and others, some Veteran's may struggle with the cost of

internet service and a lack of digital skills needed to navigate the online world. There is an emphasis on the need for accessible digital literacy programs held in familiar, comfortable locations (such as Veterans Community Centers), ideally promoted through Veteran services networks and organizations like MVOC.



Locations such as libraries are crucial public access points to get Wi-Fi and digital help for many people, however, many libraries are busy, lack privacy, or require sign-ups, reservations, appointments, or other personally identifying information or requirements that, sometimes, or often, act as barriers for Veterans trying to access digital resources. Furthermore, Veterans primarily use the internet for access to their Department of Veterans' Affairs benefits and related online programs and administrative (digital) applications, and Librarians are not trained or familiar with these programs, like a Veteran's Services Officer or a Coordinator at a Veteran's Center would be.

Veterans, like other segments of the population, also use the internet for social connections, jobseeking, health care services, financial services and banking, hobbies and entertainment, and all other aspects of everyday life and living. Therefore, it is not only important for Veterans to have equitable, affordable access to reliable internet, it is essential that it be available to them at home, or in a public space that is "less public" than traditional public gathering spaces. Ideally such spaces would be focused specifically on Veterans and their needs and staffed by trained Veterans services specialists. Many veterans lack internet access due to affordability, trust, and digital literacy barriers. However, many, if not most, veterans have access to a cellphone with mobile data services. Still, many are concerned about scams, online safety and security, and protection of their personal privacy. The lack of feeling "secure" online discourages some veterans from accessing the internet at home.

It was estimated by the focus group that 75% of Veterans have some form of internet access, however many struggle with the cost of service and lack of digital skills needed to access and navigate the online world. There is an emphasis on the need for accessible digital literacy programs held in familiar, comfortable locations, ideally promoted through veteran networks. Locations such as libraries are crucial access points to get Wi-Fi and digital help. However, many libraries (and other places where free public internet is available) lack privacy or require reservations or appointments



to access a workstation. The lack of privacy or need for appointments or reservations can pose a barrier or challenge for Veterans trying to access digital resources.

Taking these things into consideration, there are many factors and potential actions and opportunities to improve Digital Equity, Inclusion, and Literacy among Veterans in the Montachusett Region and within Fitchburg. Below are a few key items related to that objective.

Primary Digital Equity Needs for Veterans:

1. Workspaces are needed to provide access to the internet for various services where privacy can be maintained. The Fitchburg Veterans Center needs two laptop computers with second monitors or portable web-camera, screens, microphone, and



headphones. They also need a document scanner and all-in-one printer.

- 2. Cyber-Security, Online Safety, and Tech-Help support, and training is imperative as many Veterans do not utilize the internet due to concerns related to privacy, safety, and cyber security. (There are similar concerns among those who do access the internet, too.) General Tech Help classes for Veterans and any workshops on using the Veterans Affairs (VA) online portal and applications should be held at the Veterans Center and provided for Veterans.
- 3. Affordable internet options and devices are needed as many Veterans cannot afford to pay for internet services, nor can they afford to purchase, maintain, or upgrade a device. (This is vital as many Veteran's programs and benefits are accessible only through online applications and online webpages, however internet and digital device affordability or subsidy programs for Veterans are not common.)

The need for secure and accessible spaces to access digital resources and digital literacy training is critical to achieving digital equity among Veterans. Further, Veteran-friendly environments play an essential role in providing services to Veteran's and bridging digital accessibility gaps. Below are three primary, or key actions that should be implemented for Veterans relative to increasing participation in digital services and programing and ensuring that the three primary "needs" listed above are adequately addressed and successfully overcome:

- 1. Create safe and private workspaces, preferably within Veterans Resource Centers or places where Veterans Services Officers or Agents are present or available.
- 2. Provide online safety, cyber-security, software, and coding classes.
- 3. Provide affordable internet options specifically for Veterans.

Below is a summary of existing digital equity challenges and barriers facing Veterans and associated "needs" to address or overcome those issues for this Covered Population:

Section City of

05 Fitchburg

| City of Fitchburg | Veterans | | | | |
|-----------------------------|---|---|--|--|--|
| Digital Equity Factor | Challenges & Barriers | Needs | | | |
| Availability | Lack of locations where free, public Wi-Fi is available Limited computer resources in Veterans Center and public facilities Limited number of available hotspots at Library Lack of public charging stations Not all Veterans Housing offers free internet services | More Public Wi-Fi locations Additional hotspot availability Additional public computers at Veterans Center Wi-Fi options for homebound Veterans Additional workspaces Public charging stations Free internet/wi-fi in Veterans Housing | | | |
| Affordability | Cost of internet service Cost of devices Fixed/limited income Housing insecurity Transitional employment ISP assistance programs that offer low cost but inadequate internet service No Veteran-specific affordable internet programs | Low-cost/free internet programs Device distribution programs (must include a digital literacy component) Equitable ISP internet assistance programs | | | |
| Adoptability | Lack of digital literacy Lack of trust/comfort using the internet Lack of access to public devices No device Lack of privacy while using devices Lack of one-on-one tech help Lack of accessible formats where public internet resources and information are disseminated | One on one tech help Digital literacy classes Internet safety training Basic computer-use classes Additional private workspaces Device distribution (once digital literacy program complete) Hard copy (and on-line) information pertaining to available digital resources Live tech help line | | | |

Addressing digital barriers, such as affordability, lack of digital security, and digital literacy is crucial to ensuring equitable access to the internet for Veterans. Creating accessible, comfortable, stressfree digital workspaces, offering cybersecurity training, and providing affordable internet options and



devices are all necessary steps to ensure Veterans have access to broadband internet critical digital resources. It is important to note and consider that many Veterans are also members of other "covered population" groups, like aging adults, individuals with disabilities, individuals who reside in rural areas, and covered households whose income is less than 150% of the poverty level.

5.4.5 Needs of Individuals with Disabilities

Approximately 15% of Fitchburg's population are covered as "Individuals with Disabilities" under the Digital Equity Act. As part of the coordinated outreach for this Plan, MRPC met with the Fitchburg Disability Commission and John Person, Regional Director of MassAbility (formerly the Massachusetts Rehabilitation Commission), a state agency empowering people with disabilities to live life on their own terms, through programs and services that expand possibilities in careers and training, home and community life, and legal rights and benefits – including disability determination for federal programs, such as the Digital Equity Act.

A primary digital "equity" issue for many individuals with disabilities, particularly for individuals who experience challenges to hearing or seeing, is the accessibility of digital media, particularly webpages. This can be especially important for a municipal government who serves the entire population of a community. Hence, one of the most critical needs, and important first steps for any municipality toward achieving digital equity is improving the accessibility and ADA compliance of the Municipal website. Likewise, creating more "private" spaces at locations where public internet and workstations are offered to allow for individuals with disabilities to get help with their digital needs, or conduct a virtual medical or other health and well-being appointment, would be a huge help to

improving the digital equity for individuals with disabilities. Providing accessible with spaces adaptive, accessible, technologies, digital devices, and associated software and hardware is also a crucial need. Due to a lack of affordable options at home, particularly for "covered groups, and a lack of population" "private" spaces where publicly accessible internet is available, such as the Library, Veterans Center, and Senior Center, more public spaces with internet and ADA accessible features are needed. One option would be to create an ADAcompliant digital workspace at the new Fitchburg Public Library.

