CITY OF SPRINGFIELD DIGITAL ACCESSIBILITY PLAN:

INTERNET FOR ALL

06/30/25

Pioneer Valley Planning Commission

This project was funded by the Massachusetts Broadband Institute at the MassTech Collaborative under the Municipal Digital Equity Planning Program. Funding was provided by Massachusetts ARPA State Fiscal Recovery Funds

TABLE OF CONTENTS

Introduction

The "Digital Divide" is the gap between those who have affordable access, skills and support to effectively engage online and those who do not. Closing the digital divide requires that we ensure that all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy.

To address this critical issue of the digital divide and to further digital access at the municipal level, the Massachusetts Broadband Institute (MBI) created the Municipal Digital Equity Planning Grant program to help communities explore the local conditions related to the digital divide and come up with community-based solutions on how to best to achieve improved digital access.

This report results from over seven public engagement outreach sessions, and collaboration and engagement with the City of Springfield's digital equity workgroup. Based on both quantitative and qualitative data and input, the following programmatic and process strategies are recommended for implementation to ensure further progress towards full digital access in Springfield.

Summary of High Priority Recommendations

PVPC recognizes that in order to make tangible progress towards digital equity in Springfield, the City needs a focused approach. This is based on the reality that resources – funding and personnel/capacity – are limited. And yet the need for action is essential to improve the lives of residents. To this end, the PVPC makes the following recommendations for action.

Here is a condensed version of the top recommendations that the PVPC makes for the City of Springfield to effectively advance digital equity for its residents. These recommendations will form the basis of the city's application for funding under MBI's Municipal Digital Equity Implementation Program:

1. **Create a permanent Digital Equity Working Group (DEWG) for the city.** *The original working group that consisted of residents and key stakeholders provided an important conduit for input and guidance to inform the City's digital equity efforts. This should be continued, and should include representation from Springfield Public Schools, Springfield City Library, members of the City Council (not fewer than one, not more than three, as determined by the President of the City Council), at least three citizen representatives, and representatives of Springfield community based or non-profit entities such as Way Finders, Tech Foundry, or New North Citizen's Council.*
2. **Assign Digital Accessibility Responsibilities to one person in the administration** *We recommend that the City prioritize the tasks of tracking progress, pursuing funding and coordination of the City's ongoing efforts to ensure digital access for all. Recognizing ongoing uncertainty about potential funding constraints (especially from the federal government), it may not be realistic to create a new position within city government to undertake this work. Instead, this work could be included in the job description of a current employee.*

3. **Expand hotspot lending program.** *Hotspots are available at approximately $120/month (based on Verizon and T-Mobile vendors). This involves purchasing the unit and a required annual subscription. Libraries in Springfield have experience distributing hotspots on a lending basis.*
4. **Explore and pursue options for expanding competition from other providers, particularly providers of fiber to the premises (FTTP).** *Residents expressed frustration with the lack of competition for provision of internet services. While a municipally owned fiber network has been deemed non-viable by city officials, attracting additional ISPs to serve the city has support. GoNetspeed's recent entrance into the market should be encouraged, with improved reliability and competitive pricing as goals to be pursued.*
5. **Pursue a phased-in deployment of publicly available Wi-Fi installations including both public buildings, and public spaces such as public parks**
6. **Support training via Tech Foundry, and distribution of computer devices (loaned, discounted, or free); help people in arrears on payments to provider.** *Many residents lack devices appropriate for connecting to the internet. Devices such as laptops, desktop computers, tablets or Chromebooks could be distributed through intermediary organizations. One noted approach could use the Tech Goes Home model which bundles digital skills training with a device and one year of internet service (if needed). To enable residents to enroll in discounted internet packages such as Internet Essentials, the City could provide targeted assistance.*

