Town of New Marlborough Digital Equity Plan



Berkshire Regional Planning Commission

March 28, 2025





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ACKNOWLEDGMENTS

Town of New Marlborough

Mari Enoch – Town Administrator John Valente – Broadband Committee Member Jerry Weinstock – Broadband Committee Member Deb O'Brien – New Marlborough Library Director Prudence Spaulding – Council on Aging Director Wendy Miller – Burritt Day Organizer Tom Stalker – New Marlborough Farmer's Market Director

Berkshire Regional Planning Commission

Laura Brennan – Economic Development Program Manager Mark Maloy – GIS, Data, and IT Manager Wylie Goodman – Senior Economic Development Planner Jocelyn Latvalla – Economic Development Program Associate Aleesha Siddiqui – American Connection Corps Fellow, Project Lead

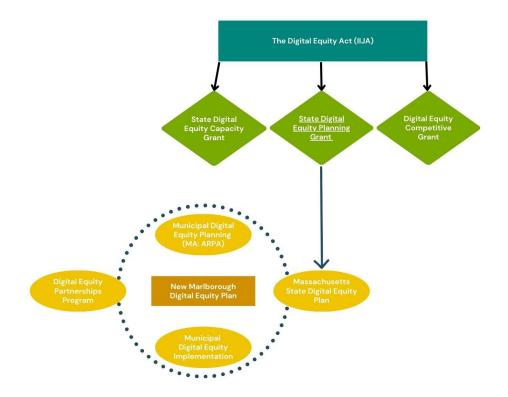
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EXECUTIVE SUMMARY

In June 2024, the town of New Marlborough embarked on a journey to address the digital needs of its residents. To do so, town leaders and stakeholders explored residents' access to broadband service; their ability to afford internet and computer devices; and their confidence developing skills to navigate the online world. The project concluded with a digital equity charrette, or community engagement workshop, and this digital equity mini-plan.

The town selected the Berkshire Regional Planning Commission (BRPC), the county's regional planning agency, to lead the charrette. The work involved gathering quantitative data from publicly available sources such as the American Community Survey (ACS), Bureau of Labor Statistics, and Federal Communication Commission; administering a statewide

Internet for All survey; interviewing community leaders and residents about their digital needs and barriers; and leading a day-long charette, during which attendees shared their experiences with computers and the internet and offered ideas about how to advance digital equity in New Marlborough.



Bipartisan Infrastructure and Jobs Act (IIJA)

A focus on digital equity nationally originated with the <u>Bipartisan Infrastructure and Investment Jobs Act</u> (IIJA). Passed by Congress in 2021, the IIJA aimed to "rebuild crumbling infrastructure,"¹ such as high-

What is "Digital Equity"?

Digital equity refers to a condition in which all individuals have the opportunities and skills necessary to access the internet and digital devices, thereby allowing them to fully participate in society – <u>National Digital</u> <u>Inclusion Alliance</u>

¹ "Fact Sheet: The Bipartisan Infrastructure Deal," The White House, March 29, 2023, https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/.

speed broadband, whose fault lines became apparent during the COVID-19 pandemic lockdown. Considered a luxury before the pandemic, internet access became a necessity during it, and those without it — due to lack of service or inability to afford it — fell further behind, unable to work from home, access healthcare, or stay connected socially.

The federal government directed two billion dollars nationally toward addressing digital access and equity gaps², with funds administered through three programs stemming from the <u>Digital Equity Act</u>: <u>State Digital Equity Act</u>: <u>State Digital Equity Capacity Grant</u>, <u>Digital Equity Competitive Grant</u>, and <u>State Digital Equity Planning (SDEP) Grant</u>. Massachusetts' statewide broadband agency, the <u>Massachusetts Broadband Institute</u> (MBI), received \$1 million in federal funds to implement the SDEP, with an additionally \$14.1 million awarded through the Capacity Grant Program. Separately, MBI directed monies from Massachusetts' American Rescue Planning Act (ARPA) funds to a more focused <u>Municipal Digital Equity Planning Program</u> supporting the creation of city- and town-level plans and charrettes. The purpose of these narrower plans and charrettes was twofold:

- Guide municipal decision-making and investments to increase access, adoption, and use of the internet for people most impacted by the COVID-19 pandemic.
- Prepare municipalities to submit grant proposals to existing or future state or federal programs to support digital equity activities.

The New Marlborough Digital Equity Charette

Municipalities could conduct an in-depth process leading to a Municipal Digital Equity Plan or a shorter, intensive engagement called a Digital Equity Charrette. New Marlborough chose the latter.

Both the plan and charrette require first understanding the needs of a town's **Covered Populations**,³ a term used by the federal government to describe eight groups who have historically faced barriers to digital equity They include:

- Rural residents
- People aged 60 and older
- People with disabilities
- Veterans
- People in households with incomes at or below the poverty rate
- English language learners and people with low literacy
- People who belong to a racial or ethnic minority group (i.e., Black, Indigenous, People of Color: BIPOC)
- Incarcerated individuals in state facilities

When creating a Municipal Digital Equity Plan or Charrette, the needs of Covered Populations must come first, and to do so involves surveying the digital equity landscape, known as conducting an **Existing Conditions** analysis. Much of the data for the Existing Conditions analysis comes from the Five-Year Estimate 2019-2023 American Community Survey (ACS). However, because New Marlborough is a small rural community, the numbers and percents reported in the ACS <u>must be read with caution, as they often have high margins of error.</u>

² "Fact Sheet: The Bipartisan Infrastructure Deal."

³ US Census Bureau, [']"Digital Equity Act of 2021," Census.gov, March 28, 2024, https://www.census.gov/programssurveys/community-resilience-estimates/partnerships/ntia/digital-equity.html.

Key Findings

The following are 10 key findings and recommendations New Marlborough town leaders can focus their digital equity implementation efforts on. More detailed explanations for these findings can be found at the end of this plan.

Public Space Modernization



1. The town of New Marlborough is situated in a rural area with many dead zones and areas with little to no reliable internet connection \rightarrow the town may wish to consider extending coverage of the New Marlborough public Wi-Fi network (NM-Net) to more recreational town areas to improve safety by giving residents the ability to call emergency services or access basic internet regardless of location.

Digital Literacy



- Many senior residents in New Marlborough felt as though they lacked the digital skills and knowledge to feel confident using the internet and stay protected against cyberattacks and scams → offer local skills classes through an organization such as Tech Goes Home or NorthStar at the New Marlborough Library.
- 3. While younger digital natives frequently learn using online courses, articles, and websites, these methods can feel foreign to older adults → to address learning differences, local digital skills classes could include a face-to-face element: a "digital navigator" acting as the class instructor teaching content in a familiar classroom setting where adult attendees can ask questions in real time. Local teenagers could also teach classes to senior residents and promote intergenerational learning by offering them the expertise of digital natives.
- 4. Younger working adults looking to expand their job prospects need applicable digital skills → offer digital skills classes that focus on the use of Microsoft and Google Suite could be helpful. For residents working in construction and related fields, separate digital skills classes could be offered and tailored towards industry-specific skills in partnership with an outside organization.

Device Distribution



- 5. Low-income households and individuals with ambulatory disabilities in New Marlborough may have a difficult time accessing digital devices → purchase and upkeep iPads and Chromebooks for long-term loans at the New Marlborough Library.
- 6. Many older residents rely on "Link to Life," a medical alert system that can contact emergency services when an individual presses a button on one of their devices. If a power outage occurs and service is lost, these devices may fail and prevent individuals from seeking help → consider purchasing and distributing UPS battery backups to those who rely on Link to Life and income-qualify so that they will have an uninterrupted power source to back up their routers, charge internet-ready devices, and receive internet service in case of an emergency.
- 7. Residents with disabilities in New Marlborough may have difficulty accessing and enjoying the same community experiences as other residents due to limitations related to assistive technologies or failure by outside entities to take into consideration Universal Design and ADA principles \rightarrow boost the accessibility of community spaces and activities with devices such as Zoom paired with a

"Meeting Owl;" up-to-date audio and hybrid equipment; and closed captioning, all of which would provide a more seamless experience for those confined at home or who struggle with hearing or other sensory impairments. All residents would benefit from ADA-compliant town and community organization websites.