Funding for fully ADA compliant accessible internet spaces, with the option for privacy, if needed, and a fully accessible municipal website gives residents the opportunity to engage and





use the internet and is a first step toward community digital equity. The Municipal Digital Equity Planning program and Municipal Digital Equity Implementation Grant provide tools and resources to understand such a need and implement the necessary solutions. When individuals with disabilities do not have equitable access to broadband internet and accessible, adaptive, digital devices and technologies at home, they will depend on public spaces like a library, senior center, or community center to get the services they need. Ensuring that those services are available is not only a primary purpose of this plan, but also a realistic possibility under the Municipal Digital Equity Implementation Planning program and Municipal Digital Equity Implementation Grant program. Therefore, actions addressing these needs are identified as high priorities within this Plan. It should be noted that transportation is also often a barrier to gaining access to public services, and broadband internet and digital equipment, services, and programs, are no exception. Often, individuals with disabilities, aging adults, individuals who are members of a racial or ethnic minority group, and lower-income households all have challenges or barriers related to access to transportation or public transit. As such, consideration should be given to this factor which affects multiple covered populations, as an indirect barrier to digital equity and inclusion. Identifying and funding public transit programs and services that could alleviate this challenge are needed and should be considered when implementing any aspect of this Plan, particularly those aimed at benefiting individuals with disabilities and other affected covered populations. Access to public transit and transportation should also be considered when planning for and appropriately locating public digital equity resources.

According to input from MassAbility, one of the greatest digital equity challenges for individuals with disabilities is access to accessible technology and devices. For this reason, MassAbility partners with other organizations, such as EasterSeals, to provide affordable options to accessible digital resources (technology, equipment, and devices). In addition to providing products and guiding clients to affordable services, MassAbility also acts as a vocational rehabilitation center for individuals with disabilities. EasterSeals is an accessible technology partner that provides systems covering a range of disabilities. As part of the implementation of this Plan and continued ongoing efforts toward enhancing and achieving digital equity in Fitchburg, MassAbility and partnerships with other non-profit organizations serving individuals with disabilities should be established to ensure that the needs of this important covered population comprising approximately 15.1% of Fitchburg's population are fully considered and met.

Below is a list of key considerations for enhancing digital equity and inclusion among individuals with disabilities:

- 1. Accessible City Website
- 2. Accessible Digital Spaces with supporting access-based technology, software, hardware, equipment, devices, and functions for induvials with varying and/or multiple disabilities
- 3. Public and Non-profit Partnerships for group-specific digital literacy training
- 4. Public Transit & Transportation support for digital literacy trainings and public digital workspaces
- 5. Affordable and Accessible Digital Resources and Devices with Assistive Technology



Below is a summary of existing digital equity challenges and barriers facing Individuals with Disabilities and associated "needs" to address or overcome those issues for this group:

| City of Fitchburg | Individuals with Disabilities | | | | |
|-----------------------------|---|---|--|--|--|
| Digital Equity Factor | Challenges & Barriers | Needs | | | |
| Availability | Lack of accessible locations with free, public Wi-Fi Limited accessible workspaces in public facilities with free public Wi-Fi Lack of accessibility-focused outreach and engagement materials Lack of assistive devices, hardware, and software available in public spaces | Accessible Public Wi-Fi locations Additional Hotspot availability Internet/Wi-Fi and device options for homebound individuals Accessible transportation to digital resources Access to assistive devices and digital technologies in public spaces | | | |
| Affordability | Cost of internet service Cost of devices Fixed/limited income ISP programs that offer low cost but inadequate internet service | Low-cost/free internet programs Device distribution programs (must include an accessible digital literacy component) Equitable ISP programs | | | |
| Adoptability | Lack of digital literacy Lack of accessible devices and workspaces Lack of assistive devices and technology (hardware & software) Lack of accessible formats where public internet resources and information are disseminated Lack of fully accessible or compliant public websites | One on one tech help – in home and on-site options Accessible Digital literacy classes – in home and on-site Device distribution (once digital literacy program complete) Accessible digital resources and information Hard copy (and online) information pertaining to available digital resources Live (or on-demand) tech help call line & online form Public websites compliant with the Standards for Information and Communication Technology (ICT) under Section 508 of the Rehabilitation Act and Section 255 of the Communications Act | | | |



Fitchburg

5.4.6 Needs of Individuals with a Language Barrier

This covered population group includes individuals who are English-learners and individuals who have lower levels of literacy. In Fitchburg, 20% of the population are individuals with a language barrier and 5.6% are English learners. In Worcester County 17.1% of the population have low literacy levels. Therefore, it is important to consider the digital equity, literacy, and inclusion needs of this group. A focus group meeting was held on December 18, 2024, to assess the needs of individuals with a language barrier.

Digital Literacy and inclusion, related translation services, and affordable access to reliable, highspeed internet and digital devices are essential needs for individuals with language barriers. To meet these needs, it is necessary to develop and maintain diverse partnerships with critical agencies and organizations with the experience, skills, established relationships, and resources to meet the specific needs of this group. Two primary organizations representing and serving individuals with a language barrier within the Montachusett Region is the Spanish American Center in Leominster, and the Literacy Volunteers of the Montachusett Region, who have an office on the first floor of Fitchburg City Hall. LUK, inc. is another important organization who serves many different ethnic groups throughout the region and has established partnerships among many other social services organizations, including the Spanish American Center. Making Opportunity Count (MOC) and NewVue Communities are two other organizations who have specialized experience serving segments of this covered population group and who are closely connected with other organizations. Mount Wachusett Community College (MWCC), particularly their adult education program, and the MassHire North Central Mass Career Center (NCMCC) are two other organizations serving the Montachusett Region and are currently involved in Digital Literacy training for individuals with a language barrier. Any of these organizations would make ideal partners in achieving digital equity, literacy, and inclusion goals. Of note is the fact that MWCC has previously assisted NCMCC with creating digital literacy curriculum in languages other than English and has also created bi-lingual curriculums. 39



³⁹ As part of the focus group meeting covering the needs of racial and ethnic minority groups and individuals with a language barrier, it was stated that English-taught courses with language assistance or translation services are, in some cases, preferred over courses taught in languages other than English or ESOL courses.



Below is a summary of existing digital equity challenges and barriers facing Individuals with a Language Barrier and associated "needs" to address or overcome those issues for this Covered Population:

| City of Fitchburg | Individuals with a Language Barrier (including individuals with low literacy) | | | | | |
|-----------------------------|--|--|--|--|--|--|
| Digital Equity Factor | Challenges & Barriers | Needs | | | | |
| Availability | Lack of locations where free, public Wi-Fi is available Limited or lacking translation resources in public facilities where free Wi-Fi is available Lack of digital devices and resources available (public computers, hotspots) Lack of public charging stations Lack of public charging stations | | | | | |
| Affordability | Cost of internet service Cost of devices Fixed/limited income ISP programs that offer low cost but inadequate internet service | Low-cost/free internet programs Device distribution programs (must include an accessible digital literacy component) Equitable ISP programs | | | | |
| Adoptability | Lack of digital literacy Lack of devices Lack of ESL/ESOL digital literacy classes Lack of accessible and translation formats where public internet resources and information is disseminated Instructors who speak other languages | One on one tech help – in home and on-site options with translation services Digital literacy classes with instruction in other languages and/or translation services Internet safety training with translation services Device distribution (once digital literacy program complete) Hard copy (and on-line) information pertaining to available digital resources Live tech help line | | | | |



Fitchburg

5.4.7 Needs of Individuals who are members of a Racial or Ethnic Minority Group

A full 28-31% of Fitchburg's population is Hispanic, 6-7.23% are black, and 2-3.7% are Asian. Of those, 14% are of multiple races or ethnicities and 10.2% of Fitchburg's residents are foreign born. As many as 35-40% of Fitchburg's residents are covered under the Digital Equity Act as members of a racial or ethnic minority group. The presence of a broad diversity of cultures and languages within the City of Fitchburg elevates the needs of this important population group.