Summary of Recommendations and Cost Estimates

Action Steps	Comments	Total Cost	Timeline	Responsible Party
1. Create Permanent Digital Equity Working Group	No cost	$ -	8/31/2025	City Council
2. Digital Accessibility Program Coordination and training	City already working with Tech Foundary and Way Finders		n/a	n/a
3.Expand Hot Spot Program	$120/unit/yr (150 units) + maintenance	$ 18,000	12/31/2025	Springfield City Library & Springfield Public Schools
4. Support of expanded availability of fiber to the premises throughout the city with all ISP providers	PVPC and City have had conversations with providers to fully serve the City	$ 10,000	Phased approach: Phase 1 by 12/31/2025; Phase 2 by 7/31/2026; Phase 3 by 12/31/2026	
5. Continue with phased in effort to put Wi-Fi in public buildings and public spaces (such as parks).	Plan for longterm effort and prioritize areas with lower access data avaialablity	$ 40,000	Ongoing	DPW; Parks & Recreation
6. Support ongoing library and council on aging efforts in digital training and education	2 Years of support for both groups	$ 32,000	Ongoing through 06/30/2027	Springfield City Library & Springfield Council on Aging
	Total Estimated Costs	$ 100,000		

The City of Springfield is eligible for up to $100,000 from MBI's Municipal Digital Equity Implementation Program.

PART 1: PURPOSE, BACKGROUND AND PROCESS

City of Springfield Digital Access Vision Statement

The following vision statement was adopted by the Springfield Digital Equity Working Group:

> *"Our vision is for the residents of Springfield 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 all residents."*

This Plan lays the groundwork for investing in our community to achieve full digital access for all. With this Plan, the City will be well-positioned to compete for funds to support broadband infrastructure and digital accessibility programs.

Purpose

The purpose of this report is to provide the City of Springfield with a roadmap to help guide the city in its efforts to overcome the digital divide which now exists.

The Importance of Bridging the Digital Divide

Technology and the internet show up in every part of our daily lives: connecting with family and friends, employment, finding housing, connecting with services and health providers, education, and much more. However, as technology grows, so does the digital equity divide (the disparity in access to digital technologies - limited access to devices, unaffordable or unreliable broadband, limited technology knowledge).[1]

Inequitable access to digital technologies creates multiple barriers to equity across several dimensions of our lives, including health, education, employment, and government services. The flip side of that coin is that by removing those barriers to digital access, we are able to accelerate efforts to achieve equity across those many dimensions.

Partnering with MBI to Bridge the Digital Divide

The Massachusetts Broadband Institute (MBI), a division of Massachusetts Technology Collaborative (MassTech) has been the primary conduit channeling federal funds into the Commonwealth of Massachusetts for the purpose of expanding digital access and eliminating the digital divide. The Municipal Digital Equity Planning Grant program was designed to help communities explore the local conditions related to the digital divide and come up with community-based solutions on how best to create digital equity.

---

[1] Baystate Medical Center, *2022 Community Health Needs Assessment*, p. 87. https://www.baystatehealth.org/about-us/community-programs/community-health-needs-assessments.

For the past two years PVPC has been providing Municipal Digital Equity Planning services to the City of Springfield. PVPC staff has collaborated closely with the identified municipal contact(s) to strategize on how the community should best be engaged in this planning process. This effort is locally focused, and we identified specific community needs related to digital access, literacy, devices, connectivity, and affordability.

This work led by PVPC has consisted of three main categories of work:

- Exploring Current Conditions (including mapping existing digital access assets)
- Engaging in a series of community engagement conversations
- Making prioritized recommendations for further investment

Review of Current Digital Accessibility Landscape

With the transition from the Biden to Trump administrations, several changes have occurred that impact the path forward. As of June 6, 2025 the following changes have occurred:

On May 8, President Trump announced the cancellation of the federal Digital Equity Act, under which states were to receive funds to improve access to the internet, including $2.5B to implement state plans to address the digital divide.

