DIGITAL EQUITY PLAN

Town of Randolph, Massachusetts

DECEMBER 2023

Acknowledgements

Table of Contents

01

Introduction

As a society with technology integrated as an essential part of life, we must examine the impacts of technology on how we learn, work, socialize, and manage personal affairs. Randolph's severe digital divide, a partition between community members who have access to broadband and technology and those who do not, profoundly impacts residents' ability to have equitable participation in their society, democracy, and economy.

Municipalities need equitable access to resources in times marked by rapidly changing political, economic, and technological conditions, especially for marginalized populations who need them most. This access requires digital equity, wherein all individuals and families can leverage reliable and accessible broadband technologies to service a wide variety of needs, including those related to education, health, financial well-being, and employment.

Without digital equity, there cannot be broader social equity. People of all ages must be able to access online resources to navigate life. This need is increasingly true concerning overlapping concerns like education, health care, employment, personal finances, and political engagement. This imperative has only become more urgent over time, particularly in light of the COVID-19 pandemic, which magnified the essential role of broadband and technology in our lives and the detrimental impacts on communities that cannot fully access and use them.

The Town of Randolph embarked on an approximately six-month-long planning process to prepare a Digital Equity Plan under the facilitation of MBI and consultation of Vanasse Hangen Brustlin, Inc. (VHB). This Plan reflects a wide breadth of collaboration and community input regarding the digital divide in Randolph and proposes a shared vision for advancing digital inclusion in the Town. This Plan positions the Town to apply for existing and future state and federal funding and guides decision-making and investments related to services and infrastructure that will increase access, adoption, and internet usage throughout the community.

02

Digital Equity Vision

Residents, business owners, educators, students, and community stakeholders of all ages and backgrounds shared their vision for bridging the digital divide in Randolph. The Town envisions a future emphasizing community resources and support networks, including digital literacy training opportunities and universal broadband and device access. Randolph will be a leader in Digital Equity Planning for the Commonwealth and embrace innovative approaches that enable opportunities for all residents, visitors, businesses, and institutions.

Vision Statement

Centering digital equity in the planning process, the Digital Equity Plan will reflect a wide breadth of collaboration and community input regarding the digital divide in Randolph. The Town will support access to programming and services that allow all individuals and communities to access the internet and connected devices needed for full participation in Randolph's society, democracy, and economy. The needs of Randolph's immigrant populations will be of paramount importance, and resources will be made available in multiple languages. Through community dialogue, residents and stakeholders of the Town have reflected and explored a vision for the future.

The Town will support...

Broadband Access – The Town will monitor broadband infrastructure and ensure that affordable, reliable, and high-speed broadband plans are available for all residents and business owners.

Digital Literacy – The Town will provide a continuum of digital literacy training programs to foster residents' ability to fully utilize the functions of online resources and web-based devices with a focus on employment.

Device Access – The Town will support residents' access to well-functioning and up-to-date computers and the capacity to maintain and replace these devices if needed.

03

What is Digital Equity?

The Internet is a necessity in modern life for the exchange of commerce and information, access to government services and telehealth, social connectivity, and participation in school and employment. For equal opportunity to participate in our society and democracy, individuals, households, organizations, and businesses need fast and reliable broadband connectivity, as well as the skills and appropriate devices required to utilize the Internet. A divide exists in Randolph between those who can consistently afford and access these resources and those who cannot, exacerbating inequalities and creating challenges in everyday life.

The Issue: The Digital Divide

Digital equity planning addresses inequities in access to broadband internet, technology, and supportive resources, also known as the digital divide. The National Digital Inclusion Alliance (NDIA) defines the digital divide as "the gap between those who have affordable access, skills, and support to effectively engage online and those who do not."[1] This gap disproportionately impacts marginalized groups, including households with low incomes, older adults, minority households, people with disabilities, and people in rural areas, all of whom are less likely to have broadband service at home.[2]

According to the U.S. Census, approximately 16 million households nationwide are without an internet subscription, 12 million are without internet access, and eight million are without a computer.[3] Several factors can limit reliable access to internet service with the speed and capacity to accomplish everyday tasks, including the quality and affordability of services provided by internet service providers (ISPs) companies offering subscription internet services. Subscribers can face confusion and unaffordability paying for bundles, including services or equipment they don't need (e.g., internet, television, home phone services).

Even with reliable internet service, users must have consistent access to a web-enabled device and the knowledge and skills necessary to participate online safely and effectively. The affordability, modernity of hardware and software, and appropriateness to the user's needs can restrict device access. The availability of training opportunities and resources, fear or shame associated with learning new skills, and privacy concerns can all limit digital literacy.

The Work: Digital Inclusion

Municipalities can address their digital divide by investing in and pursuing digital inclusion initiatives. Digital inclusion refers to the "activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs)."[4] ICTs, an extension of information technologies (IT), refers to the hardware, software, and systems that comprise our unified communications systems. The NDIA has identified five elements as integral to ensuring all individuals and households can effectively utilize these technologies.

1. Affordable, robust broadband internet service;

2. Internet-enabled devices that meet the needs of the user;

3. Access to digital literacy training;

4. Quality technical support; and

5. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration.

Digital Inclusion requires communities to intentionally address historical, institutional, and structural barriers to access and use technology.

The Goal: Digital Equity

The goal of addressing the digital divide through digital inclusion initiatives is to support digital equity for all individuals and groups within a community. Digital equity is "a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy, facilitating lifelong learning and access to essential services."[5] This plan focuses on three pillars of digital equity work, including broadband internet access, device access, and digital literacy. Communities can support digital equity by increasing subscribership to internet service, addressing infrastructural issues, expanding the availability of digital literacy training opportunities, and facilitating access to appropriate devices.

Turner Free Library, Randolph, Massachusetts, Photo Credit: Town of Randolph

Several types of devices can access the internet and serve as tools for work, school, and social connection, including cellular phones, tablets, and computers, each with benefits and drawbacks for the user. Cellular phones are one of the most portable web-based devices, offering multiple connection options and long battery life, but they cannot replace the functions of a computer. Tablets provide accessibility benefits and long battery life but cannot make calls without a cellular data plan. Laptops and desktop computers are necessary for many jobs and applications and have ample storage. However, computers have a shorter battery life and are the least affordable of these three devices.

04

Our Process

The Town of Randolph has a severe digital divide, with barriers to broadband internet and device access for individuals, households, and businesses. Recognizing the need to bridge this divide, the Town, guided by the Digital Equity Steering Committee, prepared this Digital Equity Plan in collaboration with community members and local and regional stakeholders. This Plan builds upon existing programs and services at the local, state, and federal levels, identifying potential synergies and local digital equity champions.

