

Digital Equity Plan

SERVING THE TOWNS OF:

Charlemont

Colrain

Leyden

New Salem

Northfield

Orange

Warwick

Wendell



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I. Introduction

As the most rural region in the Commonwealth, with about 71,000 people in its 26 communities, Franklin County has unique challenges when it comes to internet connection and service. After significant effort from municipalities, residents, and regional organizations over the past decades, broadband internet service finally became available for many residents through the Middle Mile and Last Mile programs. While many Franklin County residents now have access to the internet at home, work, school and throughout the communities, the COVID-19 pandemic exposed a digital divide that continues to persist. As schools closed for in-person instruction and businesses moved employees to work-at-home models in March 2020, the awareness and consequences of this disparity became more evident.

As with utilities like heat, electricity and water, in-home broadband must be available for students to learn and thrive, many adults to do their jobs effectively, businesses to remain nimble and competitive, seniors to take advantage of telehealth options, and a host of endless useful applications. In other words, affordable and reliable broadband access is a necessary component of life in the modern world.

Eight towns in Franklin County (Charlemont, Colrain, Leyden, New Salem, Northfield, Orange, Warwick, and Wendell) chose to work together to produce a regional digital equity plan. These small, rural communities have a number of digital equity issues similar to communities throughout both Franklin County and Massachusetts. However,

there are also unique issues related to the rural nature of these towns, variations on connectivity within this region (fiber connections, cable with different providers, and one town with both cable and fixed wireless), and administrative capacity at the municipal level. This digital equity plan examines the digital divide in the eight rural communities and explores options to provide digital equity for all residents.

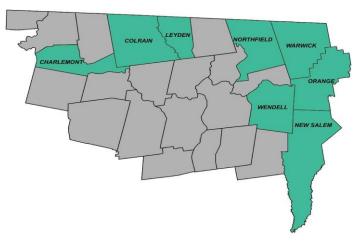


Figure 1: The eight municipalities in Franklin County included in the Regional Digital Equity Plan.

II. Digital Equity

Digital Divide

The National Digital Inclusion Alliance (NDIA) has defined the digital divide as "the gap between those who have affordable access, skills, and support to effectively engage online and those who do not." Further, as technology evolves and becomes increasingly ubiquitous for individuals and communities to participate in everyday life, "the digital divide prevents equal participation and opportunity in all parts of life, disproportionately affecting people of color, Indigenous peoples, households with low incomes, people with disabilities, people in rural areas, and older adults." In other words, the digital divide can be seen as an issue of equity.

Digital Inclusion

To bridge the digital divide, communities, organizations, governments and individuals must develop and implement programs that will ensure all residents within communities, particularly the most disadvantaged, have access to the appropriate technology as well as the tools necessary to use the that technology to thrive in the 21st century.

According to the NDIA, digital inclusion includes 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.
- 5. Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.²

Digital inclusion requires robust and sustainable strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology. Implementing the five elements of digital inclusion will eliminate or mitigate the digital divide and provide equity for all residents.

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¹ National Digital Inclusion Alliance (NDIA) Definitions (https://www.digitalinclusion.org/definitions/)

² NDIA Definitions

Digital Equity

Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.³

There are three broad components of digital equity.

- **1. Affordable Connection:** whether the internet connection is fast, reliable, and affordable.
- **2. Adequate Device:** whether an individual or household has the necessary and needed digital device, such as a desktop, laptop, or tablet, and supporting networking components (routers, WIFI extenders, etc.)
- **3. Digital Literacy:** whether residents know how to use technology properly and successfully for their needs, and whether they are receiving quality information and can assess their privacy risks.

In addition, based on the Franklin County North Quabbin Student Health Survey⁴ conducted annually with 8th, 10th, and 12th grade students in all local public schools, a fourth component of digital equity has been proposed by Franklin County youth health advocates, which is:

4. Digital Protections: whether federal, state, local, and school regulations support parents and caregivers in protecting children, youth, and other vulnerable residents from exploitation that harms their mental and physical health.

Along with broadband adoption, many residents need devices, technical support and technology training to fully access internet services, educational resources, employment and the social aspects of the digital world. While there has been significant investment over the past decade, towns are not yet meeting the 21st century expectations of a robust and thriving community as residents continue to face a disparity in reliable access, affordability, and digital literacy.

³ NDIA Definitions

⁴ Communities that Care Coalition: Student Health Surveys (https://communitiesthatcarecoalition.com/surveys/)

While definitions of digital equity and the digital divide hold true for all communities and all residents, the specifics of what the digital divide looks like, and the methods to promote digital equity, can vary greatly across regions. The Regional Digital Equity Plan helps tackle internet disparities exposed by COVID by examining current conditions specific to the eight rural towns in Franklin County and will help guide investments to bridge the digital divide. This plan will also help prepare the communities to submit grant proposals to existing or forthcoming state and federal programs to support digital equity activities.

Vision & Goals

During the planning process (outlined in the following section), the Steering Committee established a vision to work towards crossing the digital divide and providing digital equity for all communities. There are three overarching goals to guide the towns in support of the Vision. Both the Vision and the Goals were developed through the steering committee meetings, feedback during community meetings, and focus groups.

"Our vision is for the residents of our eight towns to have access to: affordable, high-speed internet; appropriate devices; and support to understand the use of this technology. Our vision recognizes that access, which includes cost, speed, devices and knowledge, is not a privilege for those who can afford it, but a right for residents. This Regional Digital Equity Plan lays the groundwork for investing in our communities to achieve digital equity for all. With this Plan, the region will be well-positioned to compete for funds to support broadband infrastructure and digital equity programs."

Goals

Goal 1: Affordable Connectivity

Support residents' access affordable and reliable internet connectivity to meet their needs.

Goal 2: Digital Literacy

Ensure every resident in the eight towns has the opportunity to learn the skills needed for effective use of digital technology, including safety.

Goal 3: Framework for Promoting and Supporting Digital Equity

Develop and maintain a framework to continue promoting and supporting digital equity for all residents of the eight towns.



Directional sign in the center of Warwick.

III. Planning Process

Digital Equity Steering Committee

The Digital Equity Steering Committee (Steering Committee) is a team of community members representing each of the eight member towns, all with a stake in information and technology resources to guide the outreach and planning process. The Steering Committee included a representative from each town, as well as an alternate. The members of the Steering Committee included town staff or current committee or board officials. In collaboration with the contracted consultant, the Steering Committee met four times over the course of the planning process and provided guidance and oversight on developing this Plan, facilitated public engagement opportunities, and liaised with the community.

Community Outreach and Engagement

Robust community outreach and engagement provided insights into both the needs of residents and the available digital equity assets. The Steering Committee pursued multiple avenues of outreach and engagement to better understand the current conditions relating to digital equity. Targeted conversations with three groups of service providers (senior centers, school districts, and libraries) provided additional information on specific issues of digital equity, current projects, and ideas for future projects. Consultant staff facilitated three community meetings held at the senior center in the town of Northfield (January 17, 2024), the Hawlemont School in the town of Charlemont (January 30, 2024), and town offices in the town of Orange (February 8, 2024). The outreach provided valuable insights on specific issues of digital equity, current projects, and ideas for future projects. These





FRCOG staff at public input meetings in Northfield, (above) and Charlemont (below).

meetings allowed residents to provide direct feedback on the issues they are facing with regards to digital inequity that were not necessarily captured in other forms of outreach.

In particular, affordability was a consistent theme in all three meetings. This was raised before it was official that the Affordable Connectivity Program (ACP) would end. Even with the ACP available, costs and affordability remained an ongoing concern. Issues related to cost also centered on connecting unconnected homes to installed broadband infrastructure. For many, it was cost prohibitive for residents to afford these connections. Attendees also spoke about the need for continued assistance with digital literacy for all residents. The types of digital literacy ranged from working in the schools, to working with older adults on accessing healthcare, to cybersecurity concerns. These equity issues are explored more throughout this report. Following data collection, a draft plan was posted on each town website for a ten-day public comment period.

Massachusetts Statewide Digital Equity Survey

The Massachusetts Broadband Institute (MBI)⁵ created a statewide Digital Equity Survey to gather information about needs, barriers, and opportunities from Massachusetts residents. The survey was available online and in print, provided in nine languages (English, Spanish, Portuguese, Chinese, Haitian Creole, Vietnamese, Russian, Arabic, and Khmer). Copies of the survey were brought to the senior centers or Councils on Aging

and libraries in all eight towns. The online survey was promoted on the Town websites, the Franklin Regional Council of Governments' website & social media, and sent out via the Franklin County Resource Network. Paper surveys were distributed at all libraries and senior centers or Councils on Aging. There were 177 responses from residents of the eight towns.



Wendell Town Hall.

