

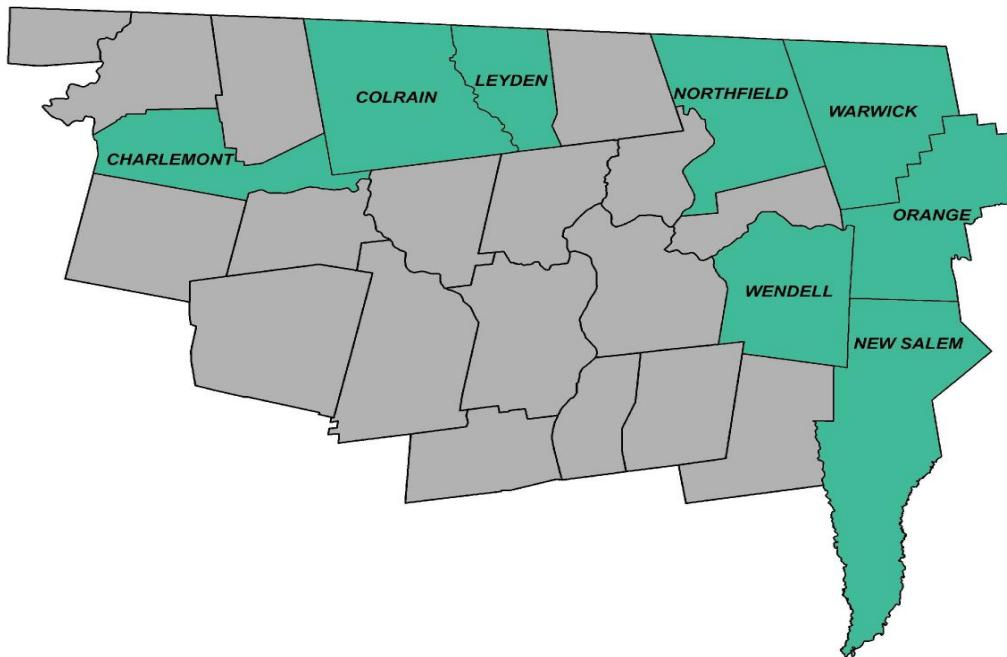
## I. Introduction

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 our communities, the COVID-19 pandemic exposed the digital divide that continues to exist. 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 long-time disparity became evident.

As with heat, electricity and water, in-home broadband access is the fourth utility that must be available for students to learn and thrive, many adults to do their jobs, 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 the 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, as well as one town with fixed wireless), and capacity at the municipal level for assistance. This digital equity plan examines the current areas of the digital divide in the 8 rural communities, and explores options to provide digital equity for all residents.

*Figure 1: Eight municipalities in Franklin County included in the 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 more vital 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.”<sup>1</sup>

### Digital Inclusion

In order to bridge the digital divide, communities, organizations, governments and individuals must develop and implement projects and programs that will ensure all residents within communities, including the most disadvantaged, have both access to and the tools necessary to use the appropriate information technology to thrive in the 21<sup>st</sup> 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;

---

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

4. Quality technical support; and
5. Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.<sup>2</sup>

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.

## 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 vital for civic and cultural participation, employment, lifelong learning, and access to essential services.<sup>3</sup>

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.
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.

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 21<sup>st</sup> century expectations of a robust and thriving community as residents continue to face a disparity in reliable access, affordability, and digital literacy.

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 8 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 or federal programs to support digital equity activities.

---

<sup>2</sup> NDIA Definitions

<sup>3</sup> NDIA Definitions

## 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 a community meeting, and focus groups.

### Vision

*“Our vision is for the residents of our 8 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 reach 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 8 towns has the opportunity to learn the skills needed to effectively use 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 8 towns.

## II. Planning Process:

### Digital Equity Steering Committee

The Digital Equity Steering Committee (Steering Committee) is a team of community members representing each of the 8 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. We pursued multiple avenues of outreach and engagement to better understand the current conditions relating to digital equity. The Steering Committee met four times over the course of the planning project. 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 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. Finally, the 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)<sup>4</sup> 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 of Councils on Aging. There were 177 responses from residents of the 8 towns.

## III. 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 8 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 closely with the MBI Last Mile program to bring broadband to the towns.

---

<sup>4</sup> 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.

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, 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. 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 towns participating in the Regional Plan 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.<sup>5</sup>

*Table 1: Community Profile<sup>6</sup>*

Municipality	Population	Median Household Income	Poverty Rate
<b>Charlemont</b>	1,064	55,603	13.1%
<b>Colrain</b>	1,740	81,316	6.2%
<b>Leyden</b>	640	97,500	9.5%
<b>New Salem</b>	1,074	75,951	10.1%
<b>Northfield</b>	2,871	94,775	7.2%
<b>Orange</b>	7,584	56,000	20.5%
<b>Warwick</b>	814	89,643	6.7%
<b>Wendell</b>	847	66,815	15.1%
<hr/>			
<b>Franklin County</b>	70,980	70,383	12.0%
<b>Massachusetts</b>	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.<sup>7</sup> Among 8 towns in this Plan, the median household income 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

<sup>5</sup> 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.

<sup>6</sup> Individual community profiles are included in the Appendix

<sup>7</sup> 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.

household income and the poverty rate between communities, income data suggests the high potential for affordability inequities for the residents of these towns.