Education, Outreach, and Adoption



- 8. Income-qualifying residents in New Marlborough may struggle with internet and device costs → the town could spread awareness of lower-cost internet plans and partner with organizations that supply refurbished devices and offer free digital skills classes.
- Veterans in New Marlborough may struggle with accessing and affording digital devices and internet
 → the town can disseminate information regarding online resources that help them search for
 benefits and discounts, as well as access VA Telehealth services and opportunities for securing digital
 devices.
- 10. The number of Spanish-speaking immigrants in Southern Berkshire County is constantly on the rise
 → the town may consider spreading awareness about multilingual digital resources and local bilingual digital skills classes.

EXISTING CONDITIONS



New Marlborough is a rural community (Population 1,528; 631 households) as defined by the federal government, and a Level 2 rural community according to the <u>Massachusetts Office of Rural Health</u>, based on its population, density, commuting characteristics, and hospital access. As such, the entire town and its residents qualify as a Covered Population.

Source: Google images

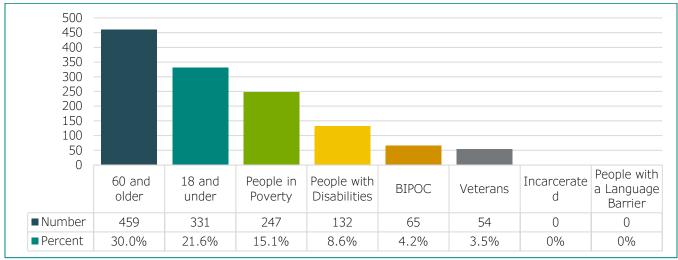


Figure 1: Covered Populations

Source: American Community Survey Five-Year Estimate, 2019-2023

The table above details the number and percentage of the seven other Covered Population groups in New Marlborough, as well as the youth population, which is an important demographic *but not a Covered Population*. The largest Covered Population are those age 60 and older, followed by people in poverty and those with disabilities. The current ACS suggests nearly all residents speak English well, suggesting few language barriers, although 5.4% of households include people who speak a language other than English at home, primarily Spanish (3.5%). There are currently no New Marlborough residents involved in the criminal justice system.

Older Adults

The percentage of older adults in New Marlborough is slightly lower than that of Berkshire County overall (31.4% vs. 35.7%), with the largest sub-group being residents between 65 to 69 years old. Older adults are served by the New Marlborough Council on Aging and New Marlborough Library. In a rural community, older adults living alone or in isolated neighborhoods are particularly vulnerable without digital skills. Research finds adults 60 and over are one of the groups most susceptible to internet scams and have lost more money than any other age cohort.⁴

Recommendations: Host a workshop with the Council on Aging (CoA) to introduce older adults to free resources such as AARP's online <u>Older Adults Technology program (OATS</u>). Hold information sessions at the library to spread cybersecurity awareness among older adults, especially those living alone or in more remote locations. Invite representatives from <u>Berkshire Medical Center</u> and <u>Fairview Hospital</u> to present at the library or CoA about how to access telehealth services and use their patient portals and phone applications.

Veterans

Veterans represent 3.5% of the population in New Marlborough, slightly less than that of Berkshire County (5.5%). Veterans often need to navigate complex government websites to access pensions, benefits, healthcare, and information about Veteran's Affairs organizations. Without the proper digital skills, device access, or internet service, these tasks can be challenging if not impossible.

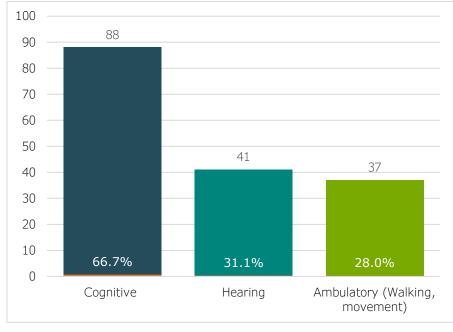
Recommendations: Use mailings, information sessions, and flyers to raise awareness about online resources such as <u>Mass Vets Advisor</u>, a website run by the state's <u>Executive Office of Veterans Services</u>, where veterans can find information and search for benefits and discounts. Invite the region's veteran's agent to present locally about <u>VA Telehealth Services</u>, which helps qualifying veterans without internet service or an internet-connected device meet virtually with a social worker and secure a tablet.

People with Disabilities (PWD)

New Marlborough residents with disabilities tend to be older individuals living with chronic conditions affecting their cognition (difficulty concentrating, remembering, or making decisions); movement (serious difficulty walking or climbing stairs); and hearing. People with cognitive disabilities likely need assistance understanding how to use devices, apps, and websites and may have home health aides who also need help with internet navigation, especially related to helping clients access telehealth and maintain social connections with family members living far away.

⁴ Bryan D. James, Patricia A. Boyle, and David A. Bennett, "Correlates of Susceptibility to Scams in Older Adults without Dementia," *Journal of Elder Abuse & amp; Neglect* 26, no. 2 (February 5, 2014): 107–22, https://doi.org/10.1080/08946566.2013.821809.





Source: U.S. Census Bureau. "Disability Characteristics." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1810, 2023, https://data.census.gov/table/ACSST5Y2022.S1810?a=040XX00US25 050XX00US25003,2

Those with hearing difficulties may struggle to participate during Zoom calls and livestreamed town meetings due to a lack of closed captioning. Those with ambulatory disabilities likely face challenges coordinating medical transport that may make going to public places (e.g., library, community center) to use computers and the internet difficult.

Ensuring these residents can use Zoom to connect with doctors and family members; participate in virtual social activities; download e-books and schedule transportation are just a few examples of valuable skills that could enhance the quality of life for people with disabilities (PWD).

Recommendations: Purchase a "Meeting Owl" video conference device so those attending community Zoom meetings virtually feel included through high resolution streaming and a 360-degree camera. Provide closed captioning during town meeting video calls to help those with cognitive and hearing disabilities more easily process conversations. Set aside funding for upkeep and maintenance of Chromebooks and iPads at the New Marlborough Library to ensure they are ready to be loaned out. Work with United Cerebral Palsy (UCP) of Western Massachusetts to help bring assistive technologies to homebound residents. Ensure town and organization websites and online newsletters are designed to follow recommendations of <u>The Americans</u> with <u>Disabilities Act</u> (ADA) and <u>Web Content Accessibility Guidelines</u> to increase navigability and accessibility.

BIPOC and English Language Learners

Of the 38 New Marlborough residents who identify as BIPOC, 9 identified as Black or African American, 8 identified as American Indian or Alaskan Native, 6 identified as Asian, and 1 identified as Hawaiian or Other Pacific Islander. 14 residents considered themselves to be "Some Other Race." Although the ACS reports that everyone in town speaks English well, there may be individuals who consider English a second language in other modalities such as writing and reading. Additionally, with a rise in Spanish-speaking immigrants in Southern Berkshire County,⁵ there may be more demand for multilingual digital classes and resources in the future that the town can prepare for to help new residents integrate more quickly.

⁵ Aina Alvarez et al., "Meet the People Who Help Spanish-Speaking Families Decode Life and Learning in South County," The Berkshire Eagle, November 9, 2022, https://www.berkshireeagle.com/news/southern_berkshires/spanish-families-berkshire-county-massachusetts-programs-equity-education-immigrants/article_45c5b982-5baa-11ed-9fa3-9bed9e773aff.html.

Recommendations: Raise awareness about multilingual digital resources such as the online <u>Digital Skills</u> <u>Library</u> by posting a link on the town website and distributing flyers in community spaces such as the library and community center. Distribute a Spanish-language version of <u>BRPC's Digital Resource Guide</u> to community spaces. Advertise information about bilingual digital literacy and computer science classes hosted by the ESOL Program at <u>Berkshire Community College</u> in Great Barrington. Invite <u>Volunteers in</u> <u>Medicine</u>, located in Great Barrington, to present over Zoom or at the library on its resources for non-English speaking residents.

OTHER DIGITAL EQUITY INDICATORS

While knowing who the Covered Populations are offers a broad understanding of potential digital barriers and needs, more granular data related to educational attainment, employment, income, broadband and computer ownership, and internet service quality can also inform digital equity recommendations. The section below delves into these specific digital equity indicators and their impact on New Marlborough residents.

Educational Attainment

The highest grade a person has completed in school can be an indicator of a digital divide, especially for those who have completed high school but not attended college as college students gain exposure to advanced technology (e.g., laptops versus Chromebooks) through classes, assignments, and research, allowing them to sharpen their digital skills. In contrast Baby Boomers, as well as younger Millennials, Gen X, and Gen Z adults who enter the workforce immediately after high school, may miss out on these computer skills.