⁵ The Massachusetts Broadband Institute (MBI) is a division within the quasi-governmental organization the Massachusetts Technology Collaborative (MTC). The MBI was created in 2008 with the purpose of making affordable high-speed Internet available to all homes, businesses, schools, libraries, medical facilities, government offices, and other public places in Massachusetts.

IV. Existing Conditions

Over the past several decades, communities in Franklin County have placed a high-priority on making sure all residents have access to broadband. Broadband connections has expanded through the MBI-supported Middle-Mile and Last-Mile programs, helping to bring high-speed broadband connection to Franklin County, including the eight municipalities in this Plan. Local involvement spearheaded efforts to bring broadband service to unserved and underserved residences, businesses, community and municipal buildings. For example, local Municipal Light Plants in towns that adopted a fiber network worked with the MBI Last Mile program to bring broadband to the towns.

However, the digital divide continues to be a challenge for these rural communities. Analysis of local and regional trends reveal several barriers to digital equity, including the rising costs of broadband, high costs for initial installation, the often-times high variability of internet speed (particularly for residents of towns reliant on cable providers

for their internet service), and the limited access to devices and training on how to successfully use those devices and navigate the internet. Two issues are particularly salient in small rural communities: For communities dependent on commercial ISPs, there is lack of price competition to benefit consumers; for town-owned broadband networks, available funding programs can be complex and difficult to access.



Image via FreePik.

This section examines the populations most vulnerable to the digital divide as a direct result of these barriers, providing a baseline understanding of the current conditions of municipalities as related to digital inequity.

Demographics

The eight towns are rural in nature, with populations ranging from 640 residents in Leyden to 7,584 in Orange. They are spread across Franklin County from Charlemont in

the far western part of the County to Warwick located in the most northeastern section of the County. The total population of the region is 16,634 with 6,967 households.⁶

*Table 1: Community Profile*⁷

Municipality	Population	Median Household Income	Poverty Rate
Charlemont	1,064	55,603	13.1%
Colrain	1,740	81,316	6.2%
Leyden	640	97,500	9.5%
New Salem	1,074	75,951	10.1%
Northfield	2,871	94,775	7.2%
Orange	7,584	56,000	20.5%
Warwick	814	89,643	6.7%
Wendell	847	66,815	15.1%
Franklin County	70,980	70,383	12.0%
Massachusetts	6,984,205	96,505	9.9%

Data source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

A common measure of income for an area is the median household income.⁸ The median household income in the region ranges from \$55,600 to \$97,500. Four of the towns have poverty rates that are higher than the state, while the town of Orange has the highest poverty rate in the county. Although the data shows there is a wide range of both the median household income and the poverty rate between communities, income data suggests the high potential for affordability inequities for the residents of these towns.

⁶ Source: *U.S. Census Bureau, 2022 ACS 5-Year Estimates*. A household consists of all the people who occupy a housing unit. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit.

⁷ Individual community profiles are included in the Appendix.

⁸ For this purpose, this includes the income in households that have families, people living alone as well as unrelated people living together. The median is the middle statistic in a data set, which makes the measurement relatively unaffected by extreme numbers (either the very wealthy or very poor) from influencing the overall figure.

Impacted Populations

The digital divide impacts the most vulnerable populations in a community. Identifying these vulnerable populations, and focusing on their specific digital needs, helps to ensure that the entire community has equitable access to services, educational opportunities, and economic resources, many of which are now available exclusively

online. Addressing the digital needs as well as digital safety of vulnerable populations enhances a community's social cohesion and creates a more equitable, inviting and inclusive community. In rural communities like the eight towns in this plan, digital equity will sustain and increase the resilience and viability of these towns, helping them thrive in the 21st century and beyond.



Image via FreePik.

The Digital Equity Act of 2021 identified eight "covered populations" that are historically more likely to experience digital inequity because of certain demographic and economic characteristics. These eight categories are:

- Individuals who live in low-income households
- Aging individuals (60+)
- Incarcerated individuals
- Veterans
- Individuals with disabilities
- Individuals with a language barrier
- Individuals who are members of a racial or ethnic minority group
- Individuals who primarily reside in a rural area

Table 2: Impacted Populations

Region	Civilian veterans	Population with a disability	Speak a language besides English at home	People of Color	Households with Children	Residents 60+
Region (Eight towns)	8.0%	17.7%	4.7%	10%	25%	32%
Franklin County	7.5%	16.8%	6.54%	11.1%	23%	32%
Massachusetts	4.7%	11.9%	24.54%	31.1%	28%	24%

Data source: U.S. Census Bureau, 2022 ACS 5-Year Estimates

The data reveals several unique challenges the towns in this region face in achieving digital equity, and affordability is a key concern regarding covered populations.

Age: The 60 and over population in the region is significantly higher than the state average, providing challenges to fully realize digital equity within these communities. Simply affording high-speed internet, as well as the devices and training needed to access the internet, stands as a barrier to older adults as many are living on fixed incomes. Lack of digital literacy is also a significant challenge for older adults as they can struggle to access essential services (like healthcare or other government benefits) and social connections that may only be available online. Lack of digital literacy can lead older adults to rely on others to help them access information online. Often this assistance comes from a family member or trusted member of the community, like a librarian or senior center employee. During discussions with librarians from the eight towns, many librarians related how they were often the go-to "expert" on all things digital, especially for older adults. Sometimes this included having access to sensitive or private information in order to assist the patrons. Staff noted that they were more than happy to assist patrons, but often felt that they should not be the ones with access to older adults' sensitive information and passwords.

Households with Children: Since COVID-19, the reliance on the internet and digital devices to provide education to school-age children has only grown. Families unable to afford high-speed internet, and/or adequate devices, are at a significant disadvantage when it comes to making sure their children are receiving the best education possible.

The reliance on technology and internet access, both within the school building, but more and more at home during off-school hours, is increasing. Educators across the eight towns expressed the need for equity in access to digital education tools both in school and at home. In addition, families unable to afford childcare are at a significant disadvantage when it comes to making sure their children are safe and healthy online, protected from the harms and lures of pornography and sexual exploitation, radical extremism and hate, social media comparisons, online bullying, sleep displacement, etc.

Disabilities: The region has a significant population with disabilities. This group might have specific needs when it comes to digital access, requiring specialized equipment or software that could add to the overall cost.

Veterans: the veteran population (8%), which is almost double the percentage of veterans state-wide, faces a potential overlap with the low-income bracket. Similar to seniors, veterans on fixed incomes might struggle to afford internet services. As these veterans all live in rural communities, this adds further burden when it comes to accessing needed assistance like healthcare.

Rural⁹: all towns in this region are considered rural. Rural residents and communities face unique barriers to digital equity due to lack of available connection and affordability. Although broadband availability has improved in rural communities over the past decade, connection costs continue to plague rural residents. This reflects the simple fact that the costs of providing internet service in rural areas are higher than in more densely-populated areas. Across the country, rural communities and their residents face a growing risk of being left-behind in a world and an economy that are increasingly becoming more digital. The digital divide exacerbates the many issues facing rural residents including economic, social, and political isolation and marginalization.

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⁹ This Plan uses the MBI definition of Rural, based on the Massachusetts State Office of Rural Health definition, which considers a municipality to be rural if it meets one of the following criteria: Meets at least one of three federal rural definitions at the sub-county level (Census Bureau, Office of Management and Budget, or Rural-Urban Commuting Area Codes), and/or has a population less than 10,000 people and a population density below 500 people per square mile, and/or has an acute care hospital in the town that meets the state hospital licensure definition of a small rural hospital, or is a certified Critical Access Hospital.

¹⁰ "As Broadband Deserts Recede, Cost of Service Still a Question" (https://www.govtech.com/network/as-broadband-deserts-recede-cost-of-service-still-a-question)

Rural residents in the eight Franklin County towns are not immune to these issues. 11 During a community meeting in Orange, one couple from the town of New Salem described how marginalized they felt from the community because they did not have access to the internet within their home. They explained how this became particularly evident during (and after) the COVID-19 pandemic when municipal meetings went online. This couple is one of many households experiencing the digital divide, demonstrating the disparities that continue to exist in rural communities like those in Franklin County. Participating in local civic life was not the only issue, as access to many vital things like healthcare, require high-speed internet access, as well as knowledge of how to successfully use a computer and the internet. Likewise, the isolating effects of the pandemic pushing many children and youth online led to a youth mental health crisis that is more intractable in rural areas where transportation is limited and neighbors are far apart.

Labor Force & Economy

Table 3: Labor Force & Economy

Region	Unemployment Rate	Labor Force Participation Rate	Working from home
Franklin County	5.7%	63.1%	13.7%
Massachusetts	5.3%	67.1%	14.6%
Region (Eight towns)	6.60%	60.5%	9.8%

Data source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

Inability to connect to high-speed internet, lack of access to digital devices, and lack of digital literacy, negatively impacts the economic vitality of a municipality. Due to lack of accessible broadband in some of the towns within the region, some local businesses have not been able to build their businesses and expand their workforce. The percentage of employees working from home is also lower than both the county and the state. Without access to affordable internet and devices, employees are less likely to work remotely.