Many people born outside of the US have immigrated to the City of Fitchburg and throughout the Montachusett Region over the course of many generations. Fitchburg has had a large and growing proportion of Hispanic residents for many generations. More recently, the region has seen an influx in immigration from various countries including Haiti, Brazil, Turkey, Latin America, and other parts of the world. Many recent immigrants are also members of other population groups such as, Individuals with a Language Barrier, and Covered Households. As with those other population groups, access to affordable, reliable, high-speed internet, digital devices, and digital literacy courses are essential. Similarly, providing such services is dependent upon developing and maintaining diverse, cooperative partnerships with critical agencies and organizations with the experience, skills, established relationships, and resources needed to meet the specific needs of this group. As with language-based needs, several partners within the region focus and specialize in serving the needs of racial and ethnic minority groups. For instance, LUK, inc., the Spanish American Center of Leominster, Making Opportunity Count (MOC), NewVue Communities, MWCC, and the MassHire NCMCC are all organizations currently involved in serving minority groups and, in many cases, providing Digital Literacy training services. Any and all of these groups would make ideal partners in achieving digital equity, literacy, and inclusion goals in Fitchburg.





Below is a summary of existing digital equity challenges and barriers facing Individuals who are Members of a Racial or Ethnic Minority Group and associated "needs" to address or overcome those issues for this Covered Population:

| City of Fitchburg | Individuals who are Members of a Racial or Ethnic Minority Group | | | | | | |
|-----------------------------|---|--|--|--|--|--|--|
| Digital Equity Factor | Challenges & Barriers | Needs | | | | | |
| Availability | Lack of locations where free, public Wi-Fi is available Limited resources in public facilities where free Wi-Fi is available Lack of digital resources and workspaces available in public places Lack of public charging stations Limited or lacking translation resources in public facilities where free Wi-Fi is available | Establish additional Public Wi- Fi locations Additional Hot Spot availability Public charging stations Translation software/hardware Bi-lingual staff and instructors Digital Literacy classes available in multiple languages or with translation | | | | | |
| Affordability | Cost of internet service Cost of devices ISP programs that offer low cost but inadequate internet service | Low-cost/free internet programs Device distribution programs (must include a digital literacy component) Equitable ISP programs | | | | | |
| Adoptability | Lack of digital literacy Lack of affordability Lack of accessible formats and translation services where public internet resources and information is disseminated Lack of digital literacy opportunities Lack of devices Lack of ESL/ESOL digital literacy classes Instructors who speak other languages | Digital Literacy classes offered at cultural or ethnic community centers Device distribution (once digital literacy program complete) Hard copy (and on-line) information pertaining to available digital resources Live tech help line Digital literacy classes with instruction in other languages and/or translation services Internet safety training with translation services | | | | | |

Fitchburg

5.4.8 Needs of Individuals who Reside in Rural Areas

According to the Pew Institute⁴⁰, 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 Fitchburg.

While the City of Fitchburg does have some less developed areas with rural characteristics, particularly in the northern parts of the City in the vicinity of Ashby and Ashburnham, no part of the City is classified as "Rural" under the definition used for the Digital Equity Act. Therefore, the needs of that covered population group were not assessed as part of this plan.



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

⁴⁰ 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

6 DIGITAL EQUITY RECOMMENDATIONS

Community Vision, Goals, and Actions

Broadband internet accessibility and connectivity issues in Fitchburg 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 affecting affordability, limited access to public internet and digital workspaces, affordable devices and technology, and digital literacy training and tech help. These challenges and barriers are exacerbated in Fitchburg within areas where greater than 75% of the population are "covered populations" of the Digital Equity Act, including a high of 86.5% of the population in Downtown Fitchburg (Census Tract 7107). However, as discussed in the Summary of Community Needs and SWOT analysis presented within **Section 5**, Fitchburg has the potential to develop a framework to better support digital inclusion and enhance digital equity. Through the information provided by this Plan and upon its eventual implementation, the City of Fitchburg has the tools and resources necessary to enhance digital equity and inclusion within the City, and to become a regional hub for digital literacy and inclusion, and a statewide Digital Equity leader or Champion.









6.1 DIGITAL EQUITY COMMUNITY VISION

The City of Fitchburg envisions itself as a Digital Equity and Inclusion Leader and will implement and promote the Goals and Actions of this Plan to champion initiatives and create and pursue new opportunities in a way that honors that commitment and is deserving of such recognition as "The City of Digital Equity and Inclusion".

With thoughtful and inclusive planning, it is our mission, through the implementation of this Plan, to promote Digital Equity through increased access to affordable services and programs. This mission can be accomplished by providing the City's residents and visitors with the tools, resources, programs, services, and opportunities needed to achieve higher levels of digital inclusion and literacy. We believe the City's vision and mission can be further advanced through the establishment of free, open, yet secure public access to reliable, high-speed internet and internet-connected digital devices and workstations and providing digital navigation and training services to advance digital literacy, safety, security, and individual levels of comfort and convenience among people of all ages and abilities.

Fitchburg's Digital Equity vision can be summarized and better understood by considering the answers to three basic questions: "What?", "Who?", and "Why?". Answering these questions requires careful thought, consideration, and exploration of the existing conditions around broadband internet access and digital literacy and inclusion. Having conducted that evaluation as part of this planning process, the summary below provides a clearer picture of the purpose and reason for envisioning a more equitable and inclusive digital environment in Fitchburg.

| What? Sound digital policies and practices Confidence in online safety & security Availability of free public wi-fi and digital resources Increased Digital Literacy, Skills, and Opportunities Affordable, reliable internet options for homes and businesses Public Transit and Transportation to access Digital Literacy and Resources | Who? Aging Adults Lower-income households Homeless & housing insecure Racial & Ethnic Minority Groups Individuals with a Language Barrier Disabled Veterans Small and Micro- enterprise businesses The people of Fitchburg, those who live, work, shop, dine, recreate, explore, and experience this great City. | Why? Increased inclusivity Adaptability and adoptability for future needs Compliance with ADA requirements and equal opportunity for individuals with a disability Equal opportunity and affordability for lower- income residents Equal opportunity for Racial & Ethnic Minority Groups Equal opportunity for individuals who speak other languages, are English-learners, or who |
|---|---|--|
| - | | |