Digital Equity Steering Committee

The Digital Equity Steering Committee (the Committee) is a team of municipal staff with a stake in providing information and technology resources to the Randolph community. The Committee includes representatives from Town administration, IT services, the Randolph Police Department, the Turner Free Library, and Randolph Public Schools (RPS). In collaboration with the contracted consultant, the Committee provided guidance and oversight on developing this Plan, facilitated public engagement opportunities, and liaised with the community.

Public Engagement

The Digital Equity planning process included several community and stakeholder touchpoints, allowing the Town to disseminate information to the public regarding ongoing planning activities and solicit crucial inputs that informed the development of goals and recommendations. This Plan relies heavily on feedback collected through the following engagement activities.

Stakeholder Interviews: The Team facilitated several group interviews with digital equity stakeholders focused on key challenges and opportunities related to their work, including the following groups.

1. The Turner Free Library
2. Randolph Community Partnership (RCP)
3. Randolph Public Schools
4. The U.S. Haitian Chamber of Commerce (USHCOC)
5. Elder Affairs

The Town engaged with the Randolph Housing Authroity during the digital equity planning process regarding ongoing challenges and opportunities, including the Metropolitan Area Planning Council Apartment Wi-Fi program.

Photo 1: Randolph Day Pop-Up Event
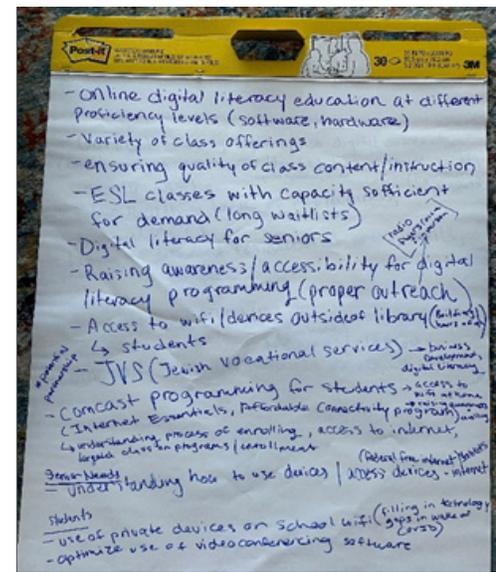
Photo 2: Public Meeting #1 Group Discussion

Pop-Up Events: The Team attended two pop-up events, participating in pre-planned Town events. These events included Randolph Day and the Randolph Social Services Fair. The objectives of these pop-ups were to inform the community about the Digital Equity Plan and solicit input from residents regarding digital equity issues and opportunities. VHB engaged with dozens of residents at each of these events.

Public Meetings: The Team facilitated two public meetings at strategic points throughout the planning process to disseminate information on ongoing planning efforts and solicit public feedback. Both meetings allowed attendees to participate in person, with a virtual,

hybrid structure for the second meeting. The public meetings were interactive, including a brief presentation from the Team followed by group discussions. The first meeting was attended by seven town residents. The second was attended by three residents.

During Public Meeting #1, participants provided feedback on issues they have experienced regarding broadband internet access, access to devices, and digital literacy, as well as opportunities to improve access to these resources in the Town. Participants also provided guidance on focus areas for the Plan's Vision, which informed the development of the Plan's Vision Statement (see Vision Statement).

Statewide Digital Equity Survey: MBI launched a Statewide Digital Equity Survey to understand better Massachusetts residents' needs regarding internet access and digital equity. As of September 6, 2023, Randolph participants comprised a sample group of 69 responses, all Town residents, all aged 18 years and over.

05

Community Needs

Randolph is a vibrant community with local and regional organizations working to expand broadband internet access and digital capacity among residents, businesses, and institutions. However, connectivity varies across these groups due to various factors, including unaffordable device and service costs, gaps in digital literacy training accessibility, lack of synergy between existing resources and programs, and more. While most households in Randolph have access to computers and internet subscriptions, some communities face barriers to access.
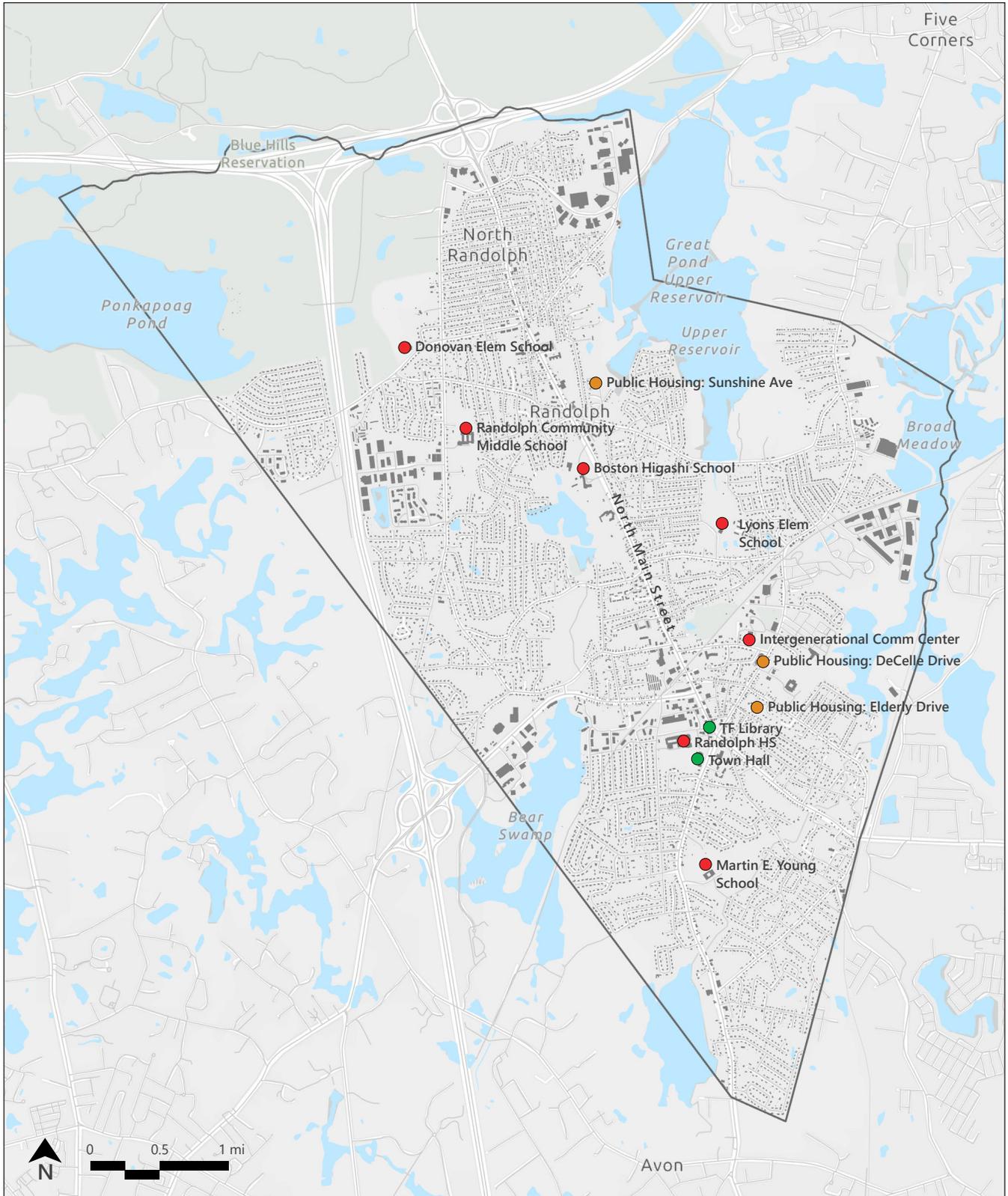
Community Institutions
Town of Randolph