While almost 47.3% of New Marlborough residents have a bachelor's degree or higher, 52.7% of those 25 and older do not. The largest cohort without a bachelor's degree are those between the ages of 18 to 24, followed by 25- to 34-year-olds and residents aged 35 to 44. This suggests an opportunity to offer adults in New Marlborough digital skill training in non-traditional settings (e.g., library, virtually) to help them build competency without requiring them to earn an advanced degree.

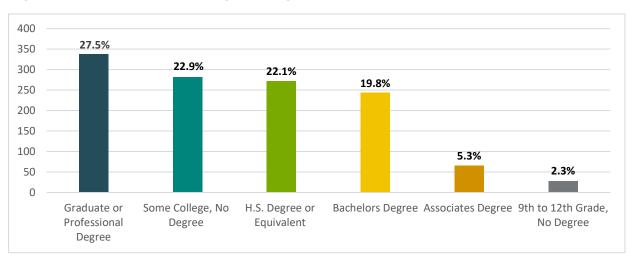


Figure 3: Educational Attainment Population Aged 25 and over

Source: U.S. Census Bureau, U.S. Department of Commerce. "Educational Attainment." *American Community* Source: Survey, ACS 5-Year Estimates Subject Tables, Table S1501, 2023, https://data.census.gov/table/ACSST5Y2023.S1501?g=060XX00US2500342460. Accessed on January 7, 2025.

The relationship between educational attainment and digital equity can sometimes be seen in differences in broadband access and computer ownership, with those who have less education also lacking internet service, devices, or skills. In New Marlborough, the residents most likely to be without broadband internet or a computer are those with only a high school diploma or those with some college or an associate's degree. Higher education offers benefits such as a) preparing people for positions in higher-paid fields (e.g., robotics, artificial intelligence, cybersecurity);⁶ b) making internet and computer ownership more financially feasible; and c) increasing remote and hybrid work options. Individuals lacking this level of education may struggle to afford or justify computer ownership and a broadband internet subscription.

Households Households Without With Computer Computer *Households with and without a computer together total 100%						
	Broa	/ith dband ernet	Broad	hout Iband Irnet		
	#	%	#	%	#	%
Less than a high school graduate or equivalency	22	78.5%	6	21.4%	0	0%
High school graduate (includes equivalency), some college or associate's degree	565	91.5%	44	7.1%	22	3.5%
Bachelor's degree or higher	564	97.2%	4	0.6%	12	2.0%

Table 1: Relationship Between Educational Attainment and Computer and Internet Ownership

Source: U.S. Census Bureau. (2022). Educational Attainment by Presence of a Computer and Types of Internet Subscription in Household. *American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B28006*.

Recommendations: Help residents without a college degree learn about free and low-cost ways to gain digital skills outside of academia, such as through programs like <u>NorthStar</u>, <u>Tech Foundry</u>, and <u>Tech Goes</u> <u>Home</u>. Host a Tech Goes Home class at the New Marlborough Library focused on adults who did not gain digital skills in college to help them prepare for remote work opportunities in partnership with a local employment recruiter or the <u>MassHire Berkshire Career Center</u>.

⁶ Ron Haskins, "Economic Mobility Project: An Initiative of The Pew Charitable Trusts," The Brookings Institution, accessed December 20, 2024, chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://www.brookings.edu/wp-content/uploads/2016/07/02_economic_mobility_sawhill_ch8.pdf.

Employment and Occupations

Among New Marlborough residents aged 16 and over (1,356), 64% are in the labor force* and most are employed (839 out of 874); 286 (35.7%) work from home. The top five industries in which residents work are shown in the chart below. While basic facility with computers and the internet are likely required in most of these industries, those working in construction may have less opportunity to use these skills on the job. **Residents not in the labor force include students, stay-at-home parents, and retirees.*

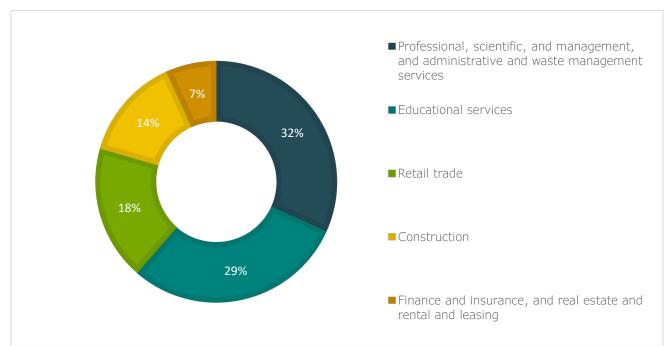


Figure 4: Major sectors of employment in New Marlborough

Source: U.S. Census Bureau, U.S. Department of Commerce. "Selected Economic Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP03, 2023, https://data.census.gov/table/ACSDP5Y2023.DP03?g=060XX00US2500342460. Accessed on January 7, 2025.

Recommendations: Offer digital skills classes for those working in construction and related fields who may not regularly interact with technology. Tailor classes toward skills specific to their industry (e.g., doing complex calculations online, writing project plans using Word or Google Suite, organizing documents, ordering equipment, etc.).

Income

Twenty-seven percent of New Marlborough households earn between \$74,999 to \$50,000 a year. About sixteen percent earn above \$200,000 annually. The same percentage earns between \$149,000 to \$100,000 annually. A small percentage (6% +/-) qualifies as low-income, placing them at or below 150% of the federal poverty level.



Figure 5: Household Income Distribution in New Marlborough 2022

Source: Table S1901, 2024, https://data.census.gov/table?q=New+Marlborough+MA+S1901

Recommendations: Increase low-income residents' awareness of lower-cost internet plans through posters at the library; posts on town websites; and making available or linking to <u>BRPC's Digital Equity Resource</u> <u>Guide</u>. Encourage organizations to partner with <u>Computers4People</u> and <u>The Alliance for Digital Equity</u> to apply for donations of refurbished devices for those who income qualify. Help residents who want to improve their digital skills enroll in free online classes through nonprofits such as Computers4People, Tech Foundry, NorthStar, and AARP's OATS program.

Housing Status

Most homes in New Marlborough (90.2%) are owner-occupied with second homeowners comprising more than half of these (53%). Of the minority of residents who rent (62), around half are considered rentburdened, suggesting they spend 30% or more of their income on housing costs. New Marlborough has 27 multiple-dwelling units (i.e., two-family houses; condominiums, or cooperatives) that may experience more internet quality or speed challenges, depending on a) how many people want to use the internet at the same time and/or b) what kind of activities people are using the internet for (e.g., movies and games versus Word processing).

Table 2: Household by Type

Household Type	#	%
Owner-Occupied	569	90.2%
Renter-Occupied	62	9.8%
Rent-Burdened	39	6.1%
Second Homeowners	335	53%
Multiple Dwelling Units	27	4.2%

Source: U.S. Census Bureau. "Selected Housing Characteristics." *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04*, 2022. Source: Berkshire Regional Planning Commission

Recommendations: programs such as Tech Goes Home or partner with Tech Foundry to provide lowincome households with free digital devices following digital skills training. Promote the availability of digital devices at the library, especially during summer months when more second homeowners are in town and demand rises. For those in multiple-dwelling units, provide information on how to use Wi-Fi extenders and optimize router placement to boost internet coverage evenly across units.

BROADBAND & COMPUTER OWNERSHIP CONDITIONS

According to <u>MBI's BEAD BSL Eligibility List</u>, New Marlborough has 1,145 broadband serviceable locations. Of these, 1,088 (95%) are **served**, 40 (3.49%) are **unserved**, and 4 are **underserved** (.34%).

The Federal Communications Commission (FCC) considers a location **served** if the resident or business can purchase commercial internet service with a minimum 100 Mbps download/20 Mbps upload speed⁷; **underserved** if the only available internet service is slower than 100/25 Mbps; and **unserved** if no commercial internet provider offers service, or the only speed available is below 25/3 Mbps.

Table 3: Internet Service Provider Comparison Speeds and Types

Provider Name	Technology	Max Advertised Download (Mbps)	Max Ad. Upload (Mbps)	# BSLs w/ Service Available	% BSLs w/ Service Available
AT&T	Fixed Wireless	225	30	х	х
Charter Communication (Spectrum)	Fiber	1000	500	996	89.17%
Fiber Connect	Fiber	1000	500	72	6.45%
T-Mobile	Fixed Wireless	100	20	53	4.74%
T-Mobile	Fixed Wireless	25	3	68	6.09%

⁷ Tyler W Wright, "FCC Broadband Collection – Purdue Center for Regional Development," *Purdue Center for Regional Development – Purdue Center for Regional Development* (blog), January 18, 2024,

https://pcrd.purdue.edu/fcc-broadband-collection/

^{#:~:}text=Served,communities%20understand%20their%20broadband%20landscape.