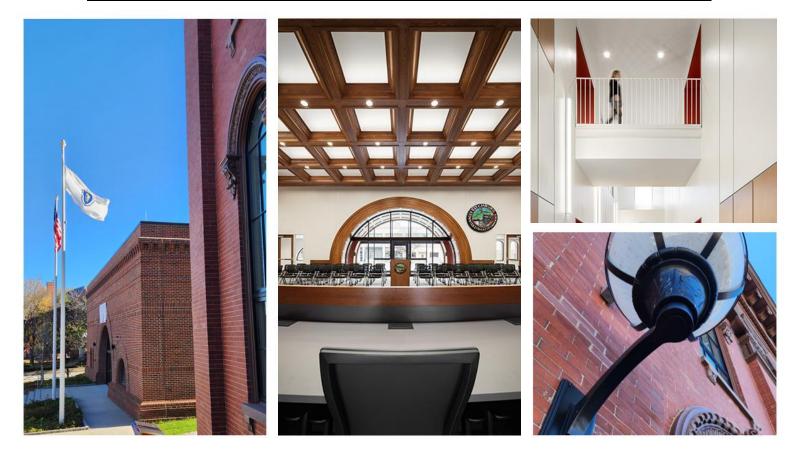


Fitchburg's community vision is centered on a desired outcome, attainable through the implementation of carefully planned and clearly defined goals and actions and informed by an understanding of the challenges, barriers, and needs identified as part of this planning process; Through this understanding, and the community vision it inspired, clear goals and actions have been defined to address the needs, overcome the challenges, and to achieve the desired outcomes for Digital Equity and Inclusion in the City of Fitchburg, now and into the future.

6.2 DIGITAL EQUITY GOALS

City of Fitchburg Digital Equity Plan Goals:

- I. Improve the effectiveness, efficiency, and quality of local initiatives that promote and enhance digital equity, literacy, and inclusion.
- II. Increase access to affordable, fast, reliable internet.
- III. Expand internet access and digital literacy through community engagement and inclusion to overcome existing barriers and challenges.
- IV. Further develop the municipality's technological resources and public digital workspaces.
- V. Seek and secure funding opportunities for investment and long-term support of digital equity programs and services.
- VI. Become a municipal leader in digital equity through collaboration, inclusion, education, and programming.
- VII. Provide digital literacy training and skill building opportunities for people of all ages and abilities, and those that are part of a covered population.





6.3 DIGITAL EQUITY RECOMMENDATIONS (ACTION PLAN)

A Digital Equity Action Plan or set of Recommendations (presented as Goals and Actions) aimed at addressing the Digital Equity "needs" of the residents of the City of Fitchburg and achieving their shared community "vision" which was developed as part of this Plan and with information gathered throughout the public planning process. The Action Plan is presented here, within Section 6.3, as an Implementation Matrix which consolidates related actions under a common goal and offers guidance or recommendations on "Potential Leadership" or implementation partners and Potential Funding Programs" or sources of funding for each action. These recommendations are intended to help facilitate and guide the implementation process but are not intended to be an exhaustive, or complete list of necessary or supporting tools or resources, but rather they offer a starting point and guiding direction to pursue. The Implementation Matrix also provides information about which "Project Focus Area Categories" each potential action item is related to, relative to the Massachusetts Broadband Institute's, Municipal Digital Equity Implementation Grant program. This information will be useful as it directly corresponds to the categories of allowable and intended projects defined under that grant program, a primary potential funding source and companion program of the Municipal Digital Equity Planning program which funded the creation of this Plan.

The Fitchburg Digital Equity Action Plan Implementation Matrix is presented within subsection 6.3.2, below. A "Key" to the Matrix is provided directly below, as subsection 6.3.1. The Key should be referenced prior to viewing the Matrix and in coordination with its use.

6.3.1 Key to the Digital Equity Action Plan Implementation Matrix

The information presented below provides a description of the organizational structure, or framework of the Digital Equity Action Plan Implementation Matrix and serves as a "Key" to its use:

- The Action Implementation Matrix includes the seven Goals identified on within Section 6.2. •
- Goals are labelled by Roman numerals (I VII).
- Each Goal and its corresponding Actions are color-coded with a common color, unique to each Goal.
- Actions are related to one or more of the seven (7) identified project focus area categories of the Massachusetts Broadband Institutes Municipal Digital Equity Implementation Grant program (presented within the infographic below and labeled 1-7). The Project Focus Area Categories are labelled by the standard Arabic numerals, 1 – 7 to differentiate them from the Goals and are listed within the Matrix under the 'Project Focus Area Category(s)' column. Some Action corresponds to more than one Project Focus Area Category.
- It is important to note that the Arabic numbers and the Roman numerals given for Actions and Goals, respectively, are NOT indicative of priority, nor do they correspond to each other numerically.

* Project Focus Area Categories (Key):

8

Staff Capacity for Digital Equity

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.



Wi-Fi Access and **Innovative Connectivity** Technology

Assessment, design, and establishment of an appropriate technology solution to provide inunit access to the internet for residents living in affordable housing and/or low-income neighborhoods.



Public Space Modernization

3

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.



Connectivity for Economic Hardship

Provision of Wi-Fi cellular hot spots to individuals lacking stable housing where they are unable to have a fixed broadband internet subscription.



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.

Source: Massachusetts Broadband Institute, Municipal Digital Equity Implementation Grant Program: https://broadband.masstech.org/digital-equity-implementation

6

Device Distribution and Refurbishment

Provision of new or used internetconnected devices, such as laptops, tablets, and smart phones, to distribute to target populations.



Education, Outreach, and Adoption

Enrollment of eligible residents in discounted options for broadband, devices, and digital skills. Outreach may include workshops, call center phone banking, door-to-door outreach, online/printed communications, and public service announcements.

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6.3.2 Digital Equity Action Plan Implementation Matrix

| City of Fit | chburg Digital Equity Plan: Action Impl | ementation | Matrix | |
|---|--|--|--|---|
| Goal | Action | Potential Leader(s) | Potential Funding Program(s) | Project Focus Area(s) Category* *See Project Focus Areas Key within Section 6.3.1 above, or below this Table |
| I. Improve the effectiveness, efficiency, and quality of local initiatives that promote and enhance digital equity, literacy, and | a. Promote and Support continuation of Digital Literacy Training Programs like those established by UMass Lowell/FSU Digital Equity Partnership program to provide devices, education, funding, and coordinated partnerships through organizations like the Youth Innovation Center, MassHire Central Mass Career Center, MWCC Adult Education & North Central Educational Opportunity Center, and other digital literacy partners. | Youth Innovation Center, MassHire, MWCC, North Central Ed. Opp. Center | MBI Digital Equity Partnerships program | 5, 6 |
| inclusion. | b. Continue to evaluate and update the Fitchburg Digital Equity Plan and pursue opportunities, services, programs, and partnerships that enhance digital equity and inclusion initiatives City-wide. | Community Development Dept., MRPC | MBI Municipal Digital Equity Implementation Grant program ; | 7 |
| | c. Recognize and celebrate Digital Trainers as community leaders and spotlight the work they do and encourage local residents and service providers to become Digital Trainers in their community, region, and beyond. | Community Development Dept. | NDIA Digital Navigator model & Digital Inclusion model | 7 |
| | a. Create and continue to support Downtown Main Street outdoor public Wi-Fi mesh networks and workspaces with workstations and charging stations in multiple downtown locations throughout to enhance and support residents, businesses, consumers, and government center. Install kiosk, digital sign, or map-board showing locations of public Wi- Fi, workspaces, charging stations, Community Anchor Institutions, and digital literacy resources. | City IT Dept., ISPs, Contracted Communication & Electrical Vendors | MBI Digital Equity Implementation Grant (reserved funds); | 2, 3 |
| II. Increase access to affordable, fast, reliable internet. | b. Create public Wi-Fi mesh networks at City Parks and Playgrounds. | City IT Dept., ISPs, Contracted Communication & Electrical Vendors | MBI Digital Equity Implementation Grant program (future rounds); CDBG; NDIA | 2, 3 |
| | c. Coordinate with the UMass Lowell/FSU Digital Equity Partnership to encourage the public modernization of spaces and internet service at the MBTA/MART Fitchburg Intermodal Transit Station. | FSU/UMass Lowell Partnership, MBTA, MART | MBI Digital Equity Partnerships program | 2, 3 |