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¹¹ For a nuanced discussion of the digital divide in rural America, see Lee, N. (2024, June 4) "Closing the digital and economic divides in rural America." Retrieved from the Brookings Institution website: https://www.brookings.edu/articles/closing-the-digital-and-economic-divides-in-rural-america/.

The unemployment rate across the region is higher than both the state and the county, while the labor force participation rate in the eight towns is significantly lower than both. Lack of digital literacy skills can negatively impacts potential employees' ability to obtain or hold a job. According to a recent report from the National Skills Coalition (NSC) in partnership with the Federal Reserve Bank of Atlanta, 92% of jobs analyzed require digital skills.¹²



Charlemont Town Offices.

 $^{^{12} \ &}quot;Closing the \ Digital \ Skill \ Divide" \ (\underline{https://nationalskillscoalition.org/resource/publications/closing-the-digital-skill-divide/)$

V. Broadband Access

The factors in determining digital equity include *Connection* (ability to connect to broadband service), *Access to Devices* (i.e. computers or tablets), and *Digital Literacy* (ability to navigate the internet safely and effectively). Lack of affordable connection, access to devices, and limited digital literacy, lead to digital inequity and exacerbate the digital divide. Overall, the eight towns in the region have taken great strides to provide all three elements to their residents particularly through providing connection. However, the data shows there remains work to do, particularly regarding affordability and robust digital literacy.

Internet Connection

Various internet options exist across the eight communities, ranging from fiber optic, cable, and fixed wireless. Satellite and DSL are also available in some locations. Fiber connection is available in five of the eight towns in this plan. Cable connection is the

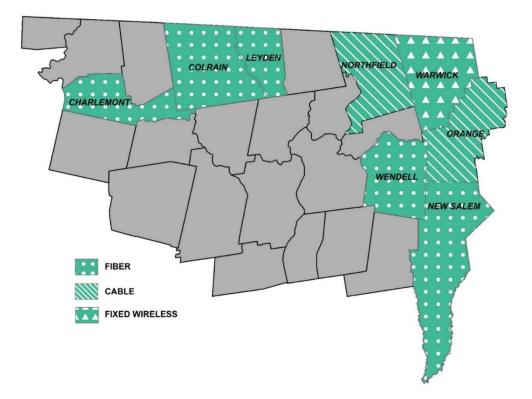


Figure 2: Types of broadband available across eight towns

primary source of broadband in two towns. Warwick relies primarily on a fixed wireless

system, although cable internet service has expanded, and looks to continue to expand within the town.

A Broadband Serviceable Location (BSL) is defined as "a business or residential location in the United States at which mass-market fixed broadband Internet access service is, or can be, installed." In other words, these are the locations that fixed broadband is already available or *could be* installed. Assessing unserved and underserved BSLs provides an understanding of the level of service within a community.

Table 4: Number of Underserved and Unserved Locations by Municipality

Municipality	Number of Underserved Broadband Serviceable Locations	Number of Unserved Broadband Serviceable Locations	Total Broadband Serviceable Locations: (BSL's)
Charlemont	0.3%	6.4%	610
Colrain	0.0%	4.6%	887
Leyden	0.3%	10.4%	357
New Salem	0.6%	4.4%	499
Northfield	0.6%	4.8%	1400
Orange	0.1%	1.3%	3093
Warwick	22.1%	77.2%	439
Wendell	0.7%	6.2%	453

Source: FCC National Broadband Map, June 2023¹³

BSLs are either served, unserved or underserved. Served means the location has a broadband connection with broadband speeds of at least 100/20 megabits per second (Mbps) available at their address. For example, a household would be considered served if they are able to access a Cable connection that has speeds up to 1200/35 Mbps, whether the households is able to afford broadband speeds or not. An unserved location does not have access to broadband speed internet, while an underserved location has access to internet, but at less than 100/20 Mbps. BSLs with only cellular

¹³ Retrieved from the BEAD Challenge Process webpage on the MBI website (https://broadband.masstech.org/sites/default/files/2024-04/FCC%20Broadband%20Serviceable%20Locations%20By%20MA%20Municipality%20%281%29.pdf)

fixed wireless service available are considered underserved, per MBI's BEAD Initial Proposal (vol. 1).

Table 4 shows that while there are few underserved locations in this region (other than Warwick), unserved locations remain an issue. This is especially true in Leyden and Warwick. Because the data about each household's internet access status is provided by internet service providers, the data is not always accurate. The BEAD Challenge (June through October 2024) aims to address this issue by enlisting regional organizations and nonprofits, and municipal leaders and residents, to improve the accuracy of this data. As an example, the town of Charlemont planned to challenge approximately 200 BSLs during the BEAD Challenge based on the high cost of installing a broadband connection to any BSL that has not previously had service.

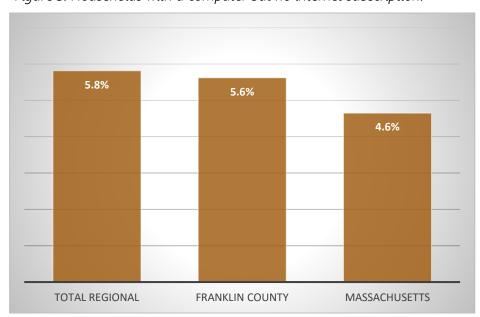


Figure 3: Households with a computer but no internet subscription.

Data source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

Having a reliable, broadband internet connection is necessary for many necessary activities in the 21st century, from filling out medical forms to interviewing for a new job

¹⁴ For more information on data qualifiers, see the previous link regarding BSLs. For more information on the BEAD Challenge, see the MBI webpage: https://broadband.masstech.org/bead-challenge-process

to talking with grandchildren. While overall the communities in this region have increased internet and broadband access, there is still a percentage of households that do not have an internet subscription. The percentage of households with a computer but no internet subscription remains slightly higher than both the county and the state.¹⁵

One issue that was raised at all community meetings and subsequent discussions with town officials was the ability to connect households that may sit alongside a wired connection, although the connection does not go up their driveway. For many of these residents, the cost to make that final connection is prohibitive. The BEAD program in Massachusetts includes BSLs with high "non-standard" installation fees as being considered "unserved".

Internet Speeds

Table 5: Internet Speeds

Speed Ranges	Fiber Towns		Non-Fibe	Non-Fiber Towns	
	(2,132 tests)		(2,132 tests) (1,850 te		ests)
Speeds < 25 x 3 Mbps	67	3%	73	4%	
Speeds < 50 x 10 Mbps	138	6%	243	13%	
Speeds < 100 x 20 Mbps	22	1%	682	37%	
Speeds at least 25 x 3 Mbps	1911	90%	1586	86%	
Speeds at least 50 x 10 Mbps	1692	79%	1168	63%	
Speeds at least 100 x 20 Mbps	1228	58%	402	22%	
Speeds at least 100 x 100 Mbps	1001	47%	1	0%	

Data source: Ookla Speed Test (https://www.speedtest.net/), 2022

Having the option to connect to the internet is only a first step in realizing digital equity. To be truly accessible, internet needs to meet broadband speeds and also be affordable. According to the Federal Communications Commission (FCC), "broadband," while used generally to mean "high-speed internet", has a specific definition of a minimum of 100 megabits per second (Mbps) download speed and 20 megabits per second (Mbps)

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¹⁵ Data is from US Census Bureau was developed from survey responses collected **over a 5-year period** from 2018-2022. During this period, the "last mile" internet connections for 6 of the 8 Towns changed.

upload speed. This definition was recently updated in March 2024 by the FCC from 25/3 Mbps.

Internet speeds can be difficult to properly measure due to various factors (time of day, how many users are currently on-line, how close a user is to a router, etc.) In addition, data on user-initiated speed tests is often biased because people tend to run speed tests when they are having problems. However, speed-test data can provide a general understanding of how well a community is reaching broadband speeds. Overall, the data for the eight towns suggests that the majority of households were not receiving broadband speeds in the towns relying on a cable provider or fixed-wireless. Towns with fiber connection had a much higher percentage of tests that had speeds of at least 100/20 Mbps.

Based on the data from the statewide survey, the majority of respondents in the eight towns (74%) said their internet was "Good enough to meet my household needs." In towns with fiber connection, 100% of respondents indicated their connection was "Good Enough." However, almost 35% of respondents from the three towns where cable or fixed wireless was the main source for broadband indicated their internet was "Not good enough." This difference was reiterated during community meetings, where the majority of participants in fiber communities indicated their internet was good enough, while residents in cable towns noted connection issues.