			1	1	
Verizon	Fixed Wireless	940	880	Х	х

Source: This data is extracted from the Massachusetts Broadband Map, developed by the Massachusetts Broadband Institute (MBI). The data is current as of at least February 22, 2024

Charter Spectrum, one of the county's largest ISPs, and Fiber Connect, a Berkshire County-based ISP that also reaches Egremont, New Marlborough, and Great Barrington, are tied for the fastest internet speeds available in town. Spectrum's monthly fees range from \$50 to \$70. The company also offers an Internet Assist Plan for low-income households that costs \$25 a month with speeds of 50 Mbps download / 5 Mbps upload. A standard Fiber Connect account costs \$99 a month, plus a one-time \$499 installation fee. In second place is Verizon, which offers internet speeds up to 940 Mbps download / 880 Mbps download at \$74.99 a month. AT&T offers fixed wireless internet in the area with advertised speeds of up to 30 Mbps download / 225 Mbps upload, with costs ranging from \$55 to \$65 a month. T-Mobile costs about \$45 a month, on average, but service is slower (133-415 Mbps download / 12-55 Mbps upload) and may be more susceptible to inclement weather and interference (e.g., mountains, trees).

Internet Speed

Until March 2024, the FCC-defined broadband as 25 Mbps download and 3 Mbps upload for basic service via coaxial cable. More recently, the agency redefined broadband to 100 Mbps download and 20 Mbps upload, which is more typically provided via fiber. The fastest residential broadband speed in the U.S. is 1 gigabit (Gbp) simultaneous (equal upload and download).

ISPs charge customers more for faster speeds, but confirming whether advertised speeds match what customers pay for and receive can be difficult due to factors such as distance between the user's computer and router; the age of a user's computer; the number of people using the internet at the same time; the type of activity(ies) in which user(s) are engaged (e.g., gaming versus email); user(s) choice of browser; and geography.

One of the most reliable ways to assess whether customers are getting the speeds they pay for is by conducting online speed tests. MBI contracted with the company Ookla to conduct speed tests across the Commonwealth and documented 968 in New Marlborough beginning in February 2022. resulting in 27 locations having at least 25/3 Mbps service; 58 with at least 50/10 Mbps; 166 with 100/20 Mbps; and 81 with 100/100 Mbps simultaneous. The data suggests 42% of tested locations receive speeds that meet the new FCC 100/20 benchmark. While similar to nearby towns like Otis (57%) and Becket (54%), if accurate, this is concerning as more locations should be receiving 100/20 speeds.

Table 4: Ookla Speed Tests

Speed and Quality Results	# of Tests
Jitter > 50 ms	74
Latency > 100 ms / Latency > 500 ms	7 / 2
Speeds < 25/3 Mbps / Speeds < 50/10 Mbps	27 / 58
Speeds < 100/20 Mbps	166
Speeds at least 25/3 Mbps	872
Speeds at least 50/10 Mbps	793
Speeds at least 100/20 Mbps	409
Speeds at least 100/100 Mbps	81
Total Tests	968

Source Ookla Speed Tests; MBI

Internet Subscription and Device Ownership

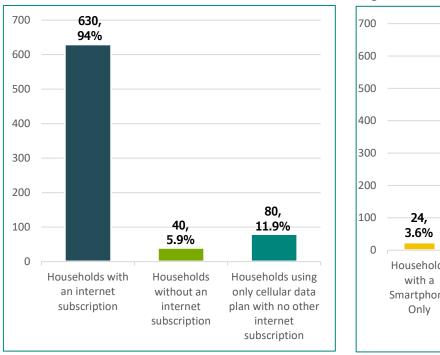
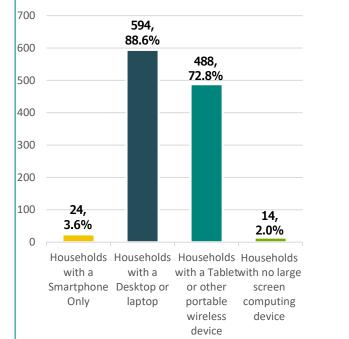


Figure 6: Internet Subscription by Household





Source: U.S. Census Bureau. (2022). Types of Computers and Internet Subscriptions. American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2801.

Nearly all households in New Marlborough (630 out of 670) have internet service. A few (80) rely solely on cellular data and 40 have no service at all. Reasons for lack of service could include a) second homeowners choosing not to pay for year-round service due to part-time residency; b) disinterest in or fears around technology, especially among older adults; and c) high costs associated with installing fiber lines to remote residences.

In terms of computer ownership, 88 percent of households have a desktop computer or laptop. A smaller percentage (72.8%) have a tablet or other portable device. Very few (24) rely solely on a smartphone and 14 lack a large-screen device.

Recommendations: For households without a large-screen device, funding can be put toward the purchase and upkeep of library Chromebooks as well as toward the purchase of updated public desktop computers. Families can also consider signing up for a digital skills class that provides a free computer upon completion, such as those offered by Tech Goes Home or Tech Foundry.

Affordable Connectivity Program (ACP) Enrollment

In December 2021, the federal government launched the <u>Affordable Connectivity Program (ACP</u>), which lowered income-qualifying U.S. households' internet bills by \$30 a month and income-qualifying households on Tribal lands' bills up to \$75 a month. Income-eligible households also received a one-time discount of up to \$100 to buy a laptop, desktop computer, or tablet from a participating provider, if they contributed more than \$10 but less than \$50 toward the purchase.

While the program targeted households with incomes at or below 200 percent of federal poverty, having a household member who met at least one of the criteria below could also make a household eligible for ACP:

- Assistance Programs: Supplemental Nutrition Assistance Program (SNAP), Medicaid, Federal Public Housing, Veteran's Pension or Survivor Benefits, Social Security Income (SSI), Women, Infants, and Children (WIC), or Lifeline.
- Tribal Specific Programs: Bureau of Indian Affairs General Assistance, Tribal TANF, Food Distribution Program on Indian Reservations, or Tribal Head Start (income-based).
- Federal Free and Reduced-Price School Lunch Program or School Breakfast Program, including through the USDA Community Eligibility Provision.
- Federal College Pell Grant.
- Broadband Providers' Low-Income Internet Program Qualifications.

As of December 2024, there was no data available on the number of prior ACP enrollees in New Marlborough.

Recommendations: Conduct targeted outreach (e.g., pamphlets, mail-in flyers, and information sessions) to New Marlborough households, especially those known to be income-qualifying through participation in other subsidy programs (e.g., tax abatements, senior discounts), to determine their awareness of currently available low-cost internet programs. Bring on a digital navigator to host sessions at the library focused exclusively on helping individuals in low-income households apply for alternative low-cost internet and/or cellphone service.

DIGITAL EQUITY ASSETS

In addition to learning how digital equity challenges affect individuals and households, the Existing Conditions Analysis also looks at digital equity assets: individuals, programs, and organizations working to close the digital divide or well-positioned to do so in the future because they serve one or more of the Covered Populations.

As of February 2024, the New Marlborough Town Hall, New Marlborough Fire and Rescue, and New Marlborough Fire Department are the only organizations listed on the <u>State's Asset Map Inventory</u>. In the future, the New Marlborough Council on Aging and New Marlborough Central Elementary School should be added to the inventory.

Community Anchor Institutions

<u>Community Anchor Institutions (CAIs)</u> are another important digital equity asset. CAIs are defined as:

"a public school, public or multi-family housing authority, library, medical or healthcare provider, community college or institution of higher education, state library agency, or other nonprofit or governmental community support organization that facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals."

In New Marlborough, CAIs include the New Marlborough Library, New Marlborough Central School, New Marlborough Fire and Rescue, and New Marlborough Police Department.

New Marlborough Library

The New Marlborough Library serves 1,528 patrons annually. There are three public computers available there, and on average eight patrons use the public internet computers weekly. Wireless internet access is available inside as well as in the parking lot, and the town's NM-Net is also accessible on library grounds. The Town of New Marlborough currently pays \$2,684 in network membership fees to sustain the library's wireless network connection.

Recommendations: Set aside funding for the purchase of Chromebooks and iPads to ensure device and internet access for residents. Purchase updated public access desktop computers. Fund the hiring of a digital navigator to help residents with technology issues.



Source: New Marlborough Library

New Marlborough Town Hall

New Marlborough Town Hall is located at 807 Mill River-Southfield Road. The building is largely used for committee meetings. New Marlborough NM-Net, a free Wi-Fi service available at most public locations in town, can be accessed at Town Hall. The Town Hall website offers a detailed list of all public Wi-Fi hotspots in town.