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| | | d. Coordinate with the Housing Authority to provide free internet access and computer workstations in each Housing Authority Property and investigate providing affordable internet options to all residents. | Fitchburg Housing Authority, ISPs | MBI Digital Equity Implementation Grant program; Apartment Wi-Fi or Residential Retrofit Program | 2, 3, 4 |
|-----|---|--|---|---|---------|
| | | e. Pursue opportunities to extend public Wi-Fi or encourage affordable, fast, reliable internet service connections through partnerships with Internet Service Providers and/or by installing Wi-Fi Access Points and networks on City-owned public spaces and light poles with a focus on Census Tract areas where greater than 75% of the population are "covered" populations of the Digital Equity Act. | City IT Dept., ISPs | Digital Equity Implementation Grant program; CDBG | 2, 4 |
| | | f. Continue to promote and work toward affordable, fast, reliable internet for residents through coordination with MBI and ISPs to ensure that all "underserved" and "unserved" locations have access to broadband internet and that internet is affordable for all residents. | Community Development Dept., Regional Digital Equity Coalition, MBI, ISPs | BEAD Deployment Program; | 2, 4, 7 |
| | | Update the City webpage for improved ADA accessibility, ease of use, and enhanced function, with a goal toward meeting the established standards for information and communication technology (ICT). | City IT Dept, Community Development Dept. | NDIA; Commonwealth Compact Grant; MOD Municipal ADA Grant | 7 |
| | Expand internet access and digital literacy through community engagement and inclusion to overcome existing barriers and challenges. | b. Create a Digital Equity and Inclusion webpage within the City website to host the Fitchburg Digital Equity Plan and a related interactive Local Digital Resources Map displaying locations of digital equity/literacy resources. | Community Development Dept. | Existing City Resources or Staff Capacity | 7 |
| | | c. 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). | City Engineering Dept, Community Development Dept. | MBI Digital Equity Implementation Grant (reserved funds) | 3, 7 |
| | | a. Purchase and install 11 new computer workstations at the Fitchburg Public Library | Library; Community Development Dept. | MBI Digital Equity Implementation Grant (reserved funds); FSU/UMass Lowell Partnership | 3 |
| IV. | Further develop the municipality's technological resources and public digital workspaces. | b. Purchase and install 2 new workstations at the Fitchburg Senior Center (one pc and one laptop) each with headphones, microphone, and webcam and an all-in-one printer with document scanner. | Council on Aging/Senior Center; Community Development Dept. | MBI Digital Equity Implementation Grant (reserved funds); AARP Community Challenge Grant | 3 |
| | | c. Purchase and install 2 new workstations (laptops) at the Fitchburg Veterans Center with microphone & webcam and an all-in-one printer with document scanner. | Veterans Center; Community Development Dept. | MBI Digital Equity Implementation Grant (reserved funds); AARP Community Challenge Grant | 3 |
| | | d. Purchase 26 additional Wi-Fi hotspots (with internet service subscription) for the Public Library to loan to the public with 2 made available for reservation through the Senior Center, 2 through the | Library, Community Development Department | MBI Digital Equity Implementation Grant (reserved funds); AARP Community Challenge Grant | 3, 4 |

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| | | Veterans Center, and 2 through the Youth Innovation Center and/or other social services organization(s). | | | |
|-----|---|---|--|---|------|
| | | a. 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 and implement the goals and actions of this Plan. | Community Development Department; Regional Digital Equity Coalition | MBI Digital Equity Partnerships program; NDIA; Commonwealth Corporation Grant (MassHire); | 7 |
| V. | Seek and secure funding opportunities for | b. Allocate funding or resources to develop partnerships that support continuation of Digtial Literacy Training utilizing existing models, curriculum, materials, and partnership organizations. | Mayor's Office, City Council, Community Development, Regional Digital Equity Coalition | MBI Digital Equity Partnerships program; Commonwealth Corporation Grant (MassHire); MBI Digital Equity Implementation Grant program (reserved funds) | 5, 7 |
| v. | Seek and secure funding opportunities for investment and long-term support of digital equity programs and services. | c. Coordinate closely with MassHire Central Mass Career Center and Umass Lowell/FSU Digital Equity Partnership to understand existing Digital Literacy funding mechanisms and sources and to best plan for future funding needs over the course of the next 5 years and beyond. | Community Development, Regional Digital Equity Coalition, MassHire, Umass Lowell/FSU | MBI Digital Equity Partnerships program; Commonwealth Corporation Grant (MassHire); MBI Digital Equity Implementation Grant program (reserved funds) | 5, 7 |
| | | a. Identify, position, and promote the City of Fitchburg as a Digital Equity Leader and champion of digital equity and inclusion initiatives and pursue those initiatives in a way that honors that commitment and is deserving of such recognition as "The City" of digital equity and inclusion. | Community Development Dept., Mayors Office, Senior Center, Library | City Staff and Stakeholder Partners | 7 |
| | | b. Join Regional Digital Equity Coalition and play a leadership role in future implementation and evolution broadband internet access and digital literacy initiatives acting as a role model and beacon for both urban and rural areas of the Montachusett Region. | Community Development Dept., Stakeholders, MRPC | City Staff and Stakeholder Partners | 1, 7 |
| VI. | Become a municipal leader in digital equity through collaboration, inclusion, education, and programming. | c. Establish a Twin City Digital Equity Partnerships Coalition of essential interested and participating social services organizations, businesses, community anchor institutions, and other local Digital Equity Leaders and Trainers and Champions to facilitate and maintain critical partnerships. | MRPC, NewVue, Spanish American Center, MOC, LUK, ARC of Opp., FRA, FHA, FSU, CHC, etc. | City Staff and Stakeholder Partners; MBI Launchpad | 1, 7 |
| | | d. Leverage existing and potential funding sources and programs to enhance digital equity and inclusion in Fitchburg. | Community Development, Stakeholder Partners | Existing City Resources or Staff Capacity; MBI Launchpad; NDIA grants | 7 |
| | | e. Identify and train a Digital Navigator (Qualified Trainer) at each City- owned Anchor Institution (e.g., Library, Senior Center, Veterans Center, Housing Authority) and encourage staff members at partner Social Services Organizations to pursue training as Digital Navigators/Trainers. | Library, Senior Center, Veteran Center, FHA, Literacy Volunteers, RRC, Homeless Outreach, Action, | MBI Launchpad; AARP Digital Skills Training; NDIA Digital Navigator Model | 5, 7 |