Internet Providers & Associated Costs

Like actual speeds, broadband costs can be difficult to comprehensively measure due to various factors, including levels of speed, discounts, and bundling options. However, nationwide, one study found that the median cost of high-speed internet was \$74.99 per month. Further, around half of households were paying between \$60 and \$90 per month. Based on responses to the statewide survey, the average monthly cost for internet service among these eight towns was \$86. It is unclear from the survey results whether the higher pricing (usually over \$200) indicated in the responses was for internet only, or a bundled service.

17-2022-2.pdf)

(https://advocacy.consumerreports.org/wp-content/uploads/2022/11/FINAL.report-broadband.november-

¹⁶ Broadband Pricing: What Consumer Reports Learned from 22,000 Internet Bills

Table 6: Broadband advertised speeds and costs for eight towns

Fiber

Provider	Cost*	Max speed	Notes
Charlemont (Whip City Fiber) – Residential Internet	\$79.99	1000Mbps/1 Gigabit	Charlemont's own network; No contracts; No data caps; Equipment and Wi-Fi included; town subsidy towards install
Colrain (Whip City Fiber) – Residential Internet	\$89.00	1000Mbps/1 Gigabit	Colrain's own network; No contracts; Equipment and Wi-Fi included; Free standard install
Leyden (Whip City Fiber) – Residential Internet	\$85.00	1000Mbps/1 Gigabit	Leyden's own network; No contracts; Equipment and Wi-Fi included; Free standard install
New Salem (Whip City Fiber) Gigabit Residential Internet (New Salem) 25 Mbps Residential Internet (New Salem)	\$75.00 \$59.00	1000Mbps/1 Gigabit 25 Mbps/25 Mbps	No contracts; no data caps; equipment and Wi-Fi included; custom install at additional cost No contracts; no data caps; equipment and Wi-Fi included; custom install at additional cost
Wendell (Whip City Fiber) – Gigabit Internet	\$94.00	1000Mbps/1 Gigabit	Wendell's own network; No contracts; Equipment and Wi-Fi included; Free install while funds last

Municipal Fiber Rates Whip City Fiber rates (https://www.whipcityfiber.com/(town)

Cable Providers

Spectrum	Cost*	Max Speeds
Internet Assist	\$24.99	50/10 Mbps
Internet 100	\$59.99	100/10 Mbps
Internet	\$84.99	300/10 Mbps
Internet Ultra	\$104.99	500/20 Mbps
Internet Gig	\$114.99	1000/35 Mbps

^{*}Standard rate after promotional period. Does not include costs from bundling with TV or other services; does not include setup or installation fees, or fees for purchase of any needed equipment

Comcast Plans	Monthly Cost*	Max Advertised Speeds (Mbps)
Connect	\$68.00	150/10
Connect More	\$90.00	300/10
Fast	\$105.00	500/10
Super Fast	\$110.00	800/15
Gigabit	\$115.00	1000/20
Gigabit Extra	\$120.00	1200/35
Gigabit x10	\$300.00	10,000/10,000

^{*}Standard rate after promotional period. Does not include costs from bundling with TV or other services; does not include setup or installation fees, or fees for purchase of any needed equipment.

Comcast also offers Internet Essentials (50/10 Mbps) and Internet Essentials Plus (100/10 Mbps) for \$9.95 and \$29.95 per month respectively. To enroll in either of these plans, consumers must show proof of ACP enrollment since September 2023 within 60 days or they will be moved to the Connect plan.

Source: Comcast rate sheet; Spectrum rates (https://www.spectrum.com/internet)

As noted previously, there are multiple service providers throughout the region, although within towns there is very little, if any competition. Comcast is the primary provider in Northfield, while Spectrum/Charter is the primary provider for the town of Orange and has a growing presence in Warwick. Warwick Broadband currently provides wireless broadband service for the town. (Although internet service is available through this provider, it does not meet the FCC's definition of broadband speed.) The other five

communities all have fiber connections and internet service provided through Whip City Fiber, based in Westfield, Massachusetts.

Table 6 shows the range of options, including cost and maximum advertised speed, for cable service, as well as for Whip City Fiber. Although this is just a snapshot of price and speed, more affordable cable plans generally do not meet the current FCC definition of broadband. Further, both cable providers, Spectrum and Comcast provide asymmetric internet, meaning download and upload speeds are different. Symmetrical connections, like that provide by Whip City Fiber, offer the same speeds for both downloading and uploading. Businesses and remote workers benefit from symmetrical internet connections as they frequently handle large data uploads. With the greater reliance on internet by businesses, and the growth in remote work, having symmetrical internet is becoming more vital to a thriving economy.

Affordability

Although residents have different prices available to them, and exact costs may change depending on service, speed, and availability, providing a snapshot of this information is important in addressing digital equity, as lack of affordability was the primary issue raised by residents in all of these communities. For example, based on the household survey, almost one-third (27%) of the 177 responses said paying for internet service was Somewhat Hard or Very Hard. During community outreach meetings, cost continuously came up as a barrier to connection. Specific comments ranges from one couple in New Salem describing how connecting their home was cost prohibitive when the fiber lines were originally laid, and now the costs of have on grown exponentially. In Charlemont, one resident expressed how fixed costs in the town are high for broadband, which means there is a higher monthly fee for residents. They also noted having affordable internet should not mean having "watered-down" internet access.

There are few programs available to assist with broadband affordability, although it is one of the primary areas of digital inequity. The Affordable Connectivity Program (ACP) was a benefit program run by the Federal Communications Commission, to help make broadband affordable for all households. The ACP provided a discount of up to \$30 per month for internet services of eligible households. The FCC collected data on which households are eligible and how many are enrolled in the program. Among the eight

¹⁷ For more information on qualification, see https://www.affordableconnectivity.gov/do-i-qualify/.

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towns, there were 2,148 eligible households with 68% of eligible households enrolled in the ACP, indicating this program was popular among the communities but also was underutilized.¹⁸ ACP was particularly popular in the town of Orange, where over 95% of eligible households were part of ACP.

Unfortunately, due to a lack of additional funding from Congress, the Affordable Connectivity Program ceased to accept new applications after February 7, 2024. Funding for the program ended in May, 2024. Households are no longer able to receive the ACP discount on their monthly internet bill. ¹⁹ Currently, while internet service providers are offering options for ACP customers to make sure their internet connection remains affordable, there is no program to replace the ACP. Due to the popularity of this program among the eight towns, as well as the high percentage of households that qualified for ACP but did not use the subsidy, the end of ACP will likely provide significant affordability issues going forward.

The Massachusetts State Digital Equity Plan provides few options regarding affordability. According to the section on Strategy and Program Details, addressing affordability falls primarily under the section "DNP5. Ongoing Affordable Connectivity Options and Enrollment." The primary focus is at the state level is to continue supporting "access to affordable connectivity options through the ACP and/or other solutions." While not providing specifics, the plan does note the impending end of the ACP, and indicates that the MBI "will establish state-based alternatives to ensure that changes to ACP availability will not impact Massachusetts residents." ²⁰

Device Access

Over 84% of households in the Region have a smartphone and 86% of households have a desktop or laptop. Although these are positive numbers, this indicates there is still a large percentage of households that may not have a device. Not having a reliable desktop or laptop computer can negatively impact a household, preventing the ability

¹⁸ ACP Enrollment & Claims Tracker (https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/)

¹⁹ For more information on ACP and its closing, see https://www.affordableconnectivity.gov/

²⁰ Massachusetts State Digital Equity Plan. Accessed at https://broadband.masstech.org/sites/default/files/2024-03/MA%20SDEP%20FINAL 3.26.24.pdf.

to work remotely, access government services, and access educational material for students of all ages.

Figure 4: Devices within households

Region	Desktop/laptop	Smartphone	Tablet or other portable wireless computer	Other computer
Regional	86%	84%	64%	2%
Franklin County	86%	87%	65%	2%
Massachusetts	88%	93%	70%	2%

Data source: U.S. Census Bureau, 2022 American Community Survey (ACS)

5-Year Estimates

When residents do not have access at home to the appropriate devices to meet their needs, they are often able to access devices through other service providers like libraries, schools and the senior center. Interviews and meetings with staff from these providers in all the towns indicated heavy use of devices.

Digital Literacy

Digital literacy is more difficult to quantify than either broadband connection or access to devices. While there are different needs for both level of internet speed needed and

Searching and/or applying for benefits or resources for you or your family 63% Transportation information 68% General internet searching Participating in your local community 82% Health care or telehealth services 30% Searching and applying for a job 82% 0% 20% 40% 60% 80% 100% ■ Hard ■ Not easy ■ Easy

Figure 5: Level of Difficulty for Types of Internet Use

Source: Massachusetts Statewide Digital Equity Survey

type of device needed, the range of digital literacy is vast from knowing how to turn on a computer to learning how to code. Digital literacy needs are often age-dependent as well as language dependent.