Vulnerable Populations

Demographic trends in a community can impact local internet service demand and technology support needs. Understanding Randolph's demographic profile and vulnerable populations is critical in planning for digital equity in the Town. Randolph has a diverse population of racial and ethnic backgrounds, language speakers, and age groups. Approximately 70% of the Town's residents are people of color, just over one-third of the Town's residents immigrated to the United States from another country, and 46% speak a language other than English at home.[6] Gaps in broadband access exist nationwide across demographic groups based on factors such as race, age, income, and education.[7] The following sections highlight portions of the Town's population with specific vulnerabilities regarding internet and technology access and use.

Immigrant Population

Randolph's population is more racially diverse than that of Norfolk County and the State, with large populations of Vietnamese and Haitian-American immigrants. The percentage of Randolph's population reporting as foreign-born has generally been double that of the county and state over the past decade, reaching a peak in 2020 at 36% of the total population.[8] Public meeting attendees noted a need within the Town for digital literacy training and expanded advocacy for Randolph's immigrant population in areas such as device usage, navigation of common software platforms, and skills related to employment. According to the Digital Equity Steering Committee, many residents are more knowledgeable at using handheld devices than desktop or laptop computers.

The USHCOC is a local champion for Haitian immigrants, providing resources and a network supporting skills development in entrepreneurship and technology usage. The USHCOC supports a large Haitian community in Randolph, and works to promote and empower local Haitian American businesses by providing platforms for business owners to showcase their services to communities in Massachusetts and beyond. According to the USHCOC, access to broadband and devices varies among Randolph's Haitian-American business owners, as well as digital literacy in critical areas, including developing online marketing, IT systems development, and establishing internet access. The USHCOC offers programming to support knowledge and skills development in marketing, accounting, bookkeeping, IT management, and addressing common small business challenges.

RCP, an adult education organization open to Massachusetts residents, provides classes to help students develop and achieve their professional goals, including ESOL and High School Equivalency (HSE) classes. Digital literacy training is incorporated into RCP's curriculum with a focus on skill areas valued in the workplace, including device use (e.g.,

smartphones, laptops, touch screen functions) and office etiquette (e.g., constructing emails).

Multilingual Population

A significant portion of Randolph's population is multilingual, with approximately 50% of the Town's population speaking English only.[9] According to the Digital Equity Steering Committee, prevalent languages spoken in Randolph include English, Vietnamese, Haitian Creole, Spanish, and Chinese. According to the Digital Equity Steering Committee, language barriers can exacerbate challenges in accessing digital literacy training, internet service enrollment, and participation in education, business development, and government services and programs. Throughout the digital equity planning process, local institutions and organizations, including the Turner Free Library and RPS, noted their use of technology to address language barriers in these areas. For example, the Turner Free Library offers tablets for English Speakers of Other Languages (ESOL), containing apps, books, games, videos, and other resources for adult English language learners. The Town can also use technology to address language barriers in public outreach.

Senior Population

Randolph has a growing population of residents over 65 years of age, increasing at a rate of 3%, faster than the County and the State over the past decade.[10] According to the Digital Equity Steering Committee, Randolph's older generation is returning to the workforce with minimal digital literacy skills. Public meeting attendees reported a need to improve digital literacy among seniors, expand internet and device access, and improve understanding among seniors of existing local, State, and federal programs subsidizing technology resources.

Older adults can face cybersecurity vulnerabilities, requiring digital literacy to avoid scams and fraudulent attacks. Cybersecurity is a state of protection against the criminal or unauthorized use of data, achieved through protective software and individual precautions. Cybersecurity is critical for all age groups, businesses, and municipal operations. 45% of MBI statewide survey respondents in Randolph indicated they are "Very concerned" about internet safety, and 80% indicated they are most concerned that their data could be stolen or used without their consent. However, digital literacy can vary across age groups regarding how to avoid and protect against cyber threats, particularly for older adults.

Internet and device access are also crucial for seniors to access telemedicine and other online services. Telemedicine, the provision of healthcare remotely using ICTs, offers a convenient means of accessing healthcare services for patients of all ages and older adults

with mobility or transportation limitations, making accessing healthcare providers' offices difficult. Residents of all ages currently experience challenges concerning healthcare access in the Town. There is a need for expanded advocacy and equity in accessing healthcare, particularly with the increasing use of web-based platforms for communicating with providers. Barriers to healthcare access impact vulnerable populations, including residents, without reliable access to appropriate devices and internet services or knowledge of how to access these resources.

Broadband Access

A high percentage of Randolph's households currently subscribe to internet service. According to the U.S. Census, 92% of Randolph's households in 2021 reported having a broadband internet subscription, slightly lower than that of the County (93%) and higher than that of the State (90%).[11] This percentage follows a steady increase in local subscribership over the previous five years from 81% in 2017, following County and State trends. During this period, the most significant rise in Randolph's subscribership was from 2019 (87%) to 2020 (92%). This increase coincides with the onset of the COVID-19 pandemic in 2020, when, nationwide, people relied on web-based platforms for employment, education, social interaction, and access to critical services and information. Randolph's subscribership leveled off following this increase, with only a .4% increase between 2020 and 2021. In addition to internet service, 75% of MBI statewide survey respondents in Randolph indicated their home internet service is bundled with other services, including telephone or TV.