On May 16, in response to the Trump Administration's announcement, Massachusetts Governor Maura Healey announced that several Massachusetts programs were being suspended indefinitely:

> "The termination of the DEA Capacity Grant Program will suspend the Massachusetts Broadband Institute (MBI) at Massachusetts Technology Collaborative's (MassTech's) Launchpad Program and the expansion of Municipal Digital Equity Planning and Municipal Digital Equity Implementation Programs. As a result, the programs will be forced to suspend efforts to advance digital skills training, expand access to digital devices, and assist local governments with digital equity planning activities across Massachusetts."[2]

The City of Springfield, in partnership with Way Finders, Springfield City Library, and Pioneer Valley Planning Commission had applied for funding totaling $932,760 through the Launchpad Program. This program was suspended by MBI in response to the President's May 8 announcement.

[2]

Trump Administration Halts $14.1 Million in Funding to Increase Internet Access in Massachusetts

Programs were Aimed at Expanding Internet Access and Adoption for Veterans, Rural Communities and Individuals with Disabilities

MEDIA CONTACT:

Karissa Hand
Press Secretary
617-725-4025

May 16, 2025

Source: Mass.gov

Boston — The Healey-Driscoll Administration is raising the alarm about the Trump Administration's recent action to terminate $14.1 million in federal funding to expand internet access for veterans, rural communities and individuals with disabilities in Massachusetts. The previously awarded funding from the Digital Equity Act (DEA) Capacity Grant Program would have provided communities with the tools, skills and resources to expand the adoption and use of high-speed internet service.

"Everyone deserves access to the internet. It's essential for being able to participate in our economy and utilize the resources and services that so many of us rely on," said **Governor Maura Healey**. "It's terrible that the Trump Administration is blocking our efforts to bring internet access to veterans, rural communities and individuals with disabilities across the state."

"The Trump Administration continues to gut programs that connect people with essential services, training opportunities, and tools needed to achieve upward mobility," said **Lieutenant Governor Kim Driscoll.** "While the federal government is busy rolling back efforts to expand internet access, Massachusetts will keep building on our progress toward internet for all, ensuring everyone has the ability to participate in the digital economy."

The termination of the DEA Capacity Grant Program will suspend the Massachusetts Broadband Institute (MBI) at Massachusetts Technology Collaborative's (MassTech's) **Launchpad Program** and the expansion of **Municipal Digital Equity Planning** and **Municipal Digital Equity Implementation Programs**. As a result, the programs will be forced to suspend efforts to advance digital skills training, expand access to digital devices, and assist local governments with digital equity planning activities across Massachusetts.

On June 4, 2025, U.S. Secretary of Commerce, Howard Lutnick, indicated in testimony before the U.S. Senate Appropriations Committee that changes would be coming to the BEAD program. On June 6, the Trump Administration announced the "Benefit of the Bargain BEAD Program", a new set of guidelines substantially altering the conditions under which states will be eligible for funding. "After careful review, NTIA announces reforms that will remove rules favoring particular technologies and eliminate unnecessary regulatory burdens."[3]

While it is clear that substantial changes will need to be made to any state programs that had previously been announced, at this time MBI has not released any revised program guidelines for which the City of Springfield should consider applying.

[3] NTIA *Press Release*, June 6, 2025. "Trump Administration Announces the Benefit of the Bargain BEAD Program that Removes Regulatory Burdens, Lowers Costs and Expands Use of All Technologies". https://www.ntia.gov/press-release/2025/trump-administration-announces-benefit-bargain-bead-program-removes-regulatory-burdens-lowers-costs.

Scope of Work

Specifically the PVPC has:

1) Worked with a core planning team and the Digital Equity Working Group and provided guidance throughout the planning process.
2) Conducted asset mapping by researching the existing municipal digital equity status and needs. Engage with the identified municipal contact(s) and community groups to determine the baseline for community digital equity.
3) Provided qualitative data research for a needs assessment, including working with a local contact(s) to identify the most effective outreach methods (including work already completed by the city).
4) Created outreach materials for use City wide.
5) Facilitated, in collaboration with City officials, stakeholders, and other resource partners, a series of iterative community engagement activities. To date, these activities have included 8 neighborhood forums (7 live forums and 1 zoom forum).

PART 2: FINDINGS

In our research related to this project, we have discovered that due to the hard work of a handful of community based organizations (CBOs) the City of Springfield has had some success addressing the need for improved digital accessibility. It became clear that there is a direct correlation between wealth and access to the internet. It also became clear by aggregating Census Tract data the number of households in the City of Springfield lacking access to the internet.