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| | a. Develop partnerships and coordinate with core stakeholder groups, non- | Disability Commission, etc. MOC, Literacy | | |
|---|--|---|--|------|
| VII. Provide digital literacy training and skill building opportunities for people of all ages and abilities, and those that are part of a covered population. | profit organizations, and other partners who provide digital literacy training and skill building opportunities. | Volunteers, Library, NewVue | MBI Launchpad; NDIA Digital Navigator model | 5, 7 |
| | b. Create opportunities for youth leadership and civic engagement by empowering students and young adults to become qualified digital literacy trainers and certified Digital Navigators. | Fitchburg Public Schools, Boys & Girls Club, MOC YIC | MBI Launchpad; NDIA Digital Navigator model | 5, 7 |
| | c. 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, and minority and multi-lingual trainers who are members of ethnic and racial minority groups they aim to serve. | Fitchburg Public Schools, Senior Center, Veterans Center, MOC YIC, Boys & Girls Club, Spanish American Center, NewVue | AARP Digital Skills; MassLinks Operation Able; Growth Mindset Model; Youth Innovation Cener framework | 5, 6 |
| | d. 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". | MART, Highlands, Gables, MOC, NewVue, Montachusett Home Care, FHA, FRA | NCCC Commonwealth Corporation Grant MBI Launchpad; MassHire | 5, 6 |

*Project Focus Area Categories: 1.) Staff Capacity for Digital Equity; 2.) Wi-Fi Access and Innovative Connectivity Technology; .3.) Public Space Modernization; 4.) Connectivity for Economic Hardship; 5.) Digital Literacy (skills, safety, security); 6.) Device Distribution and Refurbishment; 7.) Education, Outreach, and Adoption



















6.4 DIGITAL EQUITY PLAN: IMPLEMENTATION

The City of Fitchburg is eligible for and should seek to leverage numerous state and federal funding opportunities to support digital equity initiatives to bridge the City's digital divide by increasing digital inclusion, providing digital literacy training and opportunities, and thereby enhancing 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 (Reserved Funds)

Municipalities participating in the Municipal Digital Equity Planning program (the program associated with the development of this Plan), upon completion 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, increasing efficiency and likely offering mutual, joint benefits, and increased success. At present, MBI has set aside a minimum of \$56,603.77 in implementation funds for the City of Fitchburg. The City is eligible to submit an application to receive those funds for the implementation of actions identified within this Plan. However, it should be noted that, under the Municipal Digital Equity Implementation Grant Program, each municipality is eligible to apply for project costs of up to \$100,000, and, pending review and approval, could receive up to that amount.

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 up to \$100,000 per municipality 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 within their Digital Equity Plan.
- 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 grant following the process outlined below:



6.4.2 Digital Equity Funding Sources State Digital Equity & Inclusion Grant Programs:

Municipal Digital Equity Implementation Program

https://broadband.masstech.org/digital-equity-implementation

In January 2024, Massachusetts Broadband Institute (MBI) announced the new Municipal Digital Equity Implementation Program, through which municipalities who have created Digital Equity Plans through Municipal Digital Equity Planning Program are automatically eligible to receive up to \$100,000 in state funding to implement projects or programs that support the community's digital equity goals.

Municipalities, alone or partnered with other CAI's, are eligible to apply for implementation funding to pursue one or more programs or projects outlined above within the Implementation Action Plan Matrix of this Plan.

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 launched in September 2022 to support organizations across the state in implementing projects that meet the digital equity goals outlined in the Commonwealth's 2021 ARPA COVID recovery legislation. 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</u> <u>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</u> <u>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.

Gap Networks Grant Program

https://broadband.masstech.org/gap-networks-grant-program

The \$145 million Gap Networks Grant Program, administered by the Massachusetts Broadband Institute (MBI) will fund the deployment of broadband infrastructure in areas that currently lack broadband service. The Program aims to expand access and connectivity in unserved and underserved locations throughout the Commonwealth to bridge the digital divide. Specifically, the Program will fund the deployment of broadband infrastructure in those areas that currently lack access to sufficient broadband internet service, defined as service offering download speeds of at least 100 Mbps and upload speeds of at least 20 Mbps.

While prior investment of public funds has substantially reduced the number of unserved and underserved locations remaining in the state, there are still pockets of locations throughout the state that lack access to reliable and affordable broadband service. This Program is intended to address those remaining gaps in broadband availability.



Projects funded through this Program must be designed to deliver broadband service that meets or exceeds 100 Mbps symmetrical speeds. Locations that will be covered through a binding funding commitment from other federal or state funding sources are not eligible for funding under this Program. Grant applicants are required to provide a minimum matching contribution of at least 20%, subject to limited waivers for certain municipally-owned broadband infrastructure projects.

This Program will score more favorably proposed projects in economically challenged areas, specifically Gateway Municipalities and those areas identified by HUD's Qualified Census Tract program. Furthermore, awardees will be required in the Federal Communications Commission's Affordable Connectivity Program, that provide low-income consumers with subsidies on internet services.

<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 Older 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 inperson 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.

Municipal Americans with Disabilities Act Grant

https://www.mass.gov/info-details/municipal-ada-improvement-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." Section City of 06 Fitchburg

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

<u>Commonwealth Corporation (CommCorp) YouthWorks Funding</u> 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. This grant will continue the DLCS implementation work from FY21 Digital Literacy Now Grant Part 1 (FC152 and FC152A) and FY22 Digital Literacy Now Grant Part 2 (FC147).

School districts are the unit of change toward creating rigorous, inclusive, and sustainable K–12 digital literacy and computer science education.

Federal Digital Equity & Inclusion Funding Sources:

Broadband Equity, Access, and Deployment (BEAD) Program

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

The BEAD Program, created by the Bipartisan Infrastructure Investment and Jobs Act (IIJA) and administered through the NTIA, is a \$42 billion dollar program with the goal of increasing access and affordability of broadband, creating jobs, increasing access to healthcare services, improving educational experiences of students, and improving quality of life for residents. Funds can be used for broadband deployment activities (e.g. construction and deployment of broadband infrastructure, personnel costs, leasing of infrastructure, etc.) and non-deployment activities (e.g. multi-lingual outreach to support adoption and digital literacy, direct subsidies for broadband subscriptions, costs associated with stakeholder engagement, etc.). The BEAD program prioritizes broadband serviceable locations that are unserved (below a 25/3 mpbs threshold) and underserved (below a 100/20 mbps threshold).



Deployment of the <u>BEAD program in Massachusetts</u> is being administered by the Massachusetts Broadband Institute. MBI is committed to achieving universal service in Massachusetts by bringing affordable, reliable high-speed internet to every home in the state.

The BEAD program will primarily fund infrastructure projects through the Deployment phase which will connect the remaining unserved and underserved locations in the State. Once universal service is achieved, any remaining BEAD funds will be invested to enhance Community Anchor Institute connectivity and support digital equity initiatives.

To unlock BEAD funding MBI has completed the following administrative process:

- Massachusetts Initial Proposal Volume I Approved by NTIA April 2024
- Massachusetts Initial Proposal Volume II Approved by NTIA July 2024
- Massachusetts BEAD Challenge Process (Summer of 2024)

MBI administered a pre-qualification process for the BEAD Program. This process supported the review and approval of subgrantee applications to certify that potential applicants meet the minimum necessary qualification requirements. Potential BEAD applicants were strongly encouraged, but not required to prequalify now for BEAD deployment grant eligibility. Applicants that elected not to participate in the initial, standalone prequalification process will still be subject to a full review of qualifications during the funding round(s) that they participate in.