### Impacted Populations

The digital divide impacts the most vulnerable populations in a community. Identifying these vulnerable populations, and focusing on their specific needs centered on digital inclusion, 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 of vulnerable populations enhances a community's social cohesion and creates a more equitable, inviting and inclusive community. In rural communities like the 8 towns represented in this plan, digital equity will sustain and increase the resilience and viability of these towns, helping them thrive in the 2st century and beyond.

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 Population Data*

Region	Civilian veterans	Population with a disability	Speak a language besides English at home	People of Color	Households with Children	Residents 60+
Region	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 8-town region is significantly higher than the state average, providing unique 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 also provides 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, only looks to be increasing. Educators across the eight towns expressed the need for equity in access digital education tools both in school and at home.

**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%) 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.

**Rural<sup>8</sup>:** 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.<sup>9</sup> Across the country, rural communities and their residents face a growing risk of being left-behind in a world and an economy that are

---

<sup>8</sup> 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.

<sup>9</sup> “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>)

increasingly becoming more digital. The digital divide exacerbates the many issues facing rural residents including economic, social, and political isolation and marginalization.

Rural residents in the eight Franklin County towns are not immune to these issues.<sup>10</sup> 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. Participating in local civic life was not the only issue, as access many vital things like healthcare, also require high-speed internet access and the knowledge of using a computer and the internet. This was a single example, but highlighted the many disparities that continue to exist in rural communities like those in Franklin County.

## 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%
8 Town Regional	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 unemployment rate across the region is higher than both the state and the county, while the labor force participation rate in the 8 towns is significantly lower than both. The percentage of employees working from home is also lower than both the county and the state. Lack of access to affordable internet and devices likely play a role in residents' ability to work remotely, or at least have the option to do so. Lack of digital literacy skills negatively impacts residents' 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.<sup>11</sup>

<sup>10</sup> 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/>.

## IV. 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 affordable connection, access to devices, and limited digital literacy, lead to digital inequity and exacerbate the digital divide. Overall, the 8 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.

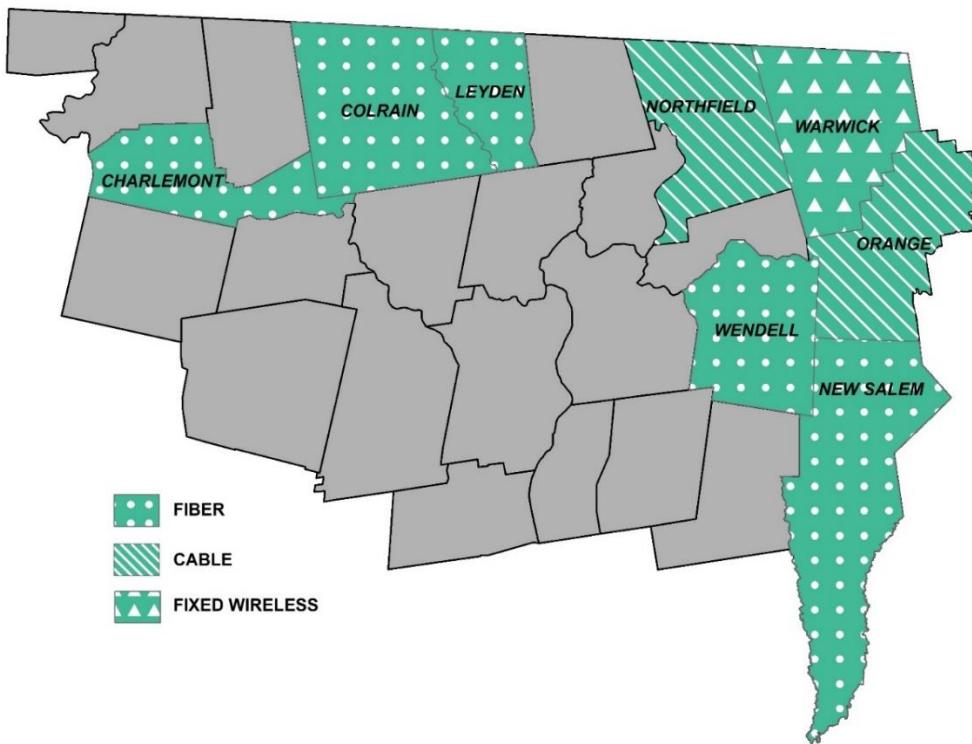
### Internet Connection

Across the eight municipalities, various speed and connection options exist, ranging from fiber optic, cable, and fixed wireless. Satellite and DSL are also available in communities. Fiber connection is available in five of the eight towns in this plan. Cable connection is the primary source of broadband in two towns. Warwick relies primarily on a fixed wireless system, although cable internet service has been increasing recently

*Figure 2: Types of broadband available across eight towns*

---

<sup>11</sup> “Closing the Digital Skill Divide” (<https://nationalskillscoalition.org/resource/publications/closing-the-digital-skill-divide/>)



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. The FCC has recently changed the definition of “broadband” to mean internet speeds of 100Mbps/20Mbps or more. Further, the FCC defines the different levels of connection: whether a location is *Served* (has a broadband connection), *Underserved* (has an internet connection, but with speeds of less than 100 Mbps/20Mbps), or *Unserved* (internet connection is 25Mbps/10Mbps or less).<sup>12</sup>