Outreach and Community Engagement

A significant part of this effort was community Engagement. The PVPC recognizes that this effort is an iterative process requiring a significant amount of engagement at the local level. To this end a number of important steps have been taken. To date, our efforts have benefited from the guidance and feedback of the Springfield City Council's Working Group on Digital Equity and Internet Access ("the Working Group"), whose members include the following:

- Jose Delgado, Working Group Chair, At-Large City Councilor
- Michael Fenton, former Working Group Chair, Ward 2 City Councilor
- Justin Ayala
- William Brock
- Jean Canosa Albano
- Giselle Gaines
- Charlie Knight
- Alex Martin
- Archbishop Timothy Paul
- Chistian Polanco
- Frank Robinson
- Roberta Walker Kilkenny
- Darryl Williams
- Stephen Howard

The following City Council staff members provided invaluable administrative support to the Working Group:

- Susan Kacoyannakis, City Council staff aide
- Kelley Mickiewicz, City Council staff aide
- Sean Young, City Council staff aide
- Sacoy Malone, Grants Director

The PVPC has also worked collaboratively with several community groups including Way Finders, Tech Foundry, Neighborhood Councils and other concerned citizens.

PVPC conducted two sets of community outreach with the guidance and involvement of the Working Group. These occurred in spring and fall 2024. A total of 6 in-person and one online community engagement event took place. Community engagement was prioritized for neighborhoods with greater documented access barriers. The first round of 5 meetings with residents, included 4 in-person sessions (held at the Brightwood, East Forest Park, and Mason Square branches of the Springfield City Library, and the East Springfield Neighborhood Council), and one hosted virtually on Zoom. Although the meetings were lightly attended (ranging in attendance from 8- 15 people), we received valuable feedback from the residents and advocates present that uncovered common themes, highlighting a series of challenges and impediments to digital equity, and pointing to a series of potential remedies to address those barriers. These group sessions were strategically held throughout the city, to directly hear feedback from residents and try to meet and talk to residents where they are.

Because we held two rounds of community engagement sessions, the time taken to complete this stage of the work was longer than originally anticipated however the increased input was important to a more informed process and result.

Community Identified Barriers to Digital Accessibility and Potential Solutions:

What We Learned

As direct result of the process of working with the Community the PVPC was able to identify the following needs and issues, as expressed by the community. It is clear from all of the data and information collected that internet access and income level are critically interrelated. Simply put, those with greater incomes have more access and more devices than those who lack financial resources.

Factors impeding access to digital resources:

- Poverty is an impediment to costly digital resources. 30% of the population of Springfield live in poverty; nearly 45,000 people
- Depends on one's employment (income). There is high unemployment in Springfield.
- Access to internet
- Affordability
- Knowledge – where to go, what to do
- Digital equity is worse for disenfranchised communities
- Made worse by a lack of options of internet service providers (ISPs)
- Once one gets a computer, they might not know where to connect
- There can be a lack of skills about how to use a computer
- Stability of job influences income
- Low-income forces people to make choices – pay for internet v food or rent

What Does The Internet Let You Do?

- Access medical care via telehealth services
- Stay in touch with family and friends
- Buy things (esp. important if someone is not mobile)
- Banking
- Folks, especially older adults or those not mobile, want independence (for example they can order meds or food online and then have a PCA pick it up)
- Education
- Apply for jobs
- Attend professional meetings in other parts of the state without needing to travel
- Access mental health services, and make meaningful connects necessary for overall well-being
- Make connections with communities with whom one has common interests
- Access to health care via the internet can mean the difference between life and death in some circumstances

Community feedback regarding barriers to digital access:

- During the pandemic it was reported that some residents had no internet and no computer despite Springfield Public Schools distributing chrome books
- Official surveys miss people who do not have internet access, so the reality of the situation is often worse than captured from official information gathering
- For those dependent on cell phones, many people in low income neighborhoods who are eligible for the FCC-administered Lifeline program face data limits that can be problematic, preventing them from experiencing full access to the internet.
- Comments about Comcast – lack of reliability and concerns about where cable is available.