Recommendations: Allocate funding towards providing public Wi-Fi and communications access to recreational town areas that pose safety risks due to limited or no cell coverage. Work together with local emergency services and relevant property trustees/managers/owners and town stakeholders to identify and prioritize potential installation locations. Potential locations could include York Lake, Umpachene Falls, Goodnow Preserve, Thousand Acre Pond, Questing, Three Mile Pond, and Appalachian Trailhead parking areas.

New Marlborough Meeting House – Gallery Space

The New Marlborough Meeting House acts as a cultural epicenter for residents that regularly hosts music performances, art shows, guest speakers, and community events.



Source: New Marlborough Meeting House

New Marlborough Fire and Rescue

New Marlborough Fire and Rescue provides fire, ambulance, and emergency services to town residents. The Fire and Rescue squad is run by a group of 20 volunteer firefighters and seven Emergency Medical Technicians. Town meetings are often held in the firehouse. New Marlborough Fire and Rescue often responds to calls made in surrounding communities due to shortages of emergency medical personnel throughout Berkshire County.

New Marlborough Fire and Rescue runs its own Facebook page with over 820 followers. Posts consist of behind-thescenes pictures of firefighter training drills, community notices regarding road closures, and advertisements for community events held by the Fire and Rescue squad. Most posts see engagement through likes and comments.

The New Marlborough Police Department

The New Marlborough Police Department is housed in the New Marlborough Firehouse. The department operates a Facebook page with over 1,200 followers. Posts largely consist of lost dog notices and advertisements for community events.

Schools

Undermountain Elementary School

Undermountain Elementary School serves students from prekindergarten through sixth grade, and is a Title I school, meaning it receives federal funding to support low-income students. The elementary school is part of the Southern Berkshire Regional School District and serves the towns of New Marlborough, Alford, Egremont, Monterey, and Sheffield. Undermountain Elementary has 257 enrolled students. Students go on to attend Mount Everett Regional High School.



Source: Berkshire Edge

Digital Literacy and Computer Science Course Offerings

The school does not currently offer formal digital literacy and computer science classes to its students. Computer science and technology learning is limited to after-school clubs. The school does have a Technology Director who runs a robotics and introduction to coding club, as well as an AI bootcamp club where students can work with Dolly, large-language models, and AI software.

Device Offerings

Every student at Undermountain receives their own computer that they can use during the school day. Students in grades pre-K through second grade receive an iPad, while students in grades three through five receive Chromebooks. Teachers always have Chromebook and iPad carts in their classrooms. Faculty and staff are issued a laptop or desktop for classroom use. There are smart boards and projectors in every classroom. Assistive tech is available for children who need speech pathology. There is an intervention center/homework center with digital devices available for after-school use. The elementary school also operates as a community hub where students and parents can use Wi-Fi before and after school. During school hours, students are not allowed to use phones or smartwatches. The school tries to let students lead the creation of device policies as much as possible.

Technological Professional Development

Faculty receive technology professional development training. Training covers ELA and iReady for math. The school would also like to pursue future tech training for Google Classroom, Canva, and Khan Academy.

The school librarian serves as the library media specialist and teaches research methods and internet safety policies.

New Marlborough Central Elementary School

New Marlborough Central Elementary is a part of the Southern Berkshire Regional School District. The school mainly serves students from New Marlborough, Alford, Egremont, Monterey, and Sheffield. Between 75 to 85 students attend the school from preschool to third grade. The school is not a Title I school. Currently, no digital literacy and computer science courses are offered, but students have access to a laptop cart and a wireless network.

Mount Everett Regional School

Mount Everett Regional School is a Title I School and part of the Southern Berkshire Regional School District. Mount Everett primarily serves students from New Marlborough, Alford, Egremont, Monterey, and Sheffield. Mount Everett is a junior and senior high school with a total enrollment of 360 students from grades 7 through 12.



Source: Berkshire Eagle

Mount Everett Regional High School Digital Literacy and Computer Science Course Taking					
Student Group	#	%			
All Students	119	40.3%			
Female	43	36.1%			
Male	75	63%			
Low Income	54	45.3%			
High Needs	61	51.2%			
LEP English Language Learners	2	1.6%			
Students with Disabilities	15	12.6%			
African American/Black	0	0%			
American Indian or Alaskan Native	0	0%			
Asian	0	0%			
Hispanic or Latino	14	11.7%			
Multi-race, Non-Hispanic or Latino	7	5.8%			
Native Hawaiian or Pacific Islander	0	0%			
White	95	79.8%			

Table 5: Digital Literacy and Computer-Science Course-Taking

Source: Massachusetts Department of Higher Education

Student Demographics

Of the 295 students attending Mount Everett, only 119 (40.3%) take a digital literacy or computer science course. Mount Everett computer science and digital literacy courses skew towards male enrollment, with 63% of enrolled students identifying as male and only 36.1% identifying as female. Almost half of all students enrolled in digital literacy and computer science courses are low income (45.3%) and may experience difficulties accessing digital devices or internet outside of school. Just over 12 percent of enrolled students have some kind of disability and 1.6% are English Language Learners and may require extra academic support and accommodation to succeed. Students enrolled in digital literacy and computer science courses are predominantly white (79.8%) with only 17.5% identifying as People of Color.

Device Offerings

Mount Everett has a 1:1 student-to-computer ratio. The school offers a wide variety of technological devices for student loans including Chromebooks, iPads, and Windows devices. Students and staff have access to Microsoft Office 265, Google Classroom, and extensive file storage. The high school has high speed internet and full wireless coverage. Students are allowed to bring their own personal computing device to school for academic use if they prefer.

District Technology Plan

The Southern Berkshire Regional School District has a technology plan for all schools, including Mount Everett. The plan includes a technology team with representatives from the faculty and staff who meet throughout the school year. The district also conducts a formal survey every year to improve technology teaching and learning through community feedback.

The SBRSD funds its technology endeavors through a mix of federal, state, and private funding. The district is committed to consulting and researching technology items before purchasing them.

The school district requires that teachers use technology every day during student learning activities. The district facilitates tech usage in the classroom by providing teachers with digital projectors, electronic whiteboards, and student response systems. Internet access is available at the high school before, during, and after school hours.

Technology Course Offerings

Mount Everett's technology course offerings are extensive and diverse. There are classes on 3D printing and design, networking, coding and programming with Linux, Python, and C++, cybersecurity, IT training, robotics, and machine learning. Mount Everett also offers an electric vehicle module where students can explore future technologies in the automotive industry by learning vehicle mechanics, electric motors, and battery componentry, as well as concepts like renewable energy and Artificial Intelligence. The high school is also an FAA-Recognized Identification Area (FRIA) where students can learn to fly drones and use a flight simulator. Mount Everett's drone team recently placed nationally at a tournament hosted by the Robotics Education Foundation (REC).

COMMUNITY ENGAGEMENT

Public engagement is central to the planning process, as quantitative data alone cannot capture all of a community's needs. On September 21, 2024, New Marlborough held its Digital Equity Charette at the New Marlborough Firehouse to collect direct feedback on the existing conditions and community asset data BRPC

conducted; hear in greater detail about residents' digital needs; and allow people to make informed recommendations related to future digital equity implementation activities.

Charette Promotion

Residents began receiving promotional flyers for the September event in July through BRPC tabling at local events. Organizations also handed out flyers to patrons in the weeks leading up to the event. Additionally, BRPC's Senior Economic Development Planner spoke at a New Marlborough CoA meeting to promote the charette a few weeks before the event. Residents were encouraged to RSVP using an electronic survey link on the poster and given a choice to attend a morning (9:00 AM to 12:00 PM) or afternoon session (1:00 to 4:00 PM). In total, 21 residents attended the charette.



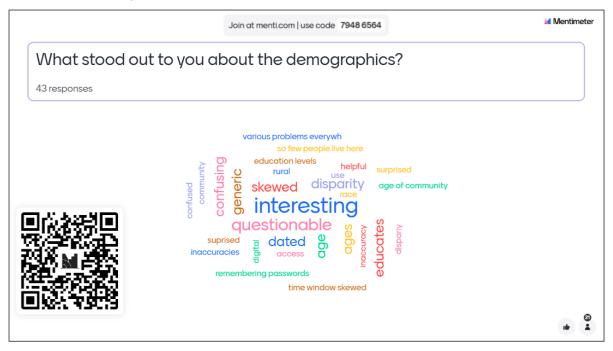
Charette Workshop

The charette began with a presentation by BRPC's ACC Fellow focused on the existing conditions analysis with time allowed for follow-up questions and hands-on activities. Attendees were invited to contribute to a digital "Word Cloud" to capture reactions to the findings (e.g., income, educational indicators) and participated in small group discussions about how people use the internet in their daily lives and the barriers they face.