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)
<b>Charlemont</b>	0.3%	6.4%	610
<b>Colrain</b>	0.0%	4.6%	887
<b>Leyden</b>	0.3%	10.4%	357
<b>New Salem</b>	0.6%	4.4%	499
<b>Northfield</b>	0.6%	4.8%	1400
<b>Orange</b>	0.1%	1.3%	3093
<b>Warwick</b>	22.1%	77.2%	439
<b>Wendell</b>	0.7%	6.2%	453

12

Source: *Source: FCC National Broadband Map, June 2023*<sup>13</sup>

Table 4 shows that while there are few underserved locations (besides in Warwick) in this region, unserved locations remain an issue. This is especially true in Leyden and Warwick. As the state begins to enact the BEAD Challenge process, this information regarding unserved and underserved locations, should be used by communities as a baseline for broadband connection needs. It should not be assumed that this data is 100% accurate, and the BEAD Challenge will provide municipalities with the opportunity to improve the accuracy of this data.<sup>14</sup>

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

Having a reliable, broadband internet connection is necessary for many vital activities in the 21<sup>st</sup> century, from filling out medical forms to interviewing for a new job 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 higher slightly than both the county and the state.<sup>15</sup>

One issue that was repeated at all community meetings, and subsequent discussions with town officials, was the ability to connect households that may sit alongside a wired connection,

---

<sup>13</sup> 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>)

<sup>14</sup> 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>

<sup>15</sup> 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.

although the connection does not go up their driveway. For many of these residents, the cost to make that final connection is prohibitive. These households are considered “served,” but are still unable to access broadband.

## Internet Speeds

Table 5: Speed Test Data

Speed Ranges	Fiber Towns (2,132 tests)	Non-Fiber Towns (1,850 tests)
Speeds < 25 x 3 Mbps	67	3%
Speeds < 50 x 10 Mbps	138	6%
Speeds < 100 x 20 Mbps	22	1%
Speeds at least 25 x 3 Mbps	1911	90%
Speeds at least 50 x 10 Mbps	1692	79%
Speeds at least 100 x 20 Mbps	1228	58%
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) upload speed. This definition was recently updated 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.) However, speed-test data can provide a general understanding of how well a community is reaching broadband speeds. Overall, the data for the 8 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.” However, a quarter indicated their internet was “Not Good Enough.” This difference was born out during community meetings, where the majority of participants indicated their internet was good enough, while some noted issues with speed and connection issues.

The FCC does allow a Challenge process to ensure accuracy.<sup>16</sup> As part of the upcoming Broadband Equity, Access, and Deployment (BEAD) Program, Massachusetts will be coordinating a challenge process to help better ensure the accuracy of the coverage data.<sup>17</sup> This will allow municipalities to better understand where there is limited or poor broadband connection within town.

## Internet Providers & and 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.<sup>18</sup> 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 8 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.

*Table 5: Broadband advertised speeds and costs for 8 towns*

### *Fiber*

Provider	Cost*	Max speed	
<b>Charlemont (Whip City Fiber) – Residential Internet</b>	\$79.99	1000Mbps/1 Gigabit	Charlemont's own network; No contracts; No data caps; Equipment and Wi-Fi included; town subsidy towards install
<b>Colrain (Whip City Fiber) – Residential Internet</b>	\$89.00	1000Mbps/1 Gigabit	Colrain's own network; No contracts; Equipment and Wi-Fi included; Free standard install
<b>Leyden (Whip City Fiber) – Residential Internet</b>	\$85.00	1000Mbps/1 Gigabit	Leyden's own network; No contracts; Equipment

<sup>16</sup> To learn more about the FCC map and how to file challenges, see: <https://help.bdc.fcc.gov/hc/en-us/sections/10467243210651-Consumers-Individuals>

<sup>17</sup> More information on the Massachusetts BEAD Challenge is available on the MBI website (<https://broadband.masstech.org/bead-challenge-process>). BEAD Challenge Process estimated to begin June 2024.

<sup>18</sup> Broadband Pricing: What Consumer Reports Learned from 22,000 Internet Bills (<https://advocacy.consumerreports.org/wp-content/uploads/2022/11/FINAL.report-broadband.november-17-2022-2.pdf>)

			and Wi-Fi included; Free standard install
<b>New Salem (Whip City Fiber)</b>			
Gigabit Residential Internet	\$85.00 (\$75 for internet; \$10 for MLP fee)	1000Mbps/1 Gigabit	No contracts; no date caps; equipment and wi-fi included; custom install at additional cost
25 Mbps Residential Internet	\$69.00 (\$59 for internet; \$10 for MLP fee)	25 Mbps/25 Mbps	No contracts; no date caps; equipment and wi-fi included; custom install at additional cost

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

### *Cable Providers*

<b>Spectrum</b>	<b>Cost*</b>	<b>Max Speeds</b>	
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			
<b>Comcast Plans</b>	<b>Monthly Cost*</b>	<b>Max Advertised Speeds (Mbps)</b>	
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 8-town 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. The other 5 communities all have fiber connections and internet service provided through Whip City Fiber, based in Westfield, Massachusetts.