When asked to rank the difficulty of using the internet for various tasks (i.e. job search, healthcare or telehealth services, etc.) a majority of respondents indicated *Easy*. However, depending on the type of use, respondents indicated various level of difficulty. For example, 33% said it was either *Not Easy* or *Hard* to use the internet for Health or Telehealth Services, 31% said it was either *Not Easy* or *Hard* to access Transportation Information, and 32% said it was either *Not Easy* or *Hard* to use the internet to Search of Apply for Benefits for You or Your Family.

One growing issue within digital literacy is cyber security and the continuous need for protecting systems, networks, and programs from digital attacks, as well as educating users on how best to achieve this. Based on the household survey, 85% of responders were either somewhat concerned or very about internet security.

Another important issue within digital literacy is making sure that children, youth, parents, and other adult caregivers understand the significant harms associated with excessive social media use, excessive screen time, and access to content that is not ageappropriate. These harms are outlined in the <u>Surgeon General's Advisory on Social Media and Youth Mental Health</u>, and is echoed in <u>Student Health Survey data from local middle and high school students</u>.

VI. Digital Assets

Although there are areas of digital inequity in the Region, the individual towns and surrounding region provide numerous assets that promote and implement digital equity.²¹

Public Libraries

Public libraries are an important source for digital equity, especially in rural communities that might lack other resources more available in Serving Western Massachusetts, The Alliance for Digital Equity is a coalition of community-focused organizations working toward digital equity for all people. The goal of the Alliance is to get people the access they need—to the equipment, to the infrastructure, and to the knowledge and skills—and that will allow them to fully participate in the digital world.

(https://sites.google.com/view/alliancefordigitalequity/home)

urban settings. Libraries often provide free onsite device usage, technical assistance, and free Wi-Fi. Other resources include one-on-one technology assistance, the ability to rent out mobile Wi-Fi hotspots, and numerous e-resources (like Kanopy and Libby). The town of Warwick secured a number of Chromebook laptops, some of which the Library has distributed to town residents. The Library also has a wireless public hotspot. In the town of Orange, residents use the free Wi-Fi at both the Wheeler Memorial Library and the Moore Leland Library branch at all hours, since the Wi-Fi extends out of the building. The library director noted that hotspots are very popular. The library currently has five, with two spares, although they are expanding to ten at the writing of this report. As with other libraries in the region, staff are available for limited tech help. Both the Orange librarian and others in the region noted the need for additional computers in the library for patrons to use. This would allow the library to provide increased tech services and on premise trainings.

One of the main issues in rural communities like those represented in this plan, is the limited capacity of these town libraries, including limited staff time and hours when open. For example, the Robertson Memorial Library in Leyden is only open 1-6pm on

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²¹ See Appendix for list of local and regional assets.

Mondays and Wednesdays, and 10-12 on Saturdays. Residents who might need assistance at other times, would not be able to access the benefits the library provides.

Education

The eight towns belong to three different regional school districts. While each has their own policies regarding technology, in response to COVID-19, classroom technology use has become more extensive in the school districts for the three school districts. Grade-dependent, students have access to chrome books, and the older grades are able to bring devices home. A staff member of one local school noted that "there exists inequity in access for families who have support systems around them such as parents who create access in the home and supervise computer use versus those who do not have access and/or do not monitor."

Within the current curriculum, the school districts work to integrate technology training into the classroom. One of the biggest issues centered on technology lies with both students' and their families' lack of awareness of online issues, suggesting the need for further and continuous training as well as federal, state, and school rules and regulations. School teachers and administrators often cite the need for resources to support tech-healthy school environments, such as Yondr pouches that help teachers enforce "Off and Away" rules.

Overall, the following were noted areas of concern and need for further investment:

- Making sure each household with a student in school as an accessible device at home (so a student would not have to bring the device back and forth from school).
- Expand digital literacy for both students and parents.
- Bringing wireless systems up to date. Wiring can be very outdated
- Digital safety and cyber security is important for students, but equally, if not more, for parents.
- Working closely with Greenfield Community College on tech-related projects would be a benefit for students.

Municipal Light Plants

In Massachusetts, municipalities may own, maintain and operate a municipal light plant (MLP) in order to provide electric and/or gas services to their citizens. Five of the participating towns in this study with fiber connection, have local MLPs. These are run by

municipal light boards, and provide a valuable resource to the towns and residents. The MLPs have been advocates for their residents, particularly around affordability. MLPs can also provide information for residents currently not connected to the fiber network on how best to connect, as well as resources around affording the installation.

Senior Centers and Councils on Aging

As this report has discussed, older adults often feel the impacts of the digital divide and digital inequity most acutely. Issues can range from inability to afford the monthly broadband costs or affording an appropriate device, to understanding how to access medical records, or fears of fraud. Senior centers and councils on aging can provide resources to older adults to help address many of these issues. Each town represented in this plan has a municipal senior center/council on aging, many of which are already contributing to improving digital equity in the communities. For example, the town of Northfield was part of a regional grant (with the town of Bernardston as the lead) to bring Claris Companion tablets to senior centers. The Northfield Senior Center received 7 of the devices, which were then distributed (through a lottery) to older adults in the community. The funding also paid for three teachers who provided two on-site trainings to the larger group. The Northfield Senior Center also provides "tech time" drop in clinics twice a month to help people on their devices. The senior center also has free Wi-Fi on-site. Other senior centers throughout the region offer similar programs, but tailor them to their residents.



Digital Equity Assets and Services in Franklin County

A more comprehensive list of regional digital assets is included in the Appendix. It would be in the best interest of the towns to maintain an up-to-date list of resources for residents to access via the town websites.

Assets and Strengths

- Local services like free Wi-Fi available at the libraries that extends out to the parking lot, including off hours.
- Regional services like the on-demand devices available at the senior centers and libraries
- Regional networks and support services like the <u>Franklin County Resource Network</u>, administered by <u>Community Action Pioneer</u> <u>Valley</u>.
- Regional services through the <u>413Cares.org/Digital Equity</u> (working with the <u>Alliance for Digital Equity</u>)
- Digital literacy programs for seniors, including the <u>Cyber Senior Program</u> through the <u>Greenfield Community College</u> (GCC).
- Availability of broadband in most communities in Franklin County through the MBI Last Mile program.
- MBI, as the State Broadband Office, works with state agencies and departments to optimize funding sources and statewide coordination (for example, coordinating digital literacy programs between libraries).
- Regional organizations that provide opportunity for coordination like the <u>Central and Western Massachusetts</u> <u>Automated Resource Sharing (CW MARS)</u> library consortium.

Needs and Challenges

- Staff and programs are heavily grant dependent. Lack staff and resources to provide services or other programs
- One time funding
- Reliance on volunteers
- Difference in bandwidth quality
- Internet cost disparity for more remote residents
- Gaps in cell service due to varied geography
- Reliance on federal and state funding due to the COVID pandemic to purchase devices and provide digital equity services.
- Reliance on external funding sources
- Need for staff/capacity
- Need for an asset map so people know where to go for services (ex. <u>Seattle-</u> <u>King County Digital Equity Asset Map</u>)
- Need for an individual or organization to coordinate between organizations

VII. Recommendations and Action Plan

The following section provides a plan of action for the eight towns to work towards addressing the digital divide in their communities, and achieving the digital equity goals outlined above. These strategies, and accompanying actions, were developed by the Steering Committee, with input from the communities. Certain strategies and actions were influenced by current projects and programs, (like the work being done through Councils on Aging and Senior Centers, the work of the Communities That Care Coalition's Regional School Health Task Force, as well as through Municipal Light Plants), while others are based on community feedback, best practices, and evolving technology trends. In some instances, actions items that would be more appropriate for either the fiber communities or towns with cable, have been noted. Some townspecific action items have been noted as well.

The Recommendations and Action Plan includes the following: lead organization (in many cases this is the Town – generally the lead will be town administration, although in some cases it might be the Municipal Light Plant or designated by the town administration to a different department), as well as the department or board/committee that could be responsible for implementation; supporting partners; potential funding sources; targeted timeframe for completion of a given strategy, defined as "Short-term" (less than 2 years), "Medium-term" (2–5 years), "Long-term" (more than 5 years).