Planning for ubiquitous broadband access in communities requires interaction with several levels of connection, references to which are often used synonymously.

Broadband is a transmission system granting users access to the Internet. Broadband refers to a high-capacity transmission technique using a wide range of frequencies, cable lines, phone lines, or optical fiber, enabling a large amount of information to be communicated simultaneously.

The Internet is a communications network transmitted to users by broadband. The Internet refers to a global computer network providing information and communication facilities consisting of interconnected networks using standardized communication protocols.

Wi-Fi provides users with a wireless broadband connection. Wireless fidelity, or Wi-Fi,

refers to a wireless network connection between devices, broadband, and other devices.

ISPs provide subscribers with services for accessing, utilizing, and participating in the Internet. While the majority of Randolph's households subscribe to internet service, over 900 households are still without an internet subscription. This divide represents challenges in the availability and affordability of internet service in Randolph. The average minimum monthly internet cost in Norfolk County is $34.79, higher than the bordering counties of Suffolk County ($33.80) and Middlesex County ($33.52).[12] Over 50% of MBI statewide survey respondents in Randolph indicated they pay over $100, up to $300, for their internet every month, not counting the costs of other services in their bundle. In addition to residents, there are businesses and institutions in the Town without internet access and subscribers without high-speed and reliable connectivity. 14% of MBI statewide survey respondents in Randolph indicated that their internet service is "Not good enough to meet [their] household needs." The following groups also face challenges with internet connectivity issues in the Town.

» **Faith-Based Institutions:** Institutions, including the Motivation Church and First Congregational Church, have reported connectivity challenges that hinder administrative activities and virtual public participation. Faith-based organizations are vital nodes in the Town for community gathering and outreach.

» **Schools:** RPS provides Wi-Fi for students, faculty, and staff in facilities district-wide. However, faculty and administrators have reported connectivity issues in certain facilities due to the age and structure of the buildings. Like schools nationwide, RPS has been responding to the impacts of the COVID-19 pandemic on the learning environment. The District transitioned classes to a hybrid structure in response to the pandemic and now incorporates in-person and virtual learning. However, while students have access to the District's Wi-Fi in the classroom, their technology use at home is limited by the availability and quality of their household internet service.

» **Businesses:** In 2022, Randolph had an estimated 935 businesses and approximately 8,913 employees.[13] The largest employer in town is Boston Higashi School, with 250 employees. Internet access is critical for businesses to conduct operations and administrative activities and provide customers with Wi-Fi. Connectivity varies among Randolph's businesses, notably smaller businesses.

The Turner Free Library is a publicly available internet access point in the community. The Library provides a free open Wi-Fi network with indoor and outdoor wireless access points and was recently awarded an E-Rate Program Grant to increase Wi-Fi accessibility in and

around the Crawford Square Downtown District. However, these services are only available during operational hours. Community members have noted a need for publicly available facilities with 24/7 Wi-Fi access. The Town is reviewing a proposal for a municipal infrastructure system to implement a 24-hour access mesh network. This system has the potential to establish universal Wi-Fi access in the Town, helping to bridge the Town's gap in internet accessibility.

There is potential to improve public awareness of existing programs supporting broadband access in Randolph, including how to enroll. 19% of Randolph's households are currently enrolled in the Affordable Connectivity Program (ACP), a Federal Communications Commission (FCC) Benefit Program providing a discount of up to $30 per month toward internet service for eligible households. Eligible households can also receive a one-time discount of up to $100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than $10 and less than $50 toward the purchase price.

While ACP enrollment rates are higher in Randolph than at the County level (7% of households), there is potential to grow local subscribership to mitigate the cost burden on

Table 1 - ACP Adoption in Randolph and Norfolk County (June 2023)

	Randolph	Norfolk County
Net New Enrollments Alternative Verification Process	(2)	(8)
Net New Enrollments Verified by School	0	0
Net New Enrollments Lifeline	47	181
Net New Enrollments National Verifier Application	123	725
Net New Enrollments Total	168	898
Total Alternative Verification Process	26	593
Total Verified by School	0	1
Total Lifeline	484	3,794
Total National Verifier Application	1,784	13,881
Total Subscribers	**2,294 (19% of total households)**	**18,269 (7% of total households)**

those challenged with high monthly costs. The Benton Institute for Broadband and Society's ACP Enrollment Performance Tool classifies Randolph's performance as Medium (on a scale of Low to High).[14] Approximatley 50% of Randolph's ACP-eligible households (4,650) are currently enrolled in the program. 23% of MBI statewide survey respondents in Randolph who reported it is "Somewhat hard" or "Very hard" to pay their internet bill also selected "No" regarding whether they had previously heard about the ACP. This group of survey respondents represents a small sample of the potential in the Town to expand ACP enrollment and help address the cost burden on internet subscribers.

Device Access

Several types of devices can access the internet and serve as tools for work, school, and social connection, including cellular phones, tablets, and computers, each with benefits and drawbacks for the user. Cellular phones are one of the most portable web-based devices, offering multiple connection options and long battery life, but they cannot replace the functions of a computer. Tablets provide accessibility benefits and long battery life but cannot make calls without a cellular data plan. Laptops and desktop computers are necessary for many jobs and applications and have ample storage. However, computers have a shorter battery life and are the least affordable of these three devices.

According to the U.S. Census, 81% of Randolph's households in 2018 reported having a desktop or laptop computer, 77% reported having one or more smartphones, and 62% reported having a tablet or other portable wireless computer.[15] These trends are reflected in MBI statewide survey data, as 65% of respondents reported using a laptop computer most to connect to the Internet, 35% reported using a desktop computer, 77% reported using a cellphone, and 54% used a tablet or similar device. However, while a high percentage of Randolph's residents report having at least one computer, there is a gap in computer access for over 500 households. There is potential to improve community awareness of publicly accessible devices in Randolph, existing programs supporting device access, and how to enroll.

Digital Equity Hubs

Digital equity hubs are critical public resources for residents, students, and employees to access internet services and devices outside their homes. The Turner Free Library is a hub for the Randolph community, providing publicly accessible computers, laptops, and Apple iPads. The Library also has a set of mobile hotspots, which patrons can check out, helping fill in internet access gaps for those without consistent, reliable service. A hotspot is a portable wireless access point allowing users to connect devices to the internet anywhere.