The Table 5 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 provided 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 range 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 have 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. One program is the Affordable Connectivity Program (ACP), a benefit program run by the Federal Communications Commission. The goal of the program was 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.<sup>19</sup> The FCC collected data on which households are eligible and how many are enrolled in the program. Among the 8 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.<sup>20</sup> 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 was projected to run through May 2024. This date is an estimate and may change. Once the program ends, households will no longer receive the ACP discount on their monthly internet bill.<sup>21</sup> 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 8 towns in this Region, 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 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.”<sup>22</sup>

## Devices 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

---

<sup>19</sup> For more information on qualification, see <https://www.affordableconnectivity.gov/do-i-qualify/>.

<sup>20</sup> ACP Enrollment & Claims Tracker (<https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>)

<sup>21</sup> For more information on ACP and its closing, see <https://www.affordableconnectivity.gov/>

<sup>22</sup> Massachusetts State Digital Equity Plan. Accessed at [https://broadband.masstech.org/sites/default/files/2024-03/MA%20SDEP%20FINAL\\_3.26.24.pdf](https://broadband.masstech.org/sites/default/files/2024-03/MA%20SDEP%20FINAL_3.26.24.pdf).

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

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%

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 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.

*Source: Massachusetts Statewide Digital Equity Survey*

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 Not Easy or Hard to use the internet for Health or Telehealth Services, 31% said it was Not Easy or Hard to access Transportation Information, and 32% said it was 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 both 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.

### **Education**

The 8-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. One 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.

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

### **Digital Assets<sup>23</sup>**

---

<sup>23</sup> See Appendix for list of local and regional 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.

For example, public libraries are an important source for digital equity, providing free onsite device usage, technical assistance, as well as other benefits like free Wi-Fi. These include one on one technology assistance, the ability to rent out mobile Wi-Fi hotspots, and numerous e-resources (like Canopy and Libby). 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 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.

#### POP OUT BOX

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>)

#### Analysis digital assets in Franklin County

Assets and Strengths	Needs and Challenges
<ul style="list-style-type: none"><li>• Local services like hotspots to borrow from the library and free Wi-Fi within all three libraries</li><li>• Local services like the new Tech Drop-In program and computer training class at the Senior Center</li><li>• Regional networks and support services like the <a href="#">Franklin County Resource Network</a>, administered by <a href="#">Community Action Pioneer Valley</a>.</li><li>• Regional services through the <a href="#">413Cares.org/Digital Equity</a> (working with the <a href="#">Alliance for Digital Equity</a>)</li><li>• Digital literacy programs for seniors, including the <a href="#">Cyber Senior Program</a> through the <a href="#">Greenfield Community College</a>.</li><li>• Availability of broadband in most communities in Franklin County through the MBI <a href="#">Last Mile program</a>.</li><li>• MBI, as the State Broadband Office, will work with state agencies and</li></ul>	<ul style="list-style-type: none"><li>• Staff and programs are heavily grant dependent. Lack staff and resources to provide services or other programs</li><li>• Reliance on volunteers</li><li>• Difference in bandwidth quality</li><li>• Gaps in cell service due to varied geography</li><li>• Reliance on federal and state funding due to the COVID pandemic to purchase devices and provide digital equity services.</li><li>• Reliance on external funding sources</li><li>• Need for staff/capacity</li><li>• One time funding</li></ul>

<p>departments to optimize funding sources and coordinate across the state (for example, working closely with local governments and agencies, and deployment of the BEAD Challenge process)</p> <ul style="list-style-type: none"><li>• Create actual asset map so people know where to go for services (ex. <a href="#"><u>Seattle-King County Digital Equity Asset Map</u></a>)</li><li>• Having an individual or organization to coordinate between organizations (for example, coordinating digital literacy programs between libraries)</li><li>• Coordination through organizations like <a href="#"><u>CWMARS</u></a></li></ul>	
--	--

## V. Recommendations and Action Plan

The following section provides a plan of action for the 8 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 community. Certain strategies and actions were influenced by current projects and programs, (like the work being done through Councils on Aging and Senior Centers, as well as through Municipal Light Plants), while others are based on community feedback, best practices, and evolving technology trends. 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
<b>Promote and support BEAD Challenge Program</b>	Towns	FRCOG; MBI; Alliance for Digital Equity	None	Short-Term
<b>Connect households not currently able to access fiber network</b>	Fiber towns/local Municipal Light Plants	FRCOG; MBI	BEAD Challenge Funding	Short-Medium Term
<b>Expand Library Mobile Hotspot Program</b>	Municipal libraries	Towns; Alliance for Digital Equity	Municipal Digital Equity Implementation Program; Grant funding from Massachusetts Libraries; Town budget for long-term maintenance	Short Term

<b>Explore public Wi-Fi locations and implementation</b>	Towns	Alliance for Digital Equity	Community Space Public Wi-Fi Program; Municipal Digital Equity Implementation	Short-Medium Term
<b>Distribute digital devices (i.e. laptops or tablets) distribution</b>	Alliance for Digital Equity	Towns; Senior Center; Public Libraries	MBI Digital Equity Implementation; Executive Office of Elder Affairs Grant Funding; STEM grants through Massachusetts Department of Elementary and Secondary Education	Short Term
<b>Negotiate lower internet subscription rates with local ISPs or investigate the possibility of direct subsidies.</b>	Cable towns (Cable Committees)	Alliance for Digital Equity	None	Medium - Long Term
<b>Create and disseminate outreach materials for internet subsidy programs and low-cost internet plans.</b>	Towns	Alliance for Digital Equity; FRCOG	MBI Digital Equity Implementation Program; Town budget; District Local Technical Assistance	Short-Long Term
<b>Explore and promote options for affordable, quality data plans for mobile phones and more robust and reliable cell service</b>	Towns	Alliance for Digital Equity	None	Medium-Term