Source: BRPC

After these exercises, attendees were asked to provide recommendations using a "brainstorm" sheet titled "How Do We Close the Digital Divide in New Marlborough?" The sheet included a table with questions that attendees were asked to fill-in with sections for each Covered Population. The questions included:

Figure 8: New Marlborough Charette Word Cloud



- 1. Identify an "issue or need" (of the Covered Population) related to digital equity.
- 2. Suggest a "potential action" town leaders could take to address the issue or need.
- 3. Describe "potential partners" (community organizations) that could help carry out the action.
- 4. Rank the issue in terms of its importance on a scale of 1-5, with 1 indicating a top priority.
- 5. Note the <u>MBI Digital Equity Implementation Program</u> category the action falls within.

Below is an example:

Identified Issue/Need	Potential Action	Potential Partners (Community Assets)	Priority (1-5) 1 is highest	MBI Funding Category
Residents need education about password managers	Offer workshops at library	Library	1	Digital Skills

Attendees spent about an hour brainstorming recommendations in small groups with the last half hour spent compiling them in an online Google document. The document remained open for 30 days after the charrette to allow residents, including those unable to attend, to make future additions or edits.

Limitations

While the feedback and recommendations provided during the charrette were essential, there are limitations with the data that deserve to be noted. Most importantly:

• The small number of attendees, reflecting only 1.7% of the adult population over age 18 in New Marlborough.

- The attendees' age (skewed to those 40 or older) may fail to capture the perspectives of the 21.6% of New Marlborough residents 18 and younger.
- The lack of BIPOC and non-English speaking residents reflects the difficulty engaging this audience and may require further exploration assisted by a bilingual presenter or organization host.

Ultimately, while the results of the charette are informative, they reflect the views of a small group of fairly homogenous New Marlborough residents and thus should be considered as one part of the data sources informing recommendations and implementation actions.

INTERNET FOR ALL SURVEY

In addition to quantitative research from publicly available sources and qualitative insights from residents who attended the charette, data from MBI's statewide <u>Internet for All</u> survey informed the recommendation process by providing detailed data about how residents in New Marlborough feel about internet access, affordability, and skills. Between June and October of 2024, 76 residents completed the survey. The chart below shows how many survey respondents there were from each of the six total Covered Population groups.

Table 6: New Marlborough Survey Respondents Demographic Profile	

Total Respondents	#	%
who own more than one digital device	56	74%
who are 60 and older	54	71%
with < than a bachelor's degree	10	13%
with a disability	7	19%
who can afford a laptop or desktop < \$250	6	8%
who served in the armed forces / veteran	6	8%
with child(ren) 18 or < at home	4	5%
with household income before taxes < \$36,999	4	5%
who feel internet service too expensive	3	4%
who only own a cellphone	3	4%
who define as LGBTQIA+	1	1%
with no internet service available in their area	1	1%
who do not want / do not use the internet of Hispanic, Latino, or Spanish origin who live in affordable housing who define as a Person of Color / BIPOC who are non-English speakers who define as Native American	0	0%

Survey Responses

Additional responses to key questions on the *Internet for All* survey are summarized in the section below. BRPC chose to interpret these responses using categories and percentages. First, questions were color-coded to match a broad equity category:

- = internet or device access: internet availability (navy blue)
- \blacksquare = internet affordability (teal)
- = device access (green)
- = digital skills (yellow)
- = cybersecurity (orange)

Second, responses were ranked from positive to negative:

- **Positive** = More than 59% of respondents answered the question affirmatively
- Neutral = 59% to 49% responded affirmatively
- **Negative** = Less than 49% responded affirmatively

Of the 76 survey respondents, some opted out of answering various questions in the survey, which is reflected in the different number of total responses for each. Responses are listed from highest to lowest percentage.

Positive (>59%)				
Question	Answer	#	%	
Are you able to regularly use the internet for online activities ?	Yes	70	97%	
How accessible are online government services like benefits portals, RMV?	Very accessible and Somewhat accessible	63	95%	
Does everyone in your household have access to the computer devices they need?	Yes	69	94%	
Do you have internet service in your home?	Yes	71	93%	
Able to use the internet for general internet searching?	Easy	61	92%	
Able to use the internet for participating in your local community?	Easy	52	86%	
How hard is it for you to pay your internet bill?	Not at all hard and Not too hard	56	82%	
Able to use the internet for searching + applying for a job?	Easy	31	75%	

Able to use the internet for healthcare or telehealth services?	Easy	44	74%
Able to use the internet for transportation information?	Easy	41	70%
Able to use the internet forsearching +/or applying for benefits or resources for you or your family?	Easy	41	70%
Are you aware of tools or resources you can use to stay safe online?	Yes, I have tools or resources that I use to stay safe online	2	66%

Negative (<49%)			
Question	Answer	#	%
Have you heard about the Affordable Connectivity Program (ACP)?	Yes	20	27%
How concerned are you about internet safety?	Not at all and Not very	4	5.9%

Results

Responses to the *Internet for All* survey were met with generally positive responses from New Marlborough residents. Many expressed confidence in being able to use the internet for online activities, community participation, accessing government services, and general searches. Survey respondents came largely from households in which everyone had access to the computer devices they need and where paying their internet bill was "not at all hard" or "not too hard".

Survey respondents expressed less confidence using the internet for searching and applying for a job, healthcare or telehealth services, transportation information, or searching for and applying for benefits and resources for their families. Respondents were even less confident in their knowledge of tools and resources to stay safe online. Digital skills classes that target these subjects and help residents further develop their digital skills and confidence could be beneficial, especially in terms of boosting local employment and reducing the number of residents affected by cyber-scams (which are currently on the rise in Berkshire County).

These largely confident survey responses were in stark contrast to the levels of digital insecurity expressed at the charette, even though the majority of charette attendees are in the same age range as the survey

takers: 60 and older. It could be that residents felt they could be more honest about their lack of digital skills in a face-to-face setting such as the charette.

Amid the many positively scored survey responses, one stands out: "Are you aware of tools and resources you can use to stay safe online?" Only three survey takers out of 76 chose to answer this question, raising questions about why they skipped this question entirely. This could signal an insecurity or lack of awareness (especially among older residents) regarding internet safety.

Of the 76 total survey respondents, only 20 had heard of the Affordable Connectivity Program (ACP). This indicates a lack of awareness of digital resources for income-qualifying households. Although ACP has been discontinued, there are still opportunities for low-income households to receive subsidized internet, refurbished devices, and free digital skills classes that should be better advertised in New Marlborough.

One of the questions receiving the fewest responses was "How concerned are you about internet safety?" with only three residents choosing to answer. With cybercrimes on the rise in Berkshire County, especially against older residents, the response to this question and the one before signals a need for more cybersecurity training and awareness for residents over 60.

RECOMMENDATIONS

The recommendations that follow reflect the next phase of the MBI digital equity process in which towns that participated in digital equity planning become eligible for MBI funding for digital equity implementation. The recommendations that follow reflect a culmination of the qualitative and quantitative data gathered about the current state of digital equity and access in New Marlborough and are in accordance with <u>MBI</u> <u>Digital Equity Implementation</u> funding categories. Descriptions of those best suited to New Marlborough with descriptions of each follow:

Public Space Modernization



<u>Description</u>: 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.

Given that the town of New Marlborough is situated in a rural area with many dead zones and areas with little to no reliable internet connection, the town may wish to consider extending Marlborough public Wi-Fi to more recreational town areas. By working with local emergency services and property owners, trustees, and managers to increase public Wi-Fi access, safety conditions will be improved by giving residents the ability to call emergency services or access basic internet no matter their location.

Digital Literacy



<u>Description</u>: 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.

Digital literacy ensures that people have the skills to safely use devices, online resources, and other digital tools to their greatest benefit. Many senior attendees of the New Marlborough charette felt as though they

lacked the digital skills and knowledge to feel confident using the internet and stay protected against cyberattacks and scams. A solution suggested by attendees was to offer digital skills classes through an organization such as Tech Goes Home or NorthStar at the New Marlborough Library.