While the Library's hotspots alone do not address the Town's divide in broadband access, these devices offer Randolph residents, employees, and students reliable and free Wi-Fi access.

Photo 3: Turner Free Library

Education

Like districts nationwide, classroom technology use has become more extensive in RPS in response to the COVID-19 pandemic. There are touch boards in all RPS classrooms, with Chromebooks and iPads available for student use. RPS is a one-to-one district providing students with Chromebooks for in-classroom use. However, while Chromebooks are available for all students, students must pay a $30 device fee. The District also restricts which grades are permitted to take Chromebooks home.

Due to this shift in technology use, the District is working to optimize device policies and their use in the learning environment and provide adequate IT management and oversight.

The Technology Department currently receives approximately 1,000 tickets per week with requests for hardware and software assistance. RPS is challenged with delivering sufficient digital literacy training for students, faculty, and staff and implementing adequate cybersecurity measures and device controls, allowing students to conduct research safely and effectively. Both students and educators noted the expanded use of laptops in the classroom and the desire to rely on technology less in the future.

Digital Literacy

Digital literacy is a critical connectivity element, empowering technology users to utilize the Internet and fully benefit from digital equity programs. Randolph community members have reported a need for more digital literacy classes and training opportunities for different proficiency levels and language speakers, focusing on typical web-based applications and devices and how to utilize them effectively. Additionally, there is a need to expand municipal outreach strategies, including virtual and non-virtual methods (e.g., email/text alerts, word-of-mouth, Town website, local TV station, mailouts, and community radio).

The following chart breaks down MBI statewide survey responses regarding the difficulty level of various internet activities.
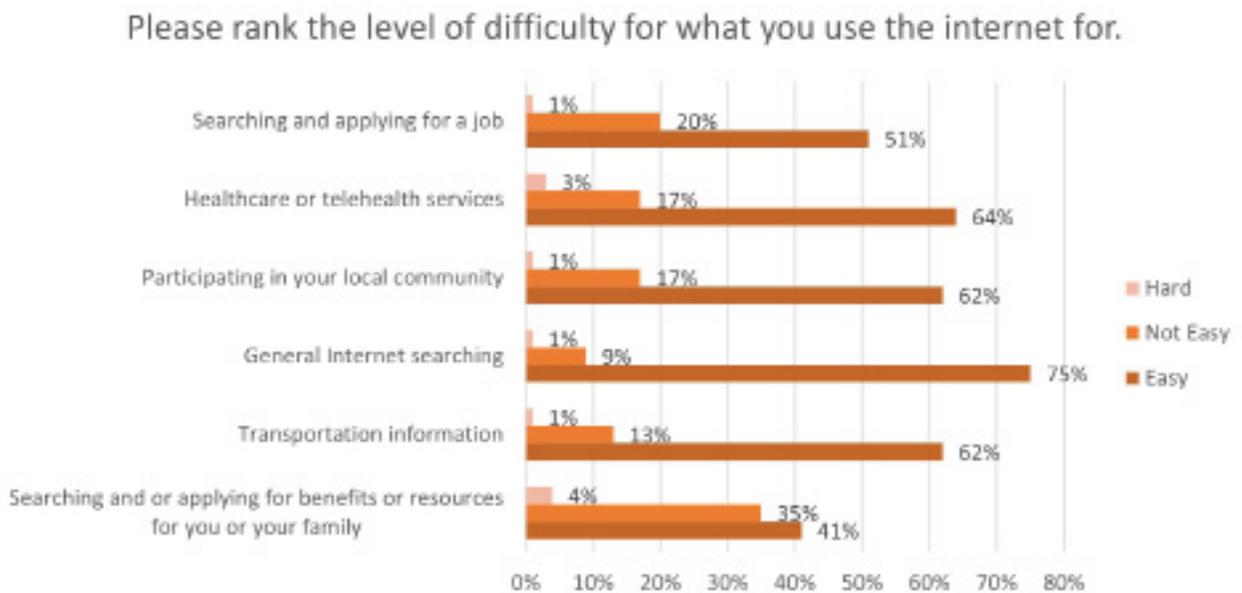
Source: MBI Statewide Digital Equity Survey (Randolph, 09/06/2023)

Survey respondents highlighted accessing "Healthcare or telehealth services" and "Searching and applying for benefits or resources for you or your family" among the most challenging internet activities. Regarding what format of digital literacy training respondents preferred, 30% indicated they would prefer a do-it-yourself training module, 23% indicated they would prefer an in-person class, and 23% indicated they would prefer an online class. Digital literacy training opportunities in communities should include virtual and non-virtual formats to accommodate the needs of as many residents as possible.

The Turner Free Library is a critical resource in the Randolph community, providing essential technology resources, services, and information in multiple languages. While the Library's digital literacy training opportunities are currently offered in English, Information on the Library's website is available in five languages: English, Chinese, Haitian Creole, Spanish, and Vietnamese. The Library provides digital literacy training in the form of individual technical assistance on a walk-in basis and computer classes targeting various proficiency levels. The Library's resources, facilities, and services are well utilized by the Randolph community, and demand often exceeds availability. The Library is limited only by capacity and is working to expand digital literacy programming and device availability.

Digital Equity Champions

Randolph has a system of digital equity champions, including leaders, instructors and technical experts working with the Turner Free Library, RPS, and the Town of Randolph. An American Connection Corps (ACC) fellow will work with the Town. The ACC is a Lead for America (LFA) program, a national non-profit organization focused on building a force of local leaders committed to serving communities nationwide. Randolph's ACC fellow will be a resource for growing the Town's network of digital navigators and expanding the Town's digital literacy resources.

Randolph lacks a robust system of digital navigators to assist community members with digital literacy and device needs. The NDIA defines digital navigators as "trusted guides who assist community members in internet adoption and the use of computing devices... including ongoing assistance with affordable internet access, device acquisition, technical skills, and application support."[16]

06

Future Funding

Randolph can leverage numerous state and federal funding opportunities to support digital equity initiatives and bridging the Town's digital divide. These funding programs target critical implementation areas of digital equity planning, including workforce development, digital literacy education, device distribution, broadband adoption, infrastructure, and outreach.

Statewide Digital Equity Planning

At the State level, MBI will develop a Statewide Digital Equity Plan for Massachusetts, integrating efforts conducted under the Municipal Digital Equity Planning Program.[17] Massachusetts has received funding under the State Digital Equity Planning Grant Program, one of three grant programs established by the $2.75 billion federal Digital Equity Act (DEA). The DEA aims to "promote the achievement of digital equity, support digital inclusion activities, and build capacity for efforts by States relating to the adoption of broadband by residents of those states."[18] MBI anticipates leveraging the statewide plan as a framework for implementing DEA State Digital Equity Capacity Grant funds toward future planning efforts.