## 2. Digital Literacy & Navigation

Strategy	Lead Organization	Supporting Partners	Potential Funding Sources	Implementation Target
<b>Support and promote current digital literacy programs</b>	Towns	Library, Senior Center, GCC	MBI Digital Equity Implementation Fund	Short-Term
<b>Develop digital literacy classes/workshop programs</b>	Alliance for Digital Equity GCC – Cyber Seniors	Towns	MBI Digital Equity Implementation	Short-term
<b>Survey the community to understand the top digital literacy needs and interests (basic computer skills, cybersecurity, public benefit applications, telemedicine, etc.).</b>	Towns; FRCOG	Alliance for Digital Equity	MBI Digital Equity Implementation; District Local Technical Assistance; Town budgets	Short-Term
<b>Support cyber security/safety training for all students and families in school districts</b>	Various School Districts (IT departments)	Northwestern DA Office (potential)	Municipal Local Cyber Security Grant Program; STEM grants through Massachusetts Department of Elementary and Secondary Education	Short-Medium Term
<b>Evaluate town websites and communication materials to ensure they are universally accessible and usable on all internet devices</b>	Towns	FRCOG; Alliance for Digital Equity	Municipal Digital Equity Implementation Program; Community Compact IT Grant	Short-Term
<b>Secure private spaces for assisted internet access</b>	Towns (senior centers/ Councils on Aging; libraries)	Towns (administration); FRCOG; Alliance for Digital Equity	Municipal Digital Equity Implementation	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	Towns	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.	Towns	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, like BEAD Challenge funding; Executive Office of Elder Affairs grants, or funding through the Massachusetts Libraries	Short-Long Term
Promote and support local and regional organizations providing digital equity	Towns	Libraries; senior centers/COAs; Alliance for Digital Equity; FRCOG	Various (MBI grant funds, Executive Office of Elder Affairs grants, library grants, etc.)	Short-Long Term

## V. Appendices

### Acknowledgements

The 8-Town Regional Digital Equity Plan was made possible with support from the Massachusetts Broadband Institute (MBI) and Massachusetts Technology Collaborative (MassTech). This project was funded by MBI at the MassTech Collaborative through the Municipal Digital Equity Planning Program. Funding was provided by Massachusetts American Rescue Plan Act (ARPA) state Fiscal Recovery Funds.

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 MLP manager
- MaryEllen Kennedy, New Salem MLP Manager
- 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 MLP Manager

#### ***Consultant Team***

Jessica Atwood, Director of Planning, Franklin Regional Council of Governments

Ted Harvey, Senior Economic Development Planner, Franklin Regional Council of Governments

Mark Maloni, Communications Manager, Franklin Regional Council of Governments

Nicole Krantz, Planning & Digital Equity Intern, Franklin Regional Council of Governments

## COMMUNITY PROFILES

### Charlemont

#### POPULATION

##### **Population**

1,064

##### **Poverty Rate**

13.1%

##### **Population density**

Per square mile

40.8

#### HOUSING

##### **Total housing units**

647

##### **% Children Age 18 and under**

10.5%

##### **% Occupied housing**

83.5%

##### **% Older Adults Age 65 and over**

35.7%

##### **% Owner-occupied**

79.3%

##### **Median age**

56.7

##### **% Renter-occupied**

20.7%

##### **% Black, Indigenous, people of color**

7.8%

#### COMPUTERS

##### **% Households with no computing device**

Desktop, laptop, tablet, or phone

5.9%

##### **% who are Veterans**

9.2%

#### BROADBAND

##### **% Households without an internet**

##### **subscription**

12.6

##### **% with disabilities**

Physical, mental, intellectual, and developmental

13.4%

##### **Primary service type**

Fiber connection

##### **Primary provider**

Charlemont Connect (Whip City Fiber)

#### INCOME

##### **Median household income**

\$55,603

##### **Source: 2022 American Community Survey**

##### **5-Year Estimates**

## Colrain

### 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, tablet, or phone

12.5%

### BROADBAND

#### % Households without an internet subscription

4.7

#### Primary service type

Fiber connection

#### Primary provider

Colrain Broadband (Whip City Fiber)

#### Source: 2022 American Community Survey

#### 5-Year Estimates

## Leyden

### 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, tablet, or phone

8.6%

### BROADBAND

#### % Households without an internet subscription

4.3%

#### Primary service type

Fiber connection

#### Primary provider

Leyden Broadband (Whip City Fiber)

### Source: 2022 American Community Survey

### 5-Year Estimates

## New Salem

### 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, tablet, or phone  
4.0%

### **BROADBAND**

#### **% Households without an internet subscription**

4.6%

#### **Primary service type**

Fiber connection

#### **Primary provider**

New Salem Broadband (Whip City Fiber)