It is important to note that many older residents are not used to learning content in a digital setting. While younger digital natives frequently learn using online courses, articles, and websites, these methods can feel foreign to older adults. To address these learning differences, digital skills classes could include a face-to-face element: a "digital navigator" acting as the class instructor teaching content in a familiar classroom setting where adult attendees can ask questions in real time. These classes could cover a variety of topics, from social media to online banking. Guest speakers from Berkshire Medical Center and Fairview Hospital could be brought in to explain telehealth and patient portals.

For younger working adults looking to expand their job prospects, skills classes that focus on the use of Microsoft and Google Suite could be helpful. For residents in construction and related fields, separate digital skills classes could be offered and tailored towards industry-specific skills in partnership with an outside entity such as Tech Foundry.

Device Distribution



<u>Description</u>: Device Distribution focuses on the provision of new or used internet-connected devices, such as laptops, tablets, and smart phones, to distribute to target populations

The purchase and upkeep of iPads and Chromebooks for long-term loans at the New Marlborough Library could be helpful for many in town, especially low-income households or individuals with ambulatory disabilities.

An added benefit of digital skills classes offered through nonprofits is that they will often give students a free digital device upon completion of a course. For example, students who take a Tech Goes Home course in New Marlborough could receive a laptop computer and Wi-Fi hotspot at the end of training.

During the charette, attendees discussed how many older residents rely on "Link to Life," a medical alert system that can contact emergency services when an individual presses a button on one of their devices. If a power outage occurs and the power grid remains down, these devices (as well as others) may fail and prevent individuals from seeking help. The town may wish to consider purchasing and distributing UPS battery backups for those who income-qualify and rely on Link to Life so that they will have an uninterrupted, temporary power source for up to four hours to back up their routers and charge internet-ready devices such as phones and tablets in case of an emergency.

Education, Outreach, and Adoption



<u>Description</u>: 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.

Residents with disabilities in New Marlborough may have difficulty accessing and enjoying the same community experiences as other residents due to limitations related to assistive technologies or failure by outside entities to take into consideration Universal Design and ADA principles. New Marlborough could therefore explore boosting the accessibility of community spaces and activities with devices such as Zoom paired with a "Meeting Owl" (high resolution streaming device with 360-degree camera), up-to-date audio

and hybrid equipment; and closed captioning, all of which would provide a more seamless experience for those confined at home or who struggle with hearing or other sensory impairments. All residents would benefit from ADA-compliant town and community organization websites.

To improve digital access for income-qualifying residents struggling with internet and device costs, the town could spread awareness of lower-cost internet plans and partner with organizations that supply refurbished devices and offer free digital skills classes. The town could also consider partially subsidizing the cost of internet for income-qualifying residents if funding was available and for a limited period.

Veterans in New Marlborough would benefit from the proliferation of information regarding online resources that help them search for benefits and discounts, as well as access VA Telehealth services and opportunities for securing digital devices.

Although there are currently no English Language Learners in New Marlborough, given the increase in Spanish-speaking immigrants in Southern Berkshire County, it may still be helpful to spread awareness about multilingual digital resources and local bilingual digital skills classes.

FUTURE FUNDING

In addition to MBI's Digital Equity Implementation funding, the chart below provides examples of additional funding the town and its partners could pursue to address unmet challenges. These grants are not exhaustive, and some may not be available yet. The town and its partners are therefore advised to stay appraised of <u>BRPC's</u> <u>Berkshire Funding Focus</u> website for notifications of federal and state grant opportunities and learn how to use <u>Candid/Foundation Directory Online at Berkshire Athenaeum</u> to search for philanthropic grants.

National			
Program	Description	Applicant(s)	
<u>Rural Healthcare</u> <u>Connect Program</u>	This program seeks to improve the quality of healthcare available to patients in rural communities by ensuring eligible healthcare providers have access to telecommunications and broadband.	Berkshire Medical Center** **Supports all NMB residents	
<u>AARP Community</u> <u>Challenge Grants</u>	 AARP Community Challenge grants may be used to support three project types. Project types described below will be prioritized over those that support ongoing programming or events. Permanent physical improvements in the community Temporary demonstrations that lead to long-term change New, innovative programming pilots or services 	Nonprofits	

State			
Program Description		Applicant(s)	
<u>Community One-Stop</u> <u>for Growth</u>	Programs within the One Stop includes funding that spurs housing and economic development by investing in public infrastructure, preparing sites and cleaning up brownfields to prepare them for development, and supporting vibrant downtowns. Programs like the <u>Rural Development Fund</u> can be used to support infrastructure improvements and community planning efforts related to public space Wi-Fi	Town of New Marlborough	
<u>DESE – Computer Science</u> <u>Engage Grant</u>	This continuation grant aims to establish and promote rigorous, engaging, and standards-aligned digital literacy and computer science (DLCS) education in public schools for kindergarten through grade 12. This grant supports the creation of new programs and/or expansion of existing programs to serve more students who are the most underserved (including but not limited to students designated as economically disadvantaged, English language learners, special education, underrepresented minorities, underrepresented females, and those living in rural areas).	Southern Berkshire Regional School District	
<u>DESE - Middle School Career</u> <u>Connected Learning</u> <u>Partnership Grant</u>	This competitive grant aims to assist school districts in planning and developing a career- connected learning model for middle school students. activities and projects will be developed to support students as they discover their personal interests, skills, talents, and passions, explore careers that align with those attributes, and engage in meaningful experiences to deepen their learning. The model will help students see the relevance of their academic learning as they begin exploring careers and understand all the potential learning opportunities and pathway options that will be available when they transition to high school.	Mount Everett Regional School	

<u>MassBoard of Library</u> <u>Commissioners (MBLC)</u>	The Open Program allows applicants to apply new methods to solve problems, build programs, and best conduct their library's mission and plan. It encourages creative program development and rewards those librarians willing to engage in a higher level of effort and to take those risks. The federal LSTA program encourages such innovation and risk- taking.	Monterey Library
<u>Mass Cyber Center Cyber</u> <u>Resilient Massachusetts</u> <u>Grant Program</u>	Municipalities in Massachusetts are eligible to receive a one-time grant of up to \$25,000 to support cybersecurity improvements based on a vulnerability assessment conducted by a qualified provider. Respondents may apply grant funding towards the cost of vendors to implement the cybersecurity improvements or IT-related staff costs of the municipality performing the services in lieu of using a vendor.	Town of New Marlborough
<u>MassLINKS — Adult</u> <u>Education Virtual School</u> <u>(DESE)</u>	The grant will recruit, intake, orient, enroll, instruct, assess, advise, offer supportive services to, and post-exit follow-up for adult learners not served by programs currently funded by ACLS and/or whose need for services is not met by programs currently funded by ACLS. All services must be delivered virtually. This grant could be accessed to address the needs of out-of-school adult learners.	Local educational agencies; Community- based or Faith-based organizations; Volunteer literacy organizations; Institutions of higher education; Public or private nonprofits **Benefits orgs. mostly outside NMB but supports residents
<u>Residential Retrofit</u>	This MBI Grant Program seeks to deploy state-of-the- art broadband infrastructure at affordable housing properties across Massachusetts. MBI intends to increase low-income residents' opportunity to access high-quality, reliable, and affordable broadband by addressing deficient wiring and infrastructure through grants for fiber optic cabling to the unit to qualified ISPs. Housing agencies can utilize the grant to provide free internet to low-income populations.	Construct Inc./ Cassilis Farm

Charitable/Philanthropies			
Program	Description	Applicant(s)	
<u>Amelia Peabody</u> <u>Charitable Fund Trust</u>	This Mass-based foundation has made grants to 221 organizations, nearly all in the state, since 2018. Among their foci are health, human services, and public safety. They have made no grants in the Berkshires but 12 in neighboring counties totaling over \$1.7M.	Nonprofits	
<u>Berkshire Bank</u> Foundation Inc.	The foundation supports organizations involved with arts and culture, environmental education, employment, housing, mentoring, human services, immigrant advocacy, military and veterans, and economically disadvantaged people. Special emphasis is directed toward programs designed to promote education and community economic development.	Nonprofits	
<u>Corporation for Public</u> <u>Broadcasting</u>	CPB provides funding for the development of public media television, radio, and digital content as well as multiplatform projects that reflect public media's mission to educate, inform and inspire the American public by providing stories through diverse perspectives, genres, styles and technologies.	Community TV	
Donald C McGraw Foundation, Inc.* <i>No</i> website	This funder has awarded 36 grants in Berkshire County since 2018, including to Hillcrest Educational Centers, Berkshire Education and Correction Services, and Berkshire Medical Center. They can be approached for telehealth grants.	Berkshire Education and Correction Services, Berkshire Medical Center, Hillcrest Education Centers	
<u>Feigenbaum</u> Foundation	Based in Pittsfield, they have awarded 303 grants in Berkshire County since 2018, including to The Berkshire Museum, Berkshire Taconic Foundation, and Community Access to the Arts. Among their foci are education, arts, and human services. This funder could support youth digital literacy through the arts.	Nonprofits	