Massachusetts municipalities must understand their digital divide and identify opportunities for advancing digital inclusion to inform statewide planning efforts. This plan provides a roadmap for addressing Randolph's digital divide, identifying implementation areas to inform prioritization and allocation of funding.

Funding Sources

The Town of Randolph can leverage the following funding programs to support the implementation of this plan.

Digital Equity Partnerships Program

MBI established the Digital Equity Partnerships Program as part of the $50 million Broadband Innovation Fund, established following the passage of An Act Relative to Immediate COVID-19 Recovery Needs (ARPA 1.0) legislation.[19] Under this program, MBI seeks 10-15 partners that can implement digital equity projects. Randolph can partner with MBI under the following program areas to implement projects identified in this plan.

Wi-Fi Access Initiative: Wi-Fi systems in affordable multi-unit buildings or in low-income neighborhoods will provide free, in unit, broadband use.

The Randolph Housing Authority can partner with MBI and the Metropolitan Area Planning Council (MAPC) to improve Wi-Fi connectivity in the Town's affordable housing developments.

Connectivity Initiative for Economic Hardship: The provision of Wi-Fi cellular hotspots to individuals lacking stable housing and unable to have a fixed broadband internet subscription will provide broadband connectivity to this vulnerable population.

The Turner Free Library can partner with MBI to expand the Turner Free Library's hotspot loan program, increasing the number of hotspots available to library patrons.

Digital Literacy Initiative: Establish and implement digital literacy training programs to ensure that target populations have the requisite skills to use devices, online resources, and digital tools to needed effect.

The Turner Free Library can partner with MBI to expand digital literacy training opportunities.

Device Distribution and Refurbishment: Secure new or used internet-connected devices to distribute to target populations.

The Turner Free Library can partner with MBI to enhance the library as a "digital inclusion hub," providing modern web-enabled devices for library patrons.

Education, Outreach, and Adoption: Support outreach and engagement activities designed to increase the success of digital equity programming, including ACP adoption, digital literacy programs, device access, and Wi-Fi or hotspot connectivity.

The Turner Free Library can partner with MBI to support public outreach regarding the Town's digital equity goals and increase ACP enrollment among the Town's population

Lead for America American Connection Corps

The Lead for America American Connection Corp (ACC) is a service membership focused on advancing economic prosperity and bridging the digital divide.[20] The ACC supports broadband development, digital inclusion, and civic leadership in communities through a

network of ACC Members who provide critical capacity-building services for the host organization or municipality. MBI has funding to cover host-site funding matches for up to 15 municipalities in Massachusetts.

An ACC Member will work with Randolph to support digital equity planning initiatives. This Member can advance community dialogue regarding community needs beyond the scope of this plan, continuing to identify issues and opportunities through routine surveying and discussions.

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.[21] 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.

Randolph 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 Randolph's broadband economy and workforce training opportunities.

Community Compact IT Grant Program

The Massachusetts Community Compact IT Grant Program 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.[22]

Randolph can leverage Municipal Fiber Grant Program funds toward developing a municipal wireless mesh network to provide free public internet outdoors.

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."[23]

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.[24] This program aims "to enhance the capacity of multi-sector collaboratives to authentically engage residents and work together" to remove barriers to health."

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

Commonwealth Corporation (CommCorp) YouthWorks Funding

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.[25]

YouthWorks funding can support workforce training in Randolph for roles in the local broadband economy. YouthWorks participants can also participate in a formalized local network of digital navigators in Randolph.

Office of Secondary and Elementary Education

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.[26] 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.[27]

Randolph 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. The Town 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.

Metropolitan Area Planning Council

The Metropolitan Area Planning Council's (MAPC) Apartment Wi-Fi Program 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.[28]

Randolph should connect with representatives from MBI and/or MAPC to learn about the Apartment Wi-Fi Program and find out if there are any opportunities to leverage this program in Randolph's affordable housing apartment buildings.

07
Goals and Reccommendations

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

2 Expand community outreach and strengthen partnerships.

3 Promote access to affordable devices and broadband internet.

4 Strengthen digital literacy throughout the community.

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

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

Goals and Reccommendations

1

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

	OBJECTIVE	DESCRIPTION	CHAMPION	COST	FUNDING OPPORTUNITIES	TIMING
1-1	Establish team of digital equity proponents	Establish a team of digital equity champions within the Randolph community who can meet regularly and advance the goals of the Digital Equity Plan. This group could include representatives from the Turner Free Library, Randolph Community Partnership, Randolph Public Schools, DEI Coalition, and Public Health Department.	Town of Randolph (Director of Library, Recreation, and Community Programs)	0	N/A	Short-Term
1-2	Leverage advisors to advance digital equity plan	Ensure that the Town's grant-writing advisors are informed of the Digital Equity Plan's key goals and objectives, and that they treat digital equity initiatives as a top priority	Town of Randolph (Director of Library, Recreation, and Community Programs)	0	N/A	Short-Term
1-3	Become a regional leader in digital equity solutions	Stay coordinated with regional, state, and federal stakeholders in digital equity. Track MBI's development of the statewide BEAD Plan and get involved. Apply for recognition through programs like the Digital Inclusion Trailblazers award program	Town of Randolph (Director of Library, Recreation, and Community Programs)	0	N/A	Short-Term

Goals and Reccommendations

2

Expand community outreach and strengthen partnerships.