Members of Way Finders' digital equity coalition

- Data presented that was collected during the pandemic is misleading since many of the devices were "loaners" and there were hotspots rather than computers

- Some residents reported concerns with individuals fraudulently enrolling people in the now-cancelled Affordable Connectivity Program (ACP).
- Seniors can't afford the cost of cable – how do we make it affordable for them?
- Being a student and taking time to learn digital skills often costs either money or time (which can mean taking time off from work or family). This is a barrier
- People who don't know how to use the internet are often embarrassed that in 2023 they don't know how. This is a barrier to their coming forward to get connected or trained
- Internet security concerns pose a real threat, especially to older and vulnerable populations, which are both problematic in their own right, and may prevent people from using the internet out of an abundance of caution.

PVPC's Eric Weiss at table with members of Way Finders' digital equity coalition

- If the internet at peoples' house is unstable but they work is online, this results in a slowdown and inefficiencies, including uneven participation in meetings. Increases the cost of working from home or makes it impossible
- People used to attend civic gatherings like neighborhood council meetings but during the pandemic they couldn't attend because they didn't have internet access. Even for those that did have internet access, their cable connections were slow or they had old devices.
- People don't trust the government or big companies/systems
- The cost of a computer is too expensive for some people
- Some people reported concerns about the targeting of programs intended to make the internet more affordable, such as the now-cancelled ACP, letting some people, such as seniors, fall through the cracks, while providing benefits to some residents with higher incomes because of arbitrary eligibility requirements.
- What would improve accessibility to digital resources?
- Investment in infrastructure (cable and old buildings are a problem). Municipalities and the state should invest in upgrades

- Treat internet access like a necessity; If we are going to force people to digitize, society needs to support folks in the transition
- More options of ISPs; until very recently, there has been very little competition for service in Springfield, with Comcast/Xfinity enjoying near monopoly conditions.
- More outreach is needed to support people's awareness about programs such as the FCC's Lifeline program, which, like the now-cancelled Affordable Connectivity Program, provides at least some relief from high prices of internet services.
- People are hesitant to learn digital skills; libraries are a great place BUT many people see libraries as only being about books so expanding library communication is important.
- Need trusted people in the community that folks can turn to to ask questions – especially important for addressing concerns about internet security issues.
- Some residents expressed concerns about breaking computer equipment
- Normalize technology – see it everywhere. Think about where people go in the community
- Re-enforce the need for financial sustainability, esp. for low-cost plans

Community Engagement at the old Elias Brookings School, hosted by Springfield City Councilor (and Chair of the City's Digital Equity Workgroup), Jose Delgado

- With technology always changing, the goal posts are always moving
- There will always be some resistance to using the internet or a computer among some people. There is a continued need to get those folks to understand why they need to use technology

- There needs to be a focus on providing professional development for teachers around technology; many teachers, who are in the position of teaching and encouraging young people, don't know or feel comfortable with technology themselves.
- Digital skills – need to be adaptable. Use a "bumper car" approach which means be able to find work arounds when you hit a wall with the approach one tried first
- Some residents expressed terminology such as "digital literacy" to be problematic, suggest instead using less demeaning language such as "digital competency"
- Learning should be situational to be effective – we need to ask people why they want to use a computer or the internet. Then teach them what they need to make that interesting activity happen. Additionally, practice needs to be applied soon after learning something new otherwise people can forget.
- Interest in a municipally owned broadband system – would help with affordability

Actionable Insights

- Encourage more choices of ISP providers, create competition among internet service providers
- Create wireless solutions
- Have more fiber installed in the city
- Install wide area mesh networks, especially in areas of Springfield that have low access
- Establish a paid staff position with the City to shepherd the deployment of digital equity programs
- Develop a Community Advisory group to advise the city on how to allocate awarded funds to the city
- Make sure that youth are involved in whatever we do. We need hear their voices and ideas
- Design solutions that accommodate the needs for Older Adults
- Distribute resources through trusted community organizations so people don't get scammed
- Need trusted people to guide and support community members to the right resources – "digital ambassadors"
- There is a perceived pattern of the city promising improvements to some neighborhoods and their residents, but nothing happens in the end. How do we make digital equity improvements happen, especially infrastructure investments, happen in neighborhoods like Mason Square?
- Make sure that any funds designated for broadband go to the right place – to neighborhoods and people who need it
- Recognize that people not using computers now are an untapped resource. They may have talent and abilities they didn't know they had and once trained can have better jobs and contribute more to their household and community.