1. Affordable Connectivity

Strategy	Lead Organization	Supporting Partners	Potential Funding Sources	Implementation Target
Promote and support BEAD Challenge Program	Town staff	FRCOG; MBI; Alliance for Digital Equity	None	Short-Term
Connect households not currently able to access fiber network	Fiber towns/local Municipal Light Plants	FRCOG; MBI	BEAD Program Funding	Short-Medium Term
Expand Library Mobile Hotspot Program	Municipal libraries (in particular, the towns of Orange and Northfield have programs they are looking to expand)	Towns; Alliance for Digital Equity	Municipal Digital Equity Implementation Program; Grant funding from Massachusetts Libraries Board of Library Commissions; Town budget for long-term maintenance	Short Term
Explore public Wi-Fi locations and implementation	Town staff	Alliance for Digital Equity	Community Space Public Wi-Fi Program; Municipal Digital Equity Implementation Program	Short-Medium Term
Distribute digital devices (i.e. laptops or tablets) distribution	Alliance for Digital Equity	Towns; Senior Center; Public Libraries	MBI Digital Equity Implementation Program; Executive Office of Elder Affairs Grant Funding; STEM	Short Term

			grants through Massachusetts Department of Elementary and Secondary Education	
Negotiate lower internet subscription rates with local ISPs or investigate the possibility of direct subsidies.	Cable towns of Orange and Northfield (Cable Committees)	Alliance for Digital Equity	None	Medium - Long Term
Support a state or federal qualification program a town (or fiber ISP like Whip City Fiber) could use to implement need-based pricing.	Fiber towns (Municipal Light Plants)	Whip City Fiber; MBI	None	Short-Medium Term
Create and disseminate outreach materials for internet subsidy programs and low-cost internet plans.	Town staff	Alliance for Digital Equity; FRCOG	Municipal Digital Equity Implementation Program; Town budget	Short-Long Term
Explore and promote options for affordable, quality data plans for mobile phones and more robust and reliable cell service	Town staff	Alliance for Digital Equity	None	Medium-Term

2. Digital Literacy & Navigation

Strategy	Lead Organization	Supporting Partners	Potential Funding Sources	Implementation Target
Support and promote current digital literacy programs	Town staff	Library, Senior Center, GCC	Municipal Digital Equity Implementation Program	Short-Term
Collaborate with local, regional, and/or state organizations that offer digital literacy training programs.	Digital navigator (if implemented – see below)	Towns; FRCOG; Tech Goes Home; Tech Foundry; Alliance for Digital Equity; GCC – Cyber Seniors	Municipal Digital Equity Implementation Program	Short-term
Survey the community to understand the top digital literacy needs and interests (basic computer skills, cybersecurity, public benefic applications, telemedicine, etc.).	Town staff; FRCOG	Alliance for Digital Equity	Municipal Digital Equity Implementation Program; Town budgets	Short-Term
Support cyber security/safety policies, enforcement, and training for all students and families in school districts	Various School Districts (IT departments)	Northwestern DA Office (potential), Communities	Municipal Cybersecurity Awareness Grant Program; STEM grants through	Short-Medium Term

		That Care Coalition	Massachusetts Department of Elementary and Secondary Education	
Evaluate town websites and communication materials to ensure they are universally accessible and usable on all internet devices	Town staff	FRCOG; Alliance for Digital Equity	Municipal Digital Equity Implementation Program; Community Compact IT Grant	Short-Term
Secure private spaces for assisted internet access and provide one-on-one digital literacy consulting	Town staff (senior centers/ Councils on Aging; libraries)	Towns (administration); FRCOG; Alliance for Digital Equity	Municipal Digital Equity Implementation Program	Short-Medium Term
Hire a part-time Digital Inclusion Coordinator position (or full-time, if it is a regional program).	Town of Northfield (Grant Director)	Other participating towns; Alliance for Digital Equity	Municipal Digital Equity Implementation Program	Short-Medium Term

3. Framework for Promoting and Supporting Digital Equity

Strategy	Lead Organization	Supporting Partners	Potential Funding Sources	Implementation Target
Support and enhance current digital equity partnerships (for example, actively engage with the Alliance for Digital Equity)	Town staff	FRCOG; Alliance for Digital Equity; Clinical & Support Options (CSO); School Districts; Greenfield Community College; local businesses	Municipal Digital Equity Implementation; AARP Community Challenge grants; Massachusetts Councils on Aging (MCOA) Service Incentive Grant; Point 32Health Foundation	Short-Long Term
Work with other Franklin County towns (especially those who have completed Digital Equity Plans) to promote and implement digital equity regionally.	Town staff	Other Franklin County towns; FRCOG; Alliance for Digital Equity; Other digital equity asset partners (as listed in plan)	Various current and upcoming MBI grant funds; AARP Community Challenge grants; Massachusetts Councils on Aging (MCOA) Service Incentive Grant; Grant funding from Massachusetts Libraries Board of Library Commissions	Short-Long Term

Promote and support local	Town staff	Libraries; senior	Various (MBI grant	Short-Long Term
and regional organizations		centers/COAs; Alliance for	funds, Executive Office	
providing digital equity (i.e.		Digital Equity; FRCOG	of Elder Affairs grants,	
libraries, senior centers,			library grants, etc.)	
Alliance for Digital Equity,				
etc.)				

VIII. Appendices

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The contributions of the Digital Equity Steering Committee and project stakeholders join the comments of residents and stakeholders who participated in meetings and surveys throughout the Digital Equity planning process.

Digital Equity Steering Committee

- Lora Fulton, Charlemont Broadband Committee
- Kevin Fox, Colrain Town Administrator
- Jack Golden, Leyden Municipal Light Plant Manager
- MaryEllen Kennedy, New Salem Municipal Light Plant Manager
- Mallory Sullivan, Rural Programs Manager (former Northfield Grant Development Director)
- Leslie Roberts, Northfield Grant Development Director
- Andrea Llamas, Northfield Town Administrator
- Walker Powell, Orange Land-Use Planner and Conservation Agent
- David Young, Warwick Town Coordinator
- Gillian Budine, Wendell Selectboard
- Ray DiDonato, Wendell Municipal Light Plant Manager

Consultant Team (Franklin Regional Council of Governments)

- Jessica Atwood, Director of Planning
- Ted Harvey, Senior Economic Development Planner
- Nicole Krantz, Planning & Digital Equity Intern
- Mark Maloni, Communications Manager

Community Profiles



POPULATION	
Population	1,064
Population density Per square mile	40.8
% Children Age 18 and under	10.5%
% Older Adults Age 65 and over	35.7%
Median age	56.7
% Black, Indigenous, people of color	7.8%
% who are Veterans	9.2%
% with disabilities (Physical, mental, intellectual, and developmental)	13.4%
% Language other than English	5.4%
INCOME	
Median household income	\$55,603
Poverty Rate	13.1%
HOUSING	
Total housing units	647
% Occupied housing	83.5%
% Owner-occupied	79.3%
% Renter-occupied	20.7%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	5.9%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	12.6
Primary service type	Fiber connection
Primary provider	Charlemont Connect (Whip City Fiber)



POPULATION	
Population	1,740
Population density Per square mile	40.0
% Children Age 18 and under	14.4%
% Older Adults Age 65 and over	28.8%
Median age	49.3
% Black, Indigenous, people of color	6.1%
% who are Veterans	7.2%
% with disabilities (Physical, mental, intellectual, and developmental)	13.9%
% Language other than English	2.8%
INCOME	
Median household income	\$81,316
Poverty Rate	6.2%
HOUSING	
Total housing units	843
% Occupied housing	89%
% Owner-occupied	81.7%
% Renter-occupied	18.3%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	12.5%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	4.7
Primary service type	Fiber connection
Primary provider	Colrain Broadband
	(Whip City Fiber)



POPULATION	
Population	640
Population density Per square mile	35.5
% Children Age 18 and under	13.3%
% Older Adults Age 65 and over	24.5%
Median age	51.3
% Black, Indigenous, people of color	3.8%
% who are Veterans	10.6%
% with disabilities (Physical, mental, intellectual, and developmental)	11.6%
% Language other than English	5.7%
INCOME	
Median household income	\$97,500
Poverty Rate	9.5%
HOUSING	
Total housing units	284
% Occupied housing	90.1%
% Owner-occupied	94.1%
% Renter-occupied	5.9%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	8.6%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	4.3%
Primary service type	Fiber connection
Primary provider	Leyden Broadband
	(Whip City Fiber)



POPULATION	
Population	1,074
Population density Per square mile	23.9
% Children Age 18 and under	13.7%
% Older Adults Age 65 and over	19.0%
Median age	55.8
% Black, Indigenous, people of color	20.9%
% who are Veterans	7.8%
% with disabilities (Physical, mental, intellectual, and developmental)	15.0%
% Language other than English	3.4%
INCOME	
Median household income	\$75,951
Poverty Rate	10.1%
HOUSING	
Total housing units	528
% Occupied housing	85.8%
% Owner-occupied	86.1%
% Renter-occupied	13.9%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	4.0%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	4.6%
Primary service type	Fiber connection
Primary provider	New Salem
	Broadband (Whip City
	Fiber)



POPULATION	
Population	2,871
Population density Per square mile	83.5
% Children Age 18 and under	17.3%
% Older Adults Age 65 and over	22.4%
Median age	48.4
% Black, Indigenous, people of color	10.1%
% who are Veterans	6.7%
% with disabilities (Physical, mental, intellectual, and developmental)	16.4%
% Language other than English	6.2%
INCOME	
Median household income	\$94,775
Poverty Rate	7.2%
HOUSING	
Total housing units	1,348
% Occupied housing	90.9%
% Owner-occupied	88.8%
% Renter-occupied	11.2%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	8.3%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	6.7%
Primary service type	Cable
Primary provider	Comcast/Xfinity