### **Source: 2022 American Community Survey**

#### **5-Year Estimates**

## Northfield

### 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, tablet, or phone  
8.3%

### BROADBAND

#### % Households without an internet subscription

6.7%

#### Primary service type

Cable

#### Primary provider

Comcast/Xfinity

**Source: 2022 American Community Survey**

**5-Year Estimates**

## Orange

### POPULATION

#### **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, tablet, or phone

10.2%

### BROADBAND

#### **% Households without an internet subscription**

3.7%

#### **Primary service type**

Cable

#### **Primary provider**

Charter/Spectrum

### **Source: 2022 American Community Survey**

#### **5-Year Estimates**

## Warwick

### 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, tablet, or phone  
6.3%

### BROADBAND

#### % Households without an internet subscription

8.6%

#### Primary service type

Wireles

#### Primary provider

Wireless Warwick Broadband

### Source: 2022 American Community Survey

#### 5-Year Estimates

## Wendell

### 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, tablet, or phone  
10.0%

### BROADBAND

#### % Households without an internet subscription

11.4%

#### Primary service type

Wendell Net

#### Primary provider

Whip City Fiber

**Source: 2022 American Community Survey**

**5-Year Estimates**

## 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.	<a href="https://www.internetforall.gov/program/digital-equity-act-programs#">https://www.internetforall.gov/program/digital-equity-act-programs#</a>
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.	<a href="https://www.internetforall.gov/program/digital-equity-act-programs#">https://www.internetforall.gov/program/digital-equity-act-programs#</a>
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.	<a href="https://broadband.masstech.org/digital-equity-implementation">https://broadband.masstech.org/digital-equity-implementation</a>
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.	<a href="https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program">https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program</a>
Community Compact Municipal Fiber Program	1. Implementation of fiber optic networks that connect remote municipal assets to improve municipal operations and/or improve disaster recovery and resiliency. 2. One time capital needs- fiber optic cabling, hardware, software and implementation services.	<a href="https://www.mass.gov/municipal-fiber-grant-program">https://www.mass.gov/municipal-fiber-grant-program</a>
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.	<a href="https://broadband.masstech.org/gap-networks-grant-program">https://broadband.masstech.org/gap-networks-grant-program</a>
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.	<a href="https://www.fcc.gov/general/e-rate-schools-libraries-usf-program">https://www.fcc.gov/general/e-rate-schools-libraries-usf-program</a>

Lifeline program for Low-income consumers	<ol style="list-style-type: none"> <li>1. Discount on phone or broadband service for qualifying low-income consumers.</li> <li>2. Promote access to Wi-Fi enabled devices and hotspot functionality to close the homework gap</li> </ol> <p>Note: A family that qualifies for Lifeline also qualifies to receive EBB</p>	<a href="https://www.fcc.gov/lifeline-consumers">https://www.fcc.gov/lifeline-consumers</a>
Affordable Connectivity Program (ACP)	<p>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.</p> <ol style="list-style-type: none"> <li>1. \$30 discount per month for internet service for eligible households; \$75 discount for qualifying Tribal lands</li> <li>2. One time \$100 discount to purchase a laptop, desktop computer, or tablet if the contribute between \$10 to \$50 toward purchase price.</li> </ol>	<a href="https://www.fcc.gov/ACP">https://www.fcc.gov/ACP</a>
Affordable Connectivity Program (ACP) Outreach Grant	<p>The ACP Outreach Grant Program provides eligible governmental and non-governmental entities with the funding and resources needed to increase awareness of and participation in the ACP among those eligible households most in need of affordable connectivity.</p>	<a href="https://www.fcc.gov/ACP-grants">https://www.fcc.gov/ACP-grants</a>
Municipal Cybersecurity Awareness Grant Program	<p>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.</p> <p>This is a competitive grant program focused on driving innovation and transformation at the local level via investments in technology.</p>	<a href="https://www.mass.gov/info-details/about-the-municipal-cybersecurity-awareness-grant-program#how-to-apply-">https://www.mass.gov/info-details/about-the-municipal-cybersecurity-awareness-grant-program#how-to-apply-</a>
Community Compact IT Grant Program	<ol style="list-style-type: none"> <li>1. Grant to support implementation of innovative and transformative IT projects by funding one-time capital needs- tech infrastructure and/or purchases of equipment/ software.</li> <li>2. One-time planning, design, installation, implementation, and intial training</li> </ol>	<a href="https://www.mass.gov/community-compact-it-grant-program">https://www.mass.gov/community-compact-it-grant-program</a>
Efficiency and Regionalization (E&R) Grant Program	<p>Provide financial support for governmental entities (Planning and implementation activities are eligible)</p>	<a href="https://www.mass.gov/efficiency-regionalization-grant-program">https://www.mass.gov/efficiency-regionalization-grant-program</a>