Planning and Data Gathering

The PVPC collected as much data as possible concerning internet services available in the City of Springfield. The challenges are significant but accurate information is key to moving the process ahead in the proper fashion. This research is being performed at multiple levels and some examples of what we have discovered are shared below.

Impediments to Digital Resources

The research undertaken in the preparation of this report has confirmed that the impediments to accessing digital resources in the City of Springfield are broadly consistent with those facing residents both state- and nation-wide. The National Telecommunications and Information Association (NTIA) has identified the following areas of concern:

- Broadband Affordability & Availability
- Accessibility of Devices and Device Support
- Digital Literacy
- Privacy & Cybersecurity
- Accessibility & Inclusivity of Public Resources[4]

Both affordability and privacy & security are two areas that clearly have captured the attention of municipal residents. Other impediments may be of less urgent concern to residents.

Broadband Affordability & Availability

Our research in Springfield and in other communities in Hampden County has shown that the inability of people to afford the cost of quality internet services as well as devices such as desktop or laptop computers, is the primary impediment to digital resources for residents. This is particularly relevant to the City of Springfield, the community with the second lowest median household

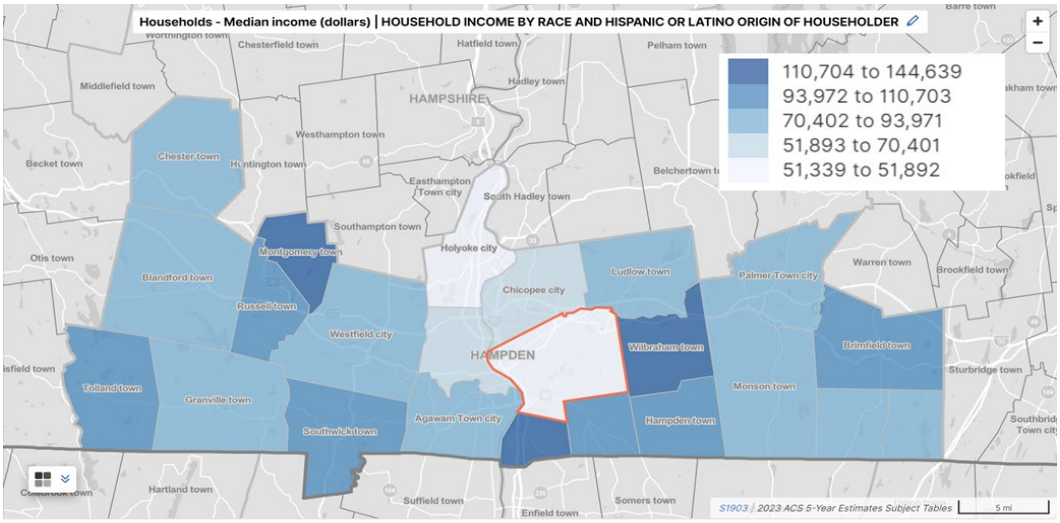


Figure 1: Median Household Income

[4] The statewide digital equity plan prepared by the Massachusetts Broadband Institute (MBI) addresses measurable objectives to overcome barriers relating to these areas. The Executive Summary of the statewide plan can be found in the Appendix.

income in the Commonwealth of Massachusetts, approximately half the statewide median ($51,339 vs $101,341).