POPULATION	
	7.5004
Population	7,5824
Population density Per square mile	214.2
% Children Age 18 and under	21.1%
% Older Adults Age 65 and over	19.2%
Median age	42.8
% Black, Indigenous, people of color	9.3%
% who are Veterans	9.7%
% with disabilities (Physical, mental, intellectual, and developmental)	22.0%
% Language other than English	5.2%
INCOME	
Median household income	\$56,000
Poverty Rate	20.5%
HOUSING	
Total housing units	3,386
% Occupied housing	88.8%
% Owner-occupied	71.0%
% Renter-occupied	29.0%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	10.2%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	3.7%
Primary service type	Cable
Primary provider	Charter/Spectrum



POPULATION	
Population	814
Population density Per square mile	21.8
% Children Age 18 and under	13.5%
% Older Adults Age 65 and over	19.0%
Median age	50.4
% Black, Indigenous, people of color	4.2%
% who are Veterans	9.5%
% with disabilities (Physical, mental, intellectual, and developmental)	12.7%
% Language other than English	3.8%
INCOME	
Median household income	\$89,643
Poverty Rate	6.7%
HOUSING	
Total housing units	424
% Occupied housing	82.1%
% Owner-occupied	92.8%
% Renter-occupied	7.2%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	6.3%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	8.6%
Primary service type	Wireless
Primary provider	Wireless Warwick
	Broadband



POPULATION	
Population	847
Population density Per square mile	26.5
% Children Age 18 and under	13.7%
% Older Adults Age 65 and over	26.1%
Median age	51.7
% Black, Indigenous, people of color	15.9%
% who are Veterans	3.0%
% with disabilities (Physical, mental, intellectual, and developmental)	17.4%
% Language other than English	3.8%
INCOME	
Median household income	\$66,815
Poverty Rate	15.1%
HOUSING	
Total housing units	1429
% Occupied housing	90.7%
% Owner-occupied	84.8%
% Renter-occupied	15.2%
COMPUTERS	
% Households with no computing device (Desktop, laptop,	10.0%
tablet, or phone)	
BROADBAND	
% Households without an internet subscription	11.4%
Primary service type	Wendell Net
Primary provider	Whip City Fiber

Digital Equity Funding

Program	Type of Assistance	URL
State Digital Equity Capacity Grant Program	A \$1.44 billion formula grant program for states, territories, and tribal governments. Funds an annual grant program for five years in support of digital equity projects and the implementation of digital equity plans.	https://www.internetforall.gov/program/digital- equity-act-programs#
State Digital Equity Competitive Grant Program	A \$1.25 billion competitive grant program to fund annual grant programs for five years to implement digital equity projects. Several types of entities can apply for these funds.	https://www.internetforall.gov/program/digital- equity-act-programs#
Municipal Digital Equity Implementation Program	Funding to mobilize, start-up, and implement digital equity activities locally to access a one-time grant up to \$100,000 per municipality to execute a project (or projects) defined in their local digital equity plan or related document that MBI deems of sufficient standard. Project implementation will increase access and usage of the internet for the populations most impacted by the COVID-19 pandemic.	https://broadband.masstech.org/digital-equity-implementation
Broadband Equity, Access, and Deployment (BEAD) Program	Expand high-speed internet access by funding planning, infrastructure deployment and adoption programs. This program builds high-speed Internet infrastructure where needed. It also supports efforts to teach the skills and provide the equipment needed so everyone can use the Internet. An eligible entity must conduct a challenge process prior to funds distribution for broadband deployment. Challenge support services are available.	https://broadbandusa.ntia.doc.gov/funding- programs/broadband-equity-access-and- deployment-bead-program
Community Compact Municipal Fiber Program	 Implementation of fiber optic networks that connect remote municipal assets to improve municipal operations and/or improve disaster recovery and resiliency. One time capital needs- fiber optic cabling, hardware, software and implementation services. 	https://www.mass.gov/municipal-fiber-grant- program

GAP Networks Grant Program	The \$145 million Gap Networks Grant Program will fund the deployment of broadband infrastructure in areas that currently lack broadband service. The Program aims to expand access and connectivity in unserved and underserved locations throughout the Commonwealth to bridge the digital divide.	https://broadband.masstech.org/gap-networks- grant-program
E-rate: Universal Service Program for Schools and Libraries	The schools and libraries universal service support program, commonly known as the E-rate program, helps schools and libraries to obtain affordable broadband.	https://www.fcc.gov/general/e-rate-schools-libraries- usf-program
Lifeline program for Low-income consumers	 Discount on phone or broadband service for qualifying low-income consumers. Promote access to Wi-Fi enabled devices and hotspot functionality to close the homework gap Note: A family that qualifies for Lifeline also qualifies to receive EBB 	https://www.fcc.gov/lifeline-consumers
Affordable Connectivity Program (ACP)	The Affordable Connectivity Program is an FCC benefit program that helps ensure that households can afford the broadband they need for work, school, healthcare and more. 1. \$30 discount per month for internet service for eligible households; \$75 discount for qualifying Tribal lands 2. One time \$100 discount to purchase a laptop, desktop computer, or tablet if the contribute between \$10 to \$50 toward purchase price.	https://www.fcc.gov/acp NO LONGER AVAILABLE
Municipal Cybersecurity Awareness Grant Program	The Executive Office of Technology Services and Security's (EOTSS) Office of Municipal and School Technology procures and manages the Municipal Cybersecurity Awareness Grant Program (MCAGP) – making the program free to participating organizations. The program improves overall cybersecurity posture through end-user training.	https://www.mass.gov/info-details/about-the-municipal-cybersecurity-awareness-grant-program#how-to-apply-

Community Compact IT Grant Program	This is a competitive grant program focused on driving innovation and transformation at the local level via investments in technology. 1. Grant to support implementation of innovative and transformative IT projects by funding one-time capital needstech infrastructure and/or purchases of equipment/ software. 2. One-time planning, design, installation, implementation, and intial training	https://www.mass.gov/community-compact-it-grant-program
Efficiency and Regionalization (E&R) Grant Program	Provide financial support for governmental entities (Planning and implementation activities are eligible)	https://www.mass.gov/efficiency-regionalization- grant-program
Telecommunications Industry Registered Apprenticeship Program (TIRAP)	a competency-based apprenticeship aimed at growing the productivity of the workforce as directly as possible. 1. Career development of telecommunications workforce through cash and in-kind support. 2. Funding to design curricula and deliver training to develop qualified applicants for placement in middle- to high-skilled jobs 3. To target veterans, transitioning service members, military spouses, women, people oF color, unemployed, underemployed, incumbent workers, and underrepresented populations.	https://www.tirap.org/
Economic Adjustment Assistance Grant	EAA provides a wide range of technical, planning, and public works and infrastructure assistance in regions experiencing adverse economic changes that may occur suddenly or over time.	https://www.eda.gov/economic-adjustment- assistance

Local Planning and Technical Assistance Programs	Planning and local technical assistance investments to support economic development, foster job creation, and attract private investment in economically distressed areas.	https://www.eda.gov/sites/default/files/filebase/files/ programs/eda-programs/FY21-23-Planning-and-LTA- NOFO FINAL.pdf
Community Development Block Grants (CDBG)	 Conduct broadband needs assessment Install wiring, fiber optic cables, and permanently affixed equipment Provide digital literacy classes. 	https://www.mass.gov/info-details/community-development-block-grant-cdbg#how-to-apply-
Workforce Innovation and Opportunity Act (WIOA)	1. Digital literacy- use of technology to improve teaching, learning, professional development, skill development and abilities, career guidance, supportive services, job search workshop, referral to jobs or training, workers' rights and complaint system information.	https://www.dol.gov/agencies/eta/grants/apply
English Language Acquisition State Grants	Enhance instruction for English learners with digital resources	https://www2.ed.gov/about/offices/list/oese/oss/tech nicalassistance/elstar-user-guide-state-support- network.pdf
CommCorps YouthWorks Funding	YouthWorks is a state-funded youth employment program that helps teens and young adults develop the skills and experience needed to find and keep jobs.	https://commcorp.org/program/youthworks/
Early Intervention Program for Infants and Toddlers with Disabilities	Assist with implementation of statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and extending early intervention programs	https://www2.ed.gov/fund/data/award/idea/index.ht ml