Telecommunications Industry Registered Apprenticeship Program (TIRAP)	<p>a competency-based apprenticeship aimed at growing the productivity of the workforce as directly as possible.</p> <ol style="list-style-type: none"> <li>1. Career development of telecommunications workforce through cash and in-kind support.</li> <li>2. Funding to design curricula and deliver training to develop qualified applicants for placement in middle- to high-skilled jobs</li> <li>3. To target veterans, transitioning service members, military spouses, women, people of color, unemployed, underemployed, incumbent workers, and underrepresented populations.</li> </ol>	<a href="https://www.tirap.org/">https://www.tirap.org/</a>
Economic Adjustment Assistance Grant	<p>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.</p>	<a href="https://www.eda.gov/economic-adjustment-assistance">https://www.eda.gov/economic-adjustment-assistance</a>
Local Planning and Technical Assistance Programs	<p>Planning and local technical assistance investments to support economic development, foster job creation, and attract private investment in economically distressed areas.</p>	<a href="https://www.eda.gov/sites/default/files/filebase/files/programs/eda-programs/FY21-23-Planning-and-LTA-NOFO_FINAL.pdf">https://www.eda.gov/sites/default/files/filebase/files/programs/eda-programs/FY21-23-Planning-and-LTA-NOFO_FINAL.pdf</a>
Community Development Block Grants (CDBG)	<ol style="list-style-type: none"> <li>1. Conduct broadband needs assessment</li> <li>2. Install wiring, fiber optic cables, and permanently affixed equipment</li> <li>3. Provide digital literacy classes.</li> </ol>	<a href="https://www.mass.gov/info-details/community-development-block-grant-cdbg#how-to-apply">https://www.mass.gov/info-details/community-development-block-grant-cdbg#how-to-apply</a>
Workforce Innovation and Opportunity Act (WIOA)	<ol style="list-style-type: none"> <li>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.</li> </ol> <p>Enhance instruction for English learners with digital resources</p>	<a href="https://www.dol.gov/agencies/eta/grants/apply">https://www.dol.gov/agencies/eta/grants/apply</a>
English Language Acquisition State Grants		<a href="https://www2.ed.gov/about/office/list/oese/oss/technicalassistance/elstar-user-guide-state-support-network.pdf">https://www2.ed.gov/about/office/list/oese/oss/technicalassistance/elstar-user-guide-state-support-network.pdf</a>
CommCorps YouthWorks Funding	<p>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.</p>	<a href="https://commcorp.org/program/youthworks/">https://commcorp.org/program/youthworks/</a>
Early Intervention Program for Infants and Toddlers with Disabilities	<p>Assist with implementation of statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and extending early intervention programs</p>	<a href="https://www2.ed.gov/fund/data/award/idea/index.html">https://www2.ed.gov/fund/data/award/idea/index.html</a>
Determination of Need (DoN)	<p>The goal of DoN and the framework for analysis by the Department of Public Health is to promote</p>	<a href="https://www.mass.gov/determination-of-need-don">https://www.mass.gov/determination-of-need-don</a>

USDA Community Connect Program	<p>population health and increased public health value.</p> <p>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.</p>	<p><a href="https://www.rd.usda.gov/community-connect">https://www.rd.usda.gov/community-connect</a></p>
<p>USDA Telecommunications Infrastructure Loans &amp; Loan Guarantees</p> <p>High Cost Program (including Connect America Fund, Rural Digital Opportunity Fund and 5G Fund)</p>	<p>Rural communities- extend access where broadband service is least likely commercially available</p> <p>This program provides financing for the construction, maintenance, improvement and expansion of telephone service and broadband in rural areas.</p>	<p><a href="https://www.rd.usda.gov/programs-services/telecommunications-programs/telecommunications-infrastructure-loans-loan-guarantees">https://www.rd.usda.gov/programs-services/telecommunications-programs/telecommunications-infrastructure-loans-loan-guarantees</a></p> <p><a href="https://www.usac.org/high-cost/">https://www.usac.org/high-cost/</a></p>
USDA Distance Learning & Telemedicine Grants	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.	
YouthWorks Funding	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.	<p><a href="https://www.rd.usda.gov/programs-services/telecommunications-programs/distance-learning-telemedicine-grants">https://www.rd.usda.gov/programs-services/telecommunications-programs/distance-learning-telemedicine-grants</a></p> <p><a href="https://commcorp.org/program/youthworks/">https://commcorp.org/program/youthworks/</a></p>
<p>Massachusetts Community Health and Healthy Aging Funds - Determination of Need (DoN)</p> <p>Residential Internet Retrofit Program</p>	<p>Youth employment program that supports skills training for youth up to age 25 from households earning less than 200% of the federal poverty rate.</p> <p>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</p> <p>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.</p>	<p><a href="https://mahealthfunds.org/">https://mahealthfunds.org/</a></p> <p><a href="https://broadband.masstech.org/retrofit">https://broadband.masstech.org/retrofit</a></p>

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-on-the-ground" support at local host site organizations to help with expanding broadband awareness and digital adoption.	<a href="https://www.americanconnectioncorps.org/">https://www.americanconnectioncorps.org/</a>
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	<a href="https://connecthumanity.fund/">https://connecthumanity.fund/</a>
Centri-Tech foundation	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	
Digital Integrators Pilot Program Bank foundations	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. Bank foundations can provide funding for the following digital equity-related programs and services: broadband, hardware/devices, tech support, librarian assistance, digital skills	<a href="https://www.digitalintegrators.org/">https://www.digitalintegrators.org/</a>
Patrick J. McGovern Foundation	This foundation has awarded new grants for innovative data- and AI-driven approaches that support digital transformation of health systems and healthcare across the globe.	<a href="https://www.digitalequity.us/resources/cra-funding-guide-for-digital-equity/">https://www.digitalequity.us/resources/cra-funding-guide-for-digital-equity/</a>
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	<a href="https://www.mcgovern.org/grants/?exposed_mf_search&amp;exposed_taxonomy_focusarea%5B0%5D=22&amp;exposed_grant_approval_date_sort=date_desc&amp;FZEWGNafiqRBuoy=0dfbn.rMQwW&amp;iwNihrR=VSjdZGI9sn5FUH&amp;mb_nJCugrtsAIHc=%5BG3illaOL0vuBdi">https://www.mcgovern.org/grants/?exposed_mf_search&amp;exposed_taxonomy_focusarea%5B0%5D=22&amp;exposed_grant_approval_date_sort=date_desc&amp;FZEWGNafiqRBuoy=0dfbn.rMQwW&amp;iwNihrR=VSjdZGI9sn5FUH&amp;mb_nJCugrtsAIHc=%5BG3illaOL0vuBdi</a> <a href="https://corporate.comcast.com/impact/project-up">https://corporate.comcast.com/impact/project-up</a>