<u>Fidelity Investments</u> <u>Charitable Gift Fund</u>	A Boston-based philanthropy that has awarded 321 grants in the Berkshires since 2018, including to 18 Degrees, Berkshire United Way, and Berkshire Taconic. Among their foci are education and human services, which dovetail into digital equity.	Nonprofits
<u>Greylock Federal Charitable</u> <u>Giving</u>	Provides support through grants and sponsorships to 501(c)(3)s and schools in communities in which Greylock has a physical location or large concentration of members. Foci related to digital equity include education, financial literacy, health, human services, and economic development.	Nonprofits
<u>Jane and Jack</u> <u>Fitzpatrick Trust</u>	The Jane & Jack Fitzpatrick Trust makes capital grants and project grants that are important to the mission of the applying non-profit. The Trust will consider matching challenge grants where appropriate. The Fitzpatrick Trust is particularly interested in offering support to projects that deliver positive economic results to the community.	Community TV, Nonprofits
<u>Mountain One</u> <u>Community Dividend</u> <u>Grants</u>	Funding preference is given to organizations or specific not-for-profit programs that support small businesses or low- to moderate-income individuals and families. Qualified 501(c)3 organizations may apply once annually for funding from Mountain One in support of programs and projects that directly impact our local communities and customers.	Nonprofits
<u>Pittsfield Co-op</u> <u>Charitable Donations</u>	Since 1889, Pittsfield Cooperative Bank has been committed to enhancing the economic vitality and social welfare of the communities we serve through charitable donations. A major focus of their charitable giving is directed towards education, youth programs, and community development.	Nonprofits
<u>Spectrum Digital</u> Education Grant	Spectrum Digital Education grants support nonprofits whose work includes digital skills training, professional advancement opportunities, and technology and resources needed for education.	Nonprofits
<u>Vanguard Charitable</u> Philanthropic Impact Fund	The Philanthropic Impact Fund (PIF) issues grants to nonprofits through a competitive RFP process ranging from \$30,000-\$50,000. Requests can be for full or partial funding.	Nonprofits

GLOSSARY

Bandwidth

The rate at which a network can transmit information. Higher bandwidth is typically more desirable. The amount of bandwidth available can determine whether a user can download a photo in two seconds or two minutes.

Broadband Equity

A condition in which all people and communities can access and use affordable, high-speed, reliable internet that meets their needs. Broadband can be delivered over wire (i.e., fiber or cable) or wirelessly (i.e., cellular). The FCC recently set the new speed of high-speed broadband at 1100 Mbps download and 20 Mbps upload. Some fiber providers have proposed even higher speeds of 100/100 symmetrical Mbps.

Digital Divide

The gap between those who have affordable access, skills, and support to effectively engage online and those who do not. As technology evolves, the digital divide prevents equal participation and opportunity in all parts of life, disproportionately affecting people of color, Indigenous people, low-income households, people with disabilities, people in rural areas, and older adults.

Digital Equity

A condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, life-long learning, and access to essential services. Equity acknowledges the systemic barriers that must be dismantled before achieving equality for all.

Digital Inclusion

Refers to the activities necessary to ensure all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs) including five elements: 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 must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional, and structural barriers to technology access and use.

Digital Inclusion Ecosystem

A combination of programs and policies that meet a geographic community's unique and diverse needs. Coordinating entities work together in an ecosystem to address all aspects of the digital divide, including affordable broadband, devices, and skills.

Digital Literacy

The ability to use information and communication technologies to find, evaluate, create, and communicate information requires both cognitive and technical skills

Digital Navigator

Trusted guides who assist community members around internet adoption and use of computing devices. Digital

navigation services include ongoing assistance with affordable internet access, device acquisition, technical skills, and application support.

Digital Redlining

Discrimination by internet service providers in the deployment, maintenance, or upgrade of infrastructure or delivery of services based on income, race, or ethnicity.

Digital Subscriber Line (DSL)

The technology used to provide high-speed internet using telephone networks.

Fiber Optic

A system that uses glass or plastic to carry light that is used to transmit information. Typically, each side of a fiber strand is attached to a laser that sends light signals. When the connection reaches capacity, the lasers can be upgraded to send more information along the same strand. Fiber technology has been used for decades and will remain the dominant method of transmitting information for the near future.

Fixed Wireless

A connectivity model that uses stationary wireless technology to bridge the "last mile" between the internet backbone and subscriber.

Hotspot

A physical location that offers internet access over a wireless local area network (LAN) through use of a router connected to an internet service provider.

Gap Network

A network — usually fixed wireless or Long-Term Evolution (LTE) — deployed quickly and at comparatively low cost to address immediate connectivity in a small area. Many gap networks were launched at the start of the COVID-19 pandemic.

Internet Service Provider (ISP)

An Internet Service Provider is a company that provides services to access and use the internet.

Last Mile

The final leg of a connection between an internet service provider and the customer. In DSL and cable systems, this is the most frequent bottleneck and most expensive to resolve. An ISP may run a faster fiber- optic network into the neighborhood but deliver the last mile (which may be far away) with a phone line that cannot sustain fast speeds.

Megabits (Mbps)

A measure of speed in which 8 Mbps means that 8 million bits of information are transferred each second. Using an 8 Mbps connection, it would take one second to transfer a 1 Mbps file such as a photo. More Mbps are faster. One Kbps (Kilobits) is less than 1 Mbps, which is less than 1 Gbps (Gigabits).

Middle Mile

The network connection between the last mile and the broader internet. For instance, in a rural area, the middle mile connects the town's network to a larger metropolitan area where it connects with major carriers.

Wi-Fi

Networking technology that allows computers and other devices to access the internet using a wireless signal.

APPENDIX

Appendix I: 2023 Average Employment and Wages by Industry: All Ownership – New Marlborough

Industry	Establishments	Total Wages	Average Employment	Average Weekly Wage
All Industries	69	\$21,740,057	376	\$1,113
Construction	18	\$6,870,604	88	\$1,507
Administrative and Waste Services	7	\$1,195,048	20	\$1,159
Other Services, Except Public Administration	6	\$327,667	6	\$995
Professional and Technical Services	6	\$313,672	4	\$1,419
Manufacturing	5	\$1,392,235	29	\$934
Accommodation and Food Services	3	\$2,043,572	47	\$839
Agriculture, Forestry, Fishing and Hunting	3	\$1,971,190	34	\$1,115
Transportation and Warehousing	2	\$85,545	2	\$1,097

Source: https://lmi.dua.eol.mass.gov/lmi/MunicipalEmploymentData/LmiTown?A=000384

Appendix II: Assets Specifically Serving New Marlborough on State Digital Equity Asset Inventory. <u>Complete list of assets serving Berkshire County can be found here</u>

Organization	Notes	Covered Populations	Digital Equity and Broadband Focus Areas
Berkshire Regional Planning Commission	BRPC is a pre-qualified consultant to provide services to municipalities participating in MBI's Municipal Digital Equity Planning Program. BRPC is also serving as the Berkshire County liaison for MBI's Digital Equity Partnerships Program which will implement projects that meet the goals outlined in the Commonwealth's ARPA COVID recovery legislation (codified as Chapter 102 of the Acts of 2021) that created a \$50M fund to bridge the digital divide.	Residents of Rural Areas, Individuals 60 and older	Accessibility of Public Resources & Services, Affordability & Availability, Digital Literacy
Veterans of Foreign Wars (Great Barrington but accessible to New Marlborough Residents)	The VFW has been open since 1946.It is a volunteer-run by one person. The VFW is down the road from an affordable housing project that opened this past year. They have senior housing across the street. They also serve a community social function. They host speakers. Latina Festival. 420 Festival. They see themselves as a community gathering place and, with proper funding, would like to be able to offer more to the people they serve. They have 17 acres of green space but the public cannot access free Wi-Fi off campus. On Tuesday nights WSBS is on-site during the summer offering free music for the community an event which draws 500- 1000 people. They have no public-facing computer lab but have space to create one with funding.	General - All Covered Populations, Individuals 60 and older, Low-Income Households (<150% federal poverty level),Individuals with Disabilities, Residents of Rural Areas, Veterans	Accessibility of Public Resources & Services, Digital Literacy