	OBJECTIVE	DESCRIPTION	CHAMPION	COST	FUNDING OPPORTUNITIES	TIMING
2-1	Improve public outreach methods	Improve upon the town's process for disseminating information (physically and virtually), collecting feedback, and announcing public events. Consider local media popular among the Haitian and Vietnamese communities.	ACC Fellow	0	N/A	Short-Term
2-2	Ensure outreach is accessible on all devices	Evaluate agency and organization 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).	Town of Randolph (IT Director)	0	N/A	Short-Term
2-3	Socialize Randolph's digital equity goals	Prepare a one-pager identifying Randolph's digital equity goals, providing contact information for staff and distribute locally.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director)	0	N/A	Short-Term
2-4	Track community sentiment	Continue to facilitate public dialogue to uncover issues and opportunities. The ACC Fellow will support this process by surveying the community. Moving forward, the Town should gauge public sentiment on a recurring basis.	Town of Randolph (Director of Library, Recreation, and Community Programs), ACC Fellow	$	Lead for America – American Connection Corps	Short-Term
2-5	Strengthen network of local partners	Maintain and improve relationships with community partners dedicated to increasing digital equity throughout Randolph. This can include the library, local boards and committees, local/regional non-profits, civic organizations, business owners, and media outlets.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director), ACC Fellow	0	N/A	Medium-Term
2-6	Maintain relationships with mission-driven non-profits	Establish and maintain strong working relationships with non-profits such as Mattapan Tech, Youthworks, Tech Goes Home, and National Partnership for New Americans. Each of these organizations can provide tailored support and help Randolph advance the Digital Equity Plan goals.	ACC Fellow	0	N/A	Short-Term

Goals and Reccommendations

3 Promote access to affordable devices and broadband internet.

	OBJECTIVE	DESCRIPTION	CHAMPION	COST	FUNDING OPPORTUNITIES	TIMING
3-1	Expand the library's device loan program	Expand access to devices and hotspots through an enhanced loaner program, facilitated by the library and the schools. Increase the Inventory of hotspots in the library to 100 units. Promote the availability of Chromebooks at the library more broadly.	Town of Randolph (Director of Library, Recreation, and Community Programs Turner Free Library (Library Director), ACC Fellow	$$	Digital Equity Partnership Program	Medium-Term
3-2	Enhance "digital inclusion hubs" at library and RCP	Enhance the library and RCP's "digital inclusion hubs", where computers can be accessed in a temporary capacity by the public. They should feature modern, well-maintained laptops, copiers, scanners, printers, and fax machines, in line with community needs.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director)	$$	Digital Equity Partnership Program	Medium-Term
3-3	Provide devices to families of students, as needed	Address inequities among students by continuing to provide free access to hotspots for students who request them, to make up for the scaling back of COVID-era programs.	RPS (Assistant Superintendent)	$$	Digital Equity Partnership Program	Short-Term
3-4	Support local/regional device donation programs	Strengthen connections with groups who facilitate device donation programs and provide free or discount refurbished devices to households who need them. The Big Brother Big Sister program could be a partner in this effort.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director)	0	N/A	Medium-Term
3-5	Promote public subsidies for devices, internet, and training programs	Facilitate a mailing campaign to educate the community on how to apply for discounts on devices and internet access, highlighting the Affordable Connectivity Program and associated discounts. For example, host subscription drives locally.	ACC Fellow	$$	Digital Equity Partnership Program	Short-Term
3-6	Develop a broad public Wi-Fi network	Develop a wireless mesh network to provide free public internet outdoors in busy areas, as has already been done around the Turner Free Library. Consider building a network, for instance, around the Intergenerational Community Center, Housing Authority, and JFK Elementary/Junior High School.	Town of Randolph (Director of Library, Recreation, and Community Programs & IT Director)	$$$	Community Compact IT Grant Program	Medium-Term
3-7	Connect with MBI and MAPC on the Apartment Wi-Fi Program.	Reach out to representatives from Mass Broadband Initiative (MBI) and/or MAPC to learn about the Apartment Wi-Fi Program and find out if there are any opportunities to leverage this program in Randolph's affordable housing apartment buildings.	Town of Randolph (Director of Library, Recreation, and Community Programs)	$	MAPC Apartment Wi-Fi Program	Medium-Term

Goals and Reccommendations

4

Strengthen digital literacy throughout the community.

	OBJECTIVE	DESCRIPTION	CHAMPION	COST	FUNDING OPPORTUNITIES	TIMING
4-1	Expand digital literacy courses	Engage additional partners and/or staff to augment the work of Mattapan Tech in teaching digital literacy courses at the Turner Free Library. There is strong demand for increased class offerings and an expanded curriculum. Survey the community to identify most pressing needs.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director), ACC Fellow	$$	Digital Equity Partnership Program	Short-Term
4-2	Establish a local digital navigation training squad	Establish a digital navigation training squad (potentially engaging college students). Establish a system to coordinate, track, and optimize the team's work. Refer to the National Digital Inclusion Alliance (NDIA) Digital Navigator Model as a guide for establishing this group.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director)	$$	CommCorps Youthworks	Short-Term
4-3	Provide mobile digital literacy resources	Use the Randolph Bookmobile, once it is operational, to provide mobile digital literacy training at Veteran's Homes, the Senior Center, and potentially elsewhere to reach seniors, and other communities as needed.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director)	0	N/A	Short-Term
4-4	Support immigrant-owned business owners	Establish a plan for increasing digital literacy among immigrant business owners and provide training for online marketing, branding, accounting, and payroll tools, leveraging relationships with groups like the Haitian Chamber of Commerce, QARI, and neighborhood churches.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director), USHCOC	0	N/A	Short-Term

Goals and Reccommendations

5

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

	OBJECTIVE	DESCRIPTION	CHAMPION	COST	FUNDING OPPORTUNITIES	TIMING
5-1	Expand and promote the library's "device advice" program	Expand and promote the Turner Free Library's Device Advice sessions (currently offered twice a month), for those who sign up for appointments. This program is well-utilized, with many visitors returning multiple times. The program should be enhanced to include weekend and/or evening hours - and advertised more widely.	Town of Randolph (Director of Library, Recreation, and Community Programs), Turner Free Library (Library Director), ACC Fellow	0	N/A	Short-Term
5-2	Enhance programming at the Randolph Community Partnership	Increase funding, and expand services, for the Randolph Community Partnership to train students on digital literacy and add more value within the workforce. The funding should support expanded technological resources (including loaner laptops in addition to in-house laptops), more staff, and more class offerings.	Randolph Community Partnership (Executive Director)	$$	Digital Equity Partnership Program	Medium-Term
5-3	Protect the community from common online risks	Protect the community from common online risks, such as hackers, identity thieves, and (increasingly common) scams related to the ACP program, by providing dedicated training to seniors and other community members.	Town of Randolph (Director of Library, Recreation, and Community Programs), Lt. Christine Morse	0	N/A	Medium-Term
5-4	Train residents on tracking medical records	Mitigate consumer vulnerability regarding health care records, (in light of the recent closure of Compass and resulting loss of access).	Town of Randolph (Director of Library, Recreation, and Community Programs), Gerard Cody	$	MA Department of Public Health Determination of Need	Medium-Term
5-5	Strengthen digital literacy training for students	Strengthen digital skills training for students in Randolph Public Schools, tracking and improving methods for identifying needs and training programs.	RPS (Assistant Superintendent, Accountability & Data Specialist)	$$	Digital Equity Partnership Program	Medium-Term
5-6	Monitor the use of technology in classrooms	In Randolph Public Schools, track how (and how often) technology is used by teachers in the classroom and establish standards/requirements for appropriate usage.	RPS (Assistant Superintendent, Accountability & Data Specialist)	$$	Office of Secondary and Elementary Education	Medium-Term