Determination of Need (DoN)	The goal of DoN and the framework for analysis by the Department of Public Health is to promote population health and increased public health value.	https://www.mass.gov/determination-of-need-don
USDA Community Connect Program	The purpose of the Community Connect Program is to provide financial assistance in the form of grants to eligible applicants that will provide, on a "community -oriented connectivity" basis, broadband service that fosters economic growth and delivers enhanced educational, health care, and public safety benefits. Rural communities- extend access where broadband service is least likely commercially available	https://www.rd.usda.gov/community-connect
USDA Telecommunications Infrastructure Loans & Loan Guarantees	This program provides financing for the construction, maintenance, improvement and expansion of telephone service and broadband in rural areas.	https://www.rd.usda.gov/programs- services/telecommunications- programs/telecommunications-infrastructure-loans- loan-guarantees
High Cost Program (including Connect America Fund, Rural Digital Opportunity Fund and 5G Fund)	The federal universal service high-cost program is designed to ensure that consumers in rural, insular, and high-cost areas have access to modern communications networks capable of providing voice and broadband service, both fixed and mobile, at rates that are reasonably comparable to those in urban areas.	https://www.usac.org/high-cost/
USDA Distance Learning & Telemedicine Grants	DLT program helps fund distance learning and telemedicine services in rural areas to increase access to education, training, and health care resources that are otherwise limited or unavailable.	https://www.rd.usda.gov/programs- services/telecommunications-programs/distance- learning-telemedicine-grants

Massachusetts Community Health and Healthy Aging Funds - Determination of Need (DoN)	This program aims to enhance the capacity of multi-sector collaboratives to authentically engage residents and work together to remove barriers to health. Funding can establish training opportunities for local consumers regarding tracking medical records	https://mahealthfunds.org/
Residential Internet Retrofit Program	Initiative to equip public and affordable-housing units across the state with high-speed internet for current and future residents by upgrading in-building telecommunications wiring, equipment, and infrastructure within older housing developments.	https://broadband.masstech.org/retrofit
Lead for America - America Connection Corps	The nation's premier AmeriCorps service experience, advancing economic prosperity in rural and emerging communities. 15 American Connection Core Members are being recruited and placed in full-time, year-long fellowships to serve as Massachusetts-based, "boots-onthe-ground" support at local host site organizations to help with expanding broadband awareness and digital adoption.	https://www.americanconnectioncorps.org/
Connect Humanity	Digital equity connectivity plan 1. Community engagement, survey work and mapping, technical design, and financial modeling 2. Support community connectivity providers to get "investment ready" 3. Grants for enabling solutions- digital skills, relevant content, workforce development Promote a diverse broadband sector 1. Research on financing and operating models for community connectivity providers 2. Fund training to promote skills to build and maintain community broadband	https://connecthumanity.fund/

Centri-Tech foundation Digital Integrators Pilot	CBOs can use the funding to apply the Community Development Framework for Digital Advancement to local digital equity and inclusion efforts. Organizations can use the tool for program design, implementation, and evaluation.	https://www.digitalintegrators.org/
Program	toor for program design, implementation, and evaluation.	
Bank foundations	Bank foundations can provide funding for the following digital equity-related progrograms and services: broadband, hardware/devices, tech support, librarian assiatance, digital skills	https://www.digitalequity.us/resources/cra-funding- guide-for-digital-equity/
Patrick J. McGovern Foundation	This foundation has awarded new grants for innovative data- and Al-driven approaches that support digital transformation of health systems and healthcare across the globe.	https://www.mcgovern.org/grants/?exposed mf sear ch&exposed taxonomy focusarea%5B0%5D=22&exp osed grant approval date sort=date desc&FZEWGN afiqRBuoy=0dfbn.rMQwW&iwNIhrR=VSjdZGI9sn5FU H&mb nJCugrtsAIHc=%5BG3illaOL0vuBdj
Project UP by Comcast	Connectivity & adoption: Connecting people to the internet, technology, and resources needed to succeed in a digital world. Skills & creativity: Creating opportunities and new career pathways in media and technology and opening doors for new voices to be heard and stories to be shared. Entrepreneurism: Equipping entrepreneurs and small business owners with the skills, digital resources, and opportunities they need to thrive.	https://corporate.comcast.com/impact/project-up
AARP's Community Challenge grants	Part of the nationwide AARP Livable Communities initiative that helps communities become great places to live for residents of all ages. The program is intended to help communities make immediate improvements and jump-start long-term progress in support of residents of all ages.	https://www.aarp.org/livable- communities/community-challenge/

Massachusetts Councils on Aging (MCOA) Service Incentive Grant	These funds will be used to provide direct grants to COAs under the following three categories (capacity building, innovations, and improving access and inclusion), and twelve project areas that have been approved by EOEA.	https://mcoaonline.org/fy25-fdp-grants/
Point 32Health Foundation funding	Grants are available to nonprofits doing work in aging that addresses equity, especially in communities most affected by systemic barriers.	https://www.point32healthfoundation.org/funding- grants/how-we-fund/

Digital Equity Assets

Organizations

Organization	Municipal, Regional, or Statewide	Website
Alliance for Digital Equity	Regional	https://sites.google.com/view/alliancefordigitalequity/home
Big Brothers Big Sisters Franklin County	Regional	https://bbbs-fc.org/
Black Economic Alliance Foundation	National	https://foundation.blackeconomicalliance.org/
Center for New Americans	Regional	https://cnam.org/
Clinical Support Options	Regional	https://www.csoinc.org/
Community Action Pioneer Valley	Regional	https://www.communityaction.us/
Community Compact Cabinet	state	https://www.mass.gov/orgs/community-compact-cabinet
Community Foundation of Western Massachusetts	Regional	https://communityfoundation.org/
CSforMA, Inc.	State	https://www.csforma.org/
Executive Office of Elder Affairs (EOEA)	State	https://www.mass.gov/orgs/executive-office-of-elder-affairs
Community Health Center of Franklin County	Regional	https://www.chcfc.org/
Franklin County Sheriff's Office	Regional	https://www.fcso-ma.us/
Franklin Regional Council of Governments	Regional	https://frcog.org/

Greenfield Community College	Regional	https://www.gcc.mass.edu/
LifePath	Regional	https://lifepathma.org/
MA Healthy Aging Collaborative	State	https://mahealthyagingcollaborative.org/
Mass Association for Community Action	State	https://www.masscap.org/
Massachusetts Association for the Blind and Visually Impaired	State	https://www.mabvi.org/
Massachusetts Board of Library Commissioners	State	https://mblc.state.ma.us/
Massachusetts Business Alliance for Education	State	https://www.mbae.org/
Massachusetts Department of Elementary & Secondary Education	State	https://www.doe.mass.edu/
Massachusetts Education and Career Opportunities, Inc. (MassEdCO)	State	https://www.massedco.org/
Massachusetts League of Community Health Centers (CHC)	State	https://www.massleague.org/
Mass Computer Using Educators (MassCUE)	State	https://www.masscue.org/
New England Cable & Telecommunications Association (NECTA)	State	https://connectingne.com/
Salasin Project	Regional	https://salasinproject.org/

The Literacy Project	Regional	https://www.literacyproject.org/
Three county Continuum of Care (a project of Community Action Pioneer Valley via HUD)	Regional	https://www.threecountycoc.communityaction.us/
T-Mobile	State	https://www.t-mobile.com/
United Way of the Franklin and Hampshire Region	Regional	https://uw-fh.org/
Verizon	National	https://www.verizon.com/
Xfinity/Comcast	National	https://www.xfinity.com/overview

Municipal Libraries

Charlemont	Tyler Memorial Library	https://charlemont-ma.us/p/25/Tyler-Memorial-Library
Colrain	Griswold Memorial Library	https://colrain-ma.gov/p/27/Griswold-Memorial-Library
Leyden	Robertson Memorial Library	https://townofleyden.com/p/11/Library
New Salem	New Salem Public Library	https://www.newsalempubliclibrary.org/
Northfield	Dickinson Memorial Library	https://northfieldpubliclibrary.org/
Orange	Orange Public Libraries	https://orangelib.org/
Wendell	Wendell Free Library	https://www.wendellmass.us/departments/library/
Warwick	Free Public Library	https://warwickma.org/library/

Municipal Senior Centers/Councils on Aging

Charlemont	Senior Center/COA	https://charlemont-ma.us/p/28/Council-on-Aging
Colrain	COA	https://colrain-ma.gov/g/42/Council-on-Aging
Leyden	COA	https://www.townofleyden.com/p/21/Council-on-Aging
New Salem	COA	https://www.newsalemma.org/council-aging
Northfield	Senior Center/COA	https://www.northfieldma.gov/senior-center
Orange	COA	https://www.townoforange.org/219/Council-on-Aging
Wendell	Senior Center/COA	https://www.wendellmass.us/council-on-aging/
Warwick	COA	https://warwickma.org/council-on-aging/

Municipal Light Plants

Charlemont	Charlemont Connect	https://charlemontconnect.org/
Colrain	Colrain Broadband	https://colrain-ma.gov/p/95/Colrain-Broadband
Leyden	Leyden Broadband/MLP	https://www.townofleyden.com/p/105/BroadbandMLP
New Salem	New Salem Broadband	https://www.newsalemma.org/broadband-committee
Wendell	Wendell Net	https://www.wendellmass.us/departments/wendell-net/