small business owners with the skills, digital resources, and opportunities they need to thrive.



## Digital Equity Assets

Organization Name	Municipal, Regional, statewide	Website
Alliance for Digital Equity	Regional	<a href="https://sites.google.com/view/alliancefordigitalequity/home">https://sites.google.com/view/alliancefordigitalequity/home</a>
Big Brothers Big Sisters Franklin county	Regional	<a href="https://bbbs-fc.org/">https://bbbs-fc.org/</a>
Black Economic Alliance Foundation	National	<a href="https://foundation.blackeconomicalliance.org/">https://foundation.blackeconomicalliance.org/</a>
Center for New Americans	Regional	<a href="https://cnam.org/">https://cnam.org/</a>
GCET	Municipal	<a href="https://www.gcet.net/">https://www.gcet.net/</a>
Various municipalities	Municipal	
Clinical Support Options	Regional	<a href="https://www.csoinc.org/">https://www.csoinc.org/</a>
Community Action Pioneer Valley	Regional	<a href="https://www.communityaction.us/">https://www.communityaction.us/</a>
Community Compact Cabinet	state	<a href="https://www.mass.gov/orgs/community-compact-cabinet">https://www.mass.gov/orgs/community-compact-cabinet</a>
Community Foundation of Western Massachusetts	Regional	<a href="https://communityfoundation.org/">https://communityfoundation.org/</a>
CSforMA, Inc.	state	<a href="https://www.csforma.org/">https://www.csforma.org/</a>
Executive Office of Elder Affairs (EOEA)	state	<a href="https://www.mass.gov/orgs/executive-office-of-elder-affairs">https://www.mass.gov/orgs/executive-office-of-elder-affairs</a>
Community Health Center of Franklin county	Regional	<a href="https://www.chcfc.org/">https://www.chcfc.org/</a>
Franklin county Sheriff's Office	Regional	<a href="https://www.fcsu-ma.us/">https://www.fcsu-ma.us/</a>
Franklin Regional Council of Governments	Regional	<a href="https://frcog.org/">https://frcog.org/</a>
Municipal COA/senior centers	Municipal	
Greenfield Community College	Regional	<a href="https://www.gcc.mass.edu/">https://www.gcc.mass.edu/</a>
Municipal Public Library	Municipal	
LifePath	Regional	<a href="https://lifepathma.org/">https://lifepathma.org/</a>
MA Healthy Aging Collaborative	state	<a href="https://mahealthyagingcollaborative.org/">https://mahealthyagingcollaborative.org/</a>
Mass Association for Community Action	state	<a href="https://www.masscap.org/">https://www.masscap.org/</a>
Massachusetts Association for the Blind and Visually Impaired	state	<a href="https://www.mabvi.org/">https://www.mabvi.org/</a>
Massachusetts Board of Library Commissioners	state	<a href="https://mblc.state.ma.us/">https://mblc.state.ma.us/</a>

Massachusetts Business Alliance for Education	state	<a href="https://www.mbae.org/">https://www.mbae.org/</a>
Massachusetts Department of Elementary & Secondary Education	state	<a href="https://www.doe.mass.edu/">https://www.doe.mass.edu/</a>
Massachusetts Education and Career Opportunities, Inc. (MassEdCO)	state	<a href="https://www.massedco.org/">https://www.massedco.org/</a>
Massachusetts League of Community Health Centers (CHC)	state	<a href="https://www.massleague.org/">https://www.massleague.org/</a>
Mass Computer Using Educators (MassCUE)	state	<a href="https://www.masscue.org/">https://www.masscue.org/</a>
New England Cable & Telecommunications Association (NECTA)	state	<a href="https://connectingne.com/">https://connectingne.com/</a>
Salasin Project	Regional	<a href="https://salasinproject.org/">https://salasinproject.org/</a>
The Literacy Project	Regional	<a href="https://www.literacyproject.org/">https://www.literacyproject.org/</a>
Three county Continuum of Care (a project of Community Action Pioneer Valley via HUD)	Regional	<a href="https://www.threecountycoc.communityaction.us/">https://www.threecountycoc.communityaction.us/</a>
T-Mobile	state	<a href="https://www.t-mobile.com/">https://www.t-mobile.com/</a>
United Way of the Franklin and Hampshire Region	Regional	<a href="https://uw-fh.org/">https://uw-fh.org/</a>
Verizon	National	<a href="https://www.verizon.com/">https://www.verizon.com/</a>
Xfinity/Comcast	National	<a href="https://www.xfinity.com/overview">https://www.xfinity.com/overview</a>