The pre-qualification process opened on September 26, 2024, and was conducted in accordance with the procedures set forth in <u>Volume II of the BEAD Initial Proposal for the Commonwealth of</u> <u>Massachusetts</u>, as approved by NTIA. The process closed on October 28, 2024.

Office of Secondary and Elementary Education, Title II, Part A Grant Program

https://www.ed.gov/grants-and-programs/formula-grants/school-improvement/supporting-effective-instruction-state-grantstitle-ii-part-a

The U.S. Office of Elementary and Secondary Education (OESE) Title II, Part A grant program provides grants to state educational agencies and subgrants to local educational agencies to increase student achievement consistent with challenging state academic standards and improve the quality and effectiveness of teachers. Eligible activities under Title II, Part A, include providing support and professional development for teachers.

The OESE's Title III, Part A grant program was established to improve the education of English Learner (EL) children and youth by helping them learn English and meet challenging state academic content and student academic achievement standards.

Eligible School Districts should apply for OESE Title II, Part A funds for professional development to empower teachers to adopt BLENDED teaching methods, leveraging technology while protecting students against unproductive online behavior. Districts should also apply for funds from the Office of Elementary and Secondary Education: Title III, Part A Funds to improve instruction for English Learners, including those with a disability, through enhanced curricula and programs.



Community Development Block Grant (CDBG)

https://www.hud.gov/program_offices/comm_planning/cdbg

The Department of Housing and Urban Development's (HUD) CDBG program provides annual grants on a formula basis to the Commonwealth of Massachusetts' Executive Office of Housing and Livable Communities, who then disperse funds to local municipalities using a statewide formula. Communities use CDBG funds to address local needs with eligible activities including public facilities, infrastructure, housing, economic development, and planning. The projects should also accomplish a National Objective of either: 1) benefiting low- and moderate-income persons; 2) eliminating slums or blight; or 3) addressing urgent needs for community health and safety.

Eligible communities can apply for federal CDBG funding to assess existing broadband infrastructure and make additions or improvements where necessary. Eligible activities include the acquisition, construction, reconstruction, rehabilitation, or installation of public facilities and improvements (which include infrastructure improvements), digital literacy classes, and internet subsidies for lowincome households.

At the local level, CDBG funds are administered by the City of Fitchburg Community Development Coordinator.

Additional Digital Equity & Inclusion Funding & Resources by Covered Population or Organization:

Affordable Housing & Covered Households:

Affordable Housing & Digital Literacy: Partnerships and Strategies

https://www.proliteracy.org/wp-content/uploads/2023/07/4.3.3-Field-Report-Harris-Judge-and-Burger.pdf

Pew Research Center - Income-Based Digital Divides Tech Adoption

https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/pew_research_center_-_incomebased_digital_divides_tech_adoption.pdf

Aging Adults/Councils on Aging:

<u>Massachusetts Executive Office of Elder Affairs, Enhancing Digital Literacy for Older Adults Grant</u> https://www.mass.gov/info-details/enhancing-digital-literacy-for-older-adults-grant

AARP Digital Skills Training

https://www.aarp.org/aarp-foundation/our-work/income/info-2022/aarp-foundation-to-provide-free-digital-skills-training.html

AARP Digital Skills Ready@50+

https://my.aarpfoundation.org/digitalskillsready/

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AARP Community Challenge Grant Program

https://www.aarp.org/livable-communities/community-challenge/info-2024/2024-challenge.html

Pew Research Center - Age 65 & Over Tech Adoption https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/pew_research_center_-_age_65_over_techadoption.pdf

PLA 5 Tips for Teaching Tech to Seniors

https://publiclibrariesonline.org/2019/04/5-tips-for-teaching-tech-to-seniors/

Tech Boomers https://techboomers.com/

Broadband Internet & Digital Equity:

Broadband Equity, Access, and Deployment (BEAD) Program - Internet for All https://www.internetforall.gov/program/broadband-equity-access-and-deployment-bead-program

Broadband – Institute for Local Self-Reliance https://ilsr.org/broadband-2/

Broadband USA - Home http://broadbandusa.ntia.doc.gov/

Digital Equity Act Info Sheet https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/digital_equity_act_info_sheet.pdf

Digital Equity Act Programs - Internet for All https://www.internetforall.gov/program/digital-equity-act-programs

Digital Equity Act Programs Overview https://www.internetforall.gov/sites/default/files/2022-05/digital-equity-act-info-sheet.pdf

Community Broadband Networks https://ilsr.org/broadband-2/

Internet for All - Home http://www.internetforall.gov/

Massachusetts Broadband Institute - MBI https://broadband.masstech.org/

National Digital Inclusion Alliance - Home http://www.digitalinclusion.org/

NTIA's Role in Implementing the Broadband Provisions of the 2021 Infrastructure Investment and Jobs Act - BroadbandUSA

https://broadbandusa.ntia.doc.gov/news/latest-news/ntias-role-implementing-broadbandprovisions-2021-infrastructure-investment-and





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Pew Research Center - COVID-19 LMI Broadband Impacts

https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/pew_research_center_-_covid-19_lmi_broadband_impacts.pdf

Pew Research Center - Demographics of Internet and Home Broadband Usage in the United States https://www.pewresearch.org/internet/fact-sheet/internet-broadband/

Pew Research Center - Internet & Technology - Research and Data https://www.pewresearch.org/topic/internet-technology/

Pew Research Center - The Internet & The Pandemic https://www.pewresearch.org/internet/2021/09/01/the-internet-and-the-pandemic/

Pew Research Center - You searched for broadband https://www.pewresearch.org/search/broadband

Webinars - Internet for All https://www.internetforall.gov/webinars

City & Town Leaders:

Digital Equity Playbook for City & Town Leaders https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/digital_equity_playbook.pdf

Equity - Office of Educational Technology https://tech.ed.gov/equity/

National League of Cities - Digital Equity https://www.nlc.org/resource/digital-equity/

Next Century Cities - Home http://nextcenturycities.org/

Device Distribution Programs:

Everyone On – Digital Literacy and Devices for All https://www.everyoneon.org/find-offers

PCs for People https://pcsrefurbished.com/sales/salesHome

Tech Goes Home https://www.techgoeshome.org/

Digital Literacy Programs & Resources:

Digital Skills Library https://digitalskillslibrary.org/



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DigitalLearn.org https://www.digitallearn.org/

Everyone On – Digital Literacy and Devices for All https://www.everyoneon.org/

LINCS Learner Center https://lincs.ed.gov/learner

Digital Outreach for Obtaining Resources & Skills (DOORS) https://skills.digitalpsych.org/

Goodwill Community Foundation (GCF) - Tech Training https://edu.gcfglobal.org/en/subjects/tech/

Goodwill Community Foundation (GCF) - Computer Training modules https://edu.gcfglobal.org/en/topics/computers/

Goodwill Community Foundation (CGF) – Learning Resources https://edu.gcfglobal.org/en/

Grow with Google https://grow.google/

Linkedin Learning https://www.linkedin.com/learning/?trk=lynda_redirect_learning

Microsoft Digital Literacy Curriculum https://www.microsoft.com/en-us/digital-literacy?oneroute=true