Goals and Reccommendations

6

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

	OBJECTIVE	DESCRIPTION	CHAMPION	COST	FUNDING OPPORTUNITIES	TIMING
6-1	**Track the major internet service providers**	Track the major ISP's (Comcast (cable), Verizon (fiber), and T-Mobile (fixed wireless)) to understand their coverage, rates, and any discount programs that they offer.	Town of Randolph (IT Director)	$$	N/A	Short-Term
6-2	**Identify and promote broadband service affordability standards**	Define broadband service affordability standards locally and track all ISP's to assess their rates. Keep in mind that many households are paying for a bundle including home security, cable television, and phone.	ACC Fellow	0	N/A	Short-Term
6-3	**Maintain a map of all conduit and fiber/cable networks**	Ensure that the fiber and cable networks of Comcast and Verizon are mapped and tracked by the municipality. This map should also show all popular free Wi-Fi locations.	Town of Randolph (IT Director)	$$	N/A	Medium-Term
6-4	**Consider alternatives to major ISP's**	Consider creating or joining a Community Broadband Network, such as what Quincy has done.	Town of Randolph (IT Director)	$$	N/A	Long-Term
6-5	**Promote job opportunities in the broadband economy**	Identify and promote job opportunities in tracking, developing, designing, and deploying broadband infrastructure locally. This can be supported through enhanced vocational tech education.	ACC Fellow	$$	Community Municipal Fiber Grant Program, CommCorps YouthWorks Funding	Short-Term

Endnotes

1. National Digital Inclusion Alliance. (n.d.). The Words Behind Our Work: The Source for Definitions of Digital Inclusion Terms. NDIA. https://www.digitalinclusion.org/definitions/.

2. Pew Research Center. (2021). Internet/Broadband Fact Sheet. PewResearch.org. https://www.pewresearch.org/internet/fact-sheet/internet-broadband/?menuItem=2ab2b-0be-6364-4d3a-8db7-ae134dbc05cd.

3. United States Census Bureau (2021 ACS 5-Year Estimates). B28002 Presence and Types of Internet Subscriptions in Households. Data.Census.gov. https://data.census.gov/table/ACS-DT5Y2021.B28002?q=internet+access.

4. See Endnote 1.

5. See Endnote 1.

6. U.S. Census Bureau. (n.d.). DP02 Selected Social Characteristics in the United States. ACS 5-Year Estimates Data Profiles. U.S. Department of Commerce. https://api.census.gov/data/2021/acs/acs5/profile.

7. See Endnote 2.

8. See Endnote 6.

9. U.S. Census Bureau. (n.d.). DP02 Selected Social Characteristics in the United States. ACS 5-Year Estimates Data Profiles. U.S. Department of Commerce. https://api.census.gov/data/2021/acs/acs5/profile.

10. U.S. Census Bureau. (n.d.). DP05 ACS Demographic and Housing Estimates. ACS 5-Year Estimates Data Profiles. U.S. Department of Commerce. https://api.census.gov/data/2021/acs/acs5/profilet.

11. U.S. Census Bureau. (n.d.). DP02 Selected Social Characteristics in the United States. ACS 5-Year Estimates Data Profiles. U.S. Department of Commerce. https://api.census.gov/data/2021/acs/acs5/profile.

12. National Telecommunications and Information Administration. (2021). Community Report Norfolk County, Massachusetts. BroadbandUSA. https://sanbamdata.blob.core.windows.net/bbusa/BBUSACommReports/202106/Counties/25021.html.

13. Data Axle (2022). Esri Business Summary. [Data set]. Esri.

14. Benton Institute for Broadband & Society (n.d.). The Affordable Connectivity Program Enrollment Performance Tool. https://www.benton.org/acp_tool?zip=02368.

15. U.S. Census Bureau. (2018). S2801 Types of Computers and Internet Subscriptions. ACS 5-Year Estimates Data Profiles. U.S. Department of Commerce. https://data.census.gov/table?q=s2801&g=060XX00US2502155955

16. See Endnote 1.

17. Massachusetts Broadband Institute. (n.d.). Municipal Digital Equity Planning Program. Broadband.masstech.org. https://broadband.masstech.org/municipal.

18. National Telecommunications and Information Administration. (2022). Notice of Funding Opportunity State Digital Equity Planning Grant Program Executive Summary. BroadbandUSA. https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf.

19. MBI. (n.d.). Digital Equity Partnerships Program. Broadband.masstech.org. https://broadband.masstech.org/partnerships.

20. American Connection Corps. (n.d.). American Connection Corps. americanconnectioncorps.org. https://www.americanconnectioncorps.org/.

21. Commonwealth of Massachusetts. (n.d.). About the Municipal Fiber Grant Program. Mass.gov. https://www.mass.gov/info-details/about-the-municipal-fiber-grant-program.

22. Commonwealth of Massachusetts. (n.d.). Community Compact IT Grant Program. Mass.gov. https://www.mass.gov/community-compact-it-grant-program.

23. Commonwealth of Massachusetts. (n.d.). Determination of Need (DoN). Mass.gov. https://www.mass.gov/determination-of-need-don

24. Commonwealth of Massachusetts. (n.d.). Massachusetts Community Health & Healthy Aging Funds. Mass.gov. https://mahealthfunds.org/.

25. Commonwealth Corporation. (n.d.). YouthWorks. commcorp.org. https://commcorp.org/program/youthworks/.

26. United States Office of Elementary and Secondary Education. (n.d.). Supporting Effective Instruction State Grants—Title II, Part A. oese.ed.gov. https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/instruction-state-grants-title-ii-part-a/#:~:text=Title%20II%2C%20Part%20A%20provides%20these%20agencies%20the,school%20leaders%20to%20serve%20as%20effective%20school%20leaders.

27. United States Office of Elementary and Secondary Education. (n.d.). English Language Acquisition State Grants—Title III, Part A. oese.ed.gov. https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/english-language-acquisition-state-grants/

28. Metropolitan Area Planning Council. (n.d.). Apartment Wi-Fi. Mapc.org. https://www.mapc.