Within the city, income disparities leave those with lower incomes even further behind. Figure 2 below provides a clear picture of the digital divide, while at the same time offering some hopeful trends in access to broadband for residents of the City of Springfield. Across all three income ranges shown ($75k+, $20k-75k, and <$20k), a growing share of homes had a broadband subscription by 2023, with the lowest income earners making the largest strides, gaining broadband access to nearly 50% more homes in 2023 than in 2018. Notably, low income broadband users have been closing the gap on high income users.

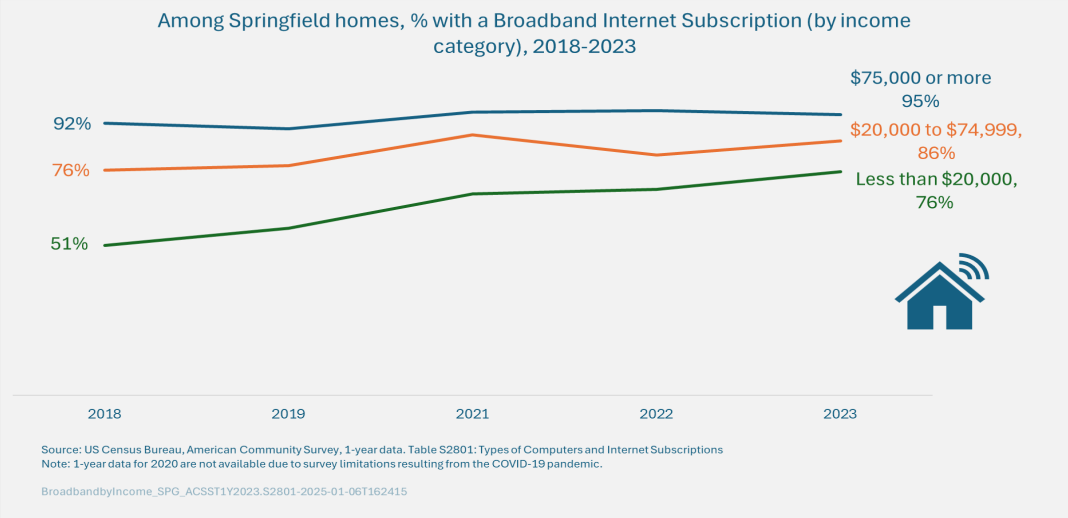


Figure 2: Share of homes with Broadband Internet subscriptions, by income

We see these disparities play out spatially in Figure 3, below. The share of homes lacking an internet subscription ranges from 1.5% in one of the East Forest Park Census Tracts (8022) to 38%–more than one in three–in one of the Metro Center Census Tracts (8012). Across most measures of digital access, we see similar geographic disparities, largely reflecting