Microsoft Learn https://learn.microsoft.com/en-us/training/

Northstar Digital Literacy Assessment https://www.digitalliteracyassessment.org/

Partners Bridging the Digital Divide https://www.pbdd.org/training/

Skill Share https://www.skillshare.com/en/

Spectrum Grants for Digital Education https://corporate.charter.com/digital-education/grants

Tech Soup (for libraries and non-profits) https://www.techsoup.org/







Economic Development:

Mass Internet Connect Program for Unemployed Job Seekers- MBI https://broadband.masstech.org/mass-internet-connect

Individuals with Disabilities:

Digital Outreach for Obtaining Resources & Skills (DOORS): A Digital Literacy Program for Adults with Mental Health Conditions https://www.proliteracy.org/wp-content/uploads/2023/07/05-Forum-2.pdf

Welcome to DOORS: A series of pragmatic and interactive lessons designed to develop functional skills for accessing and utilizing the promise of digital health https://skills.digitalpsych.org/

Become a DOORS Instructor

https://skills.digitalpsych.org/2021/01/11/online-curriculum-available/

Education:

Adult Education Digital Literacy Initiatives and Resources - LINCS https://lincs.ed.gov/state-resources/federal-initiatives/digitalliteracy

Broadband - Office of Educational Technology https://tech.ed.gov/broadband/

Digital Literacy and Technology Integration in Adult Basic Skills Education

https://www.proliteracy.org/resources/digital-literacy-and-technology-integration-in-adult-basic-skills-education/

Digital Equity Education Roundtables (DEER) - Office of Educational Technology https://tech.ed.gov/deer/

Digital Equity Education Roundtables (DEER) - Resource Guide https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/digital_equity_education_roundtables_dee r_- resource guide.pdf

E-Rate Program (FCC) - Affordable internet, telecommunications, and information services for eligible schools and libraries

https://www.fcc.gov/consumers/guides/universal-service-program-schools-and-libraries-e-rate

<u>E-Rate Program - Info Webinar (YouTube)</u> https://www.youtube.com/watch?v=hRula14kO08

Massachusetts Department of Elementary and Secondary Education, Digital Literacy Now Grants



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

National Education Foundation, 100% Digital Literacy Grant https://www.stemnef.org/grant/digitalliteracygrant/

Office of Educational Technology - Home http://tech.ed.gov/

Libraries:

Institute of Museum and Library Services (IMLS) grant programs https://www.imls.gov/grants

American Library Association (ALA) grant program https://www.ala.org/grants/view-all-grants



image credit: Trent Bell Photography

E-Rate Program (FCC) - Affordable internet, telecommunications, and information services for eligible schools and libraries

https://www.fcc.gov/consumers/guides/universal-service-program-schools-and-libraries-e-rate

E-Rate Program - Info Webinar (YouTube) https://www.youtube.com/watch?v=hRula14kO08

Ezra Jack Keats Foundation Mini-Grants https://www.ejkf.org/about-mini-grants/

American Libraries Association, Libraries Transforming Communities: Accessible Small and Rural **Communities Grant**

https://www.ala.org/tools/librariestransform/libraries-transforming-communities/access

Association of Rural and Small Libraries: New England Libraries Grants https://www.arsl.org/arsl-new-england-libraries-grants

Public Library Association Digital Literacy Workshop Incentives Program https://www.ala.org/pla/initiatives/digitalliteracy/incentive

DigitalLearn.org https://www.digitallearn.org/

Tech Soup https://www.techsoup.org/

Digital Literacy in Public Libraries https://www.webjunction.org/documents/webjunction/digital-literacy-guidebook.html

Tech Skills Checklist for Public Library Supervisors and Staff

https://www.ala.org/sites/default/files/pla/content/initiatives/digitalliteracy/200226-pla-tech-skillchecklist-survey-only.pdf

PLA Hotspot Lending Playbook

Section City of 06 Fitchburg

https://www.ala.org/pla/initiatives/digitallead/hotspot-playbook

PLA Digital Literacy Instruction Playbook

https://www.ala.org/pla/initiatives/digitallead/digital-lit-instruction-playbook

<u>PLA Public Access Computer Playbook</u> https://www.ala.org/pla/initiatives/digitallead/public-access-computers-playbook

PLA 5 Tips for Teaching Tech to Seniors https://publiclibrariesonline.org/2019/04/5-tips-for-teaching-tech-to-seniors/

ALA Digital Literacy Interest Group for Librarians - Join https://connect.ala.org/pla/communities/community-home?CommunityKey=c3bfc9b2-32db-4a71-82f9-7499e8ea77de

Racial & Ethnic Minority Groups and English-learners:

<u>Digital Literacy Courses for English-learners and Speakers of Other Languages (Microsoft)</u> https://www.microsoft.com/en-us/digital-literacy?oneroute=true

Pew Research Center - Race Ethnicity Digital Access

https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/pew_research_center__race_ethnicity_digi tal_access.pdf

Rural Areas:

Broadband in Rural America - Center on Rural Innovation https://ruralinnovation.us/our-work/broadband/

Pew Research Center - Digital Divides in Rural Communities

https://www.mrpc.org/sites/g/files/vyhlif3491/f/uploads/pew_research_center__digital_divides.pdf

6.5 NEXT STEPS: RECOMMENDATIONS FOR ONGOING PLAN OUTREACH, ENGAGEMENT, EVALUATION, MAINTENANCE AND UPDATES

The City of Fitchburg is responsible for implementing the specific goals and actions identified within the Digital Equity Plan, Implementation Action Plan detailed within **Section 6.3**, above, and while the overall responsibility for implementation of the Plan is not regulatory, we believe that it is in the best interest of the community and its people and therefore should be a priority of the Mayor, City Council, Community Development & Planning Department(s) and Planning Board, Public Library, Council on Aging and Senior Center, Veterans Services Officer and Veterans Center, Disability Commission, and City and School Information Technology Directors. Each proposed action has been assigned to a specific Digital Equity Champion, and in large part, given the nature of the Plan and structure of City Government, the City Community Development & Planning Department are listed as the "primary leader" for many of the designated Goals and Actions.

Implementation of the Plan will be accomplished by adhering to the principles of the plan and its planning process, and adherence to its strategies and recommendations as a guide to achieving its



overall vision. In some cases, the completion of an action may be contingent on the City obtaining outside funding or other resources, separate from the Municipal Digital Equity Implementation grant funding program, and when applicable, potential funding sources and a list of additional resources have been provided above.

Monitoring, evaluating, and enhancing the City'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, considering potential changes in digital equity and inclusion priorities and accomplishments over time. It is recommended that this plan be revised every 5 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. Further, it is the final recommendation of this plan that a Digital Equity Coalition be established at the regional level thorough a coordinated partnership with other Municipalities within the Montachusett Region who have participated in the Puny, relevant stakeholders, and leaders of Community Anchor Institutions. If such a coalition is established the City of Fitchburg should designate one or more interested City officials as members and leaders.

Through this coalition, we believe that the local and regional digital equity needs, visions, and goals of the Montachusett Region may continue to be enhanced and achieved for the benefit of covered populations and all residents of the Region and through this Plan and participation in the regional coalition, we are confident that the Digital Equity Visions, Goals, and Actions of the City of Fitchburg will be successfully achieved.