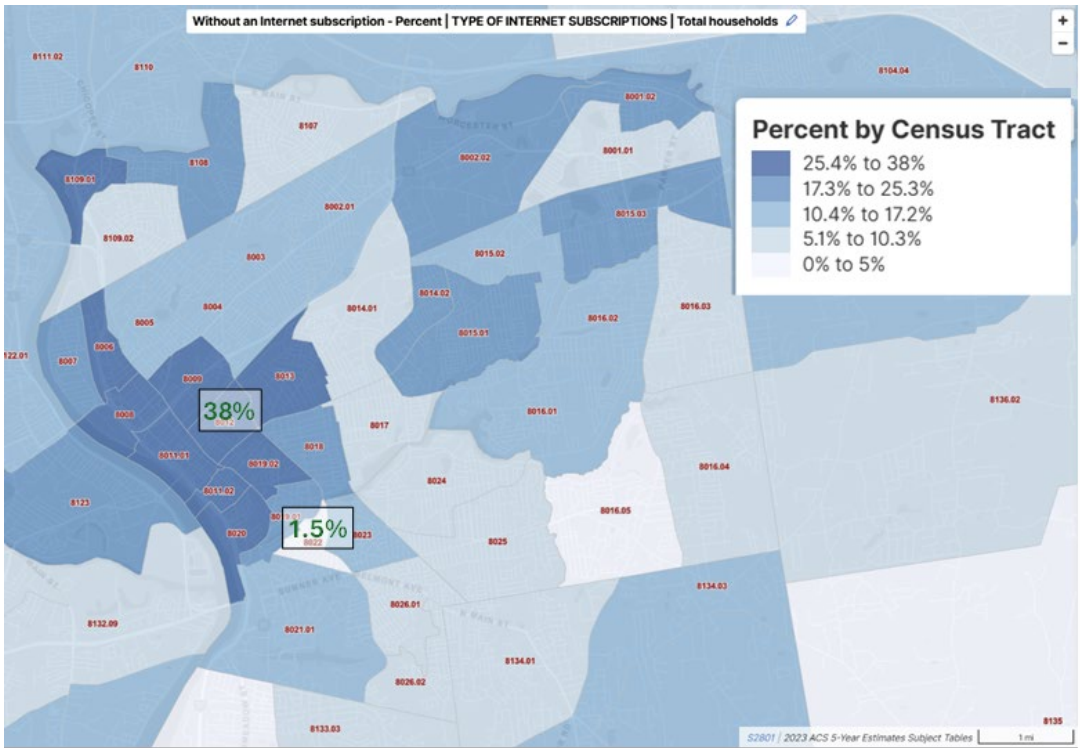


Figure 3: Share of Households without an internet subscription

the relative income and wealth levels of residents in each section of the city.

By aggregating Census Tract data we can approximate the number and percent of households lacking internet in each of Springfield's neighborhoods. The share of households lacking internet service of any kind ranges from 9% in East Forest Park to 38% in the McNight neighborhood. Across the entire city, 20% of households lack access to the internet.

Table 1, which is sorted by median household income, shows the correlation between various socio-economic indicators (poverty rate, % of the population with a bachelor's degree or higher level of education, and median household income) and the degree to which households lack internet subscriptions. [5]

Neighborhood	Total Households	Households without Internet	Percent without Internet (%)	Poverty Rate	% Bachelor's Degree or Higher	Median Household Income
East Forest Park	4,212	400	9%	10%	32%	$82,499
Sixteen Acres	8,311	917	11%	14%	30%	$81,567
East Springfield	2,946	411	14%	16%	12%	$77,280
Boston Road	1,627	306	19%	19%	16%	$59,328
Indian Orchard	3,335	497	15%	16%	18%	$58,129
Forest Park	10,056	1,020	10%	30%	22%	$55,034
Pine Point	4,214	763	18%	16%	18%	$52,992
Liberty Heights	7,145	1,363	19%	22%	17%	$48,766
Upper Hill	1,841	172	9%	20%	18%	$47,978
Old Hill	1,205	227	19%	38%	10%	$42,385
Bay	1,255	107	9%	40%	14%	$39,589
McKnight	1,746	545	31%	32%	13%	$37,209
Six Corners	2,923	829	28%	43%	8%	$27,990
Metro Center	2,843	932	33%	50%	24%	$27,191
Memorial Square	1,571	482	31%	48%	8%	$24,352
South End	1,195	345	29%	51%	2%	$23,751
Brightwood	1,621	379	23%	50%	3%	$18,541
City of Springfield	**58,046**	**9,695**	**17%**	**25%**	**20%**	**$51,339**

Source: U.S. Census Bureau, American Community Survey, 5-year data, 2019-2023.
Neighborhood data are aggregated from Census Tracts most closely approximating Springfield's neighborhood boundaries.
Median Houshold Incomes for neighborhoods with two or more Census Tracts are weighted by travel level household

Table 1: Key socio-economic measures by Springfield Neighborhood

[5] Appendix A1 shows a scatterplot of each neighborhood, with median household income as the independent variable, and percent of households without internet as the dependent variable. The resulting relationship shows that 53% of the variation in the share of households with an internet subscription is attributable to changes in the median household income.

The Massachusetts Broadband Institute undertook extensive public surveys to inform preparation of the statewide digital equity plan. Springfield residents emphasized the extent to which affordability has been a major barrier to accessing the internet, with 57% of survey respondents indicating it is either “somewhat hard” (38%) or “very hard” (19%) to afford to pay their internet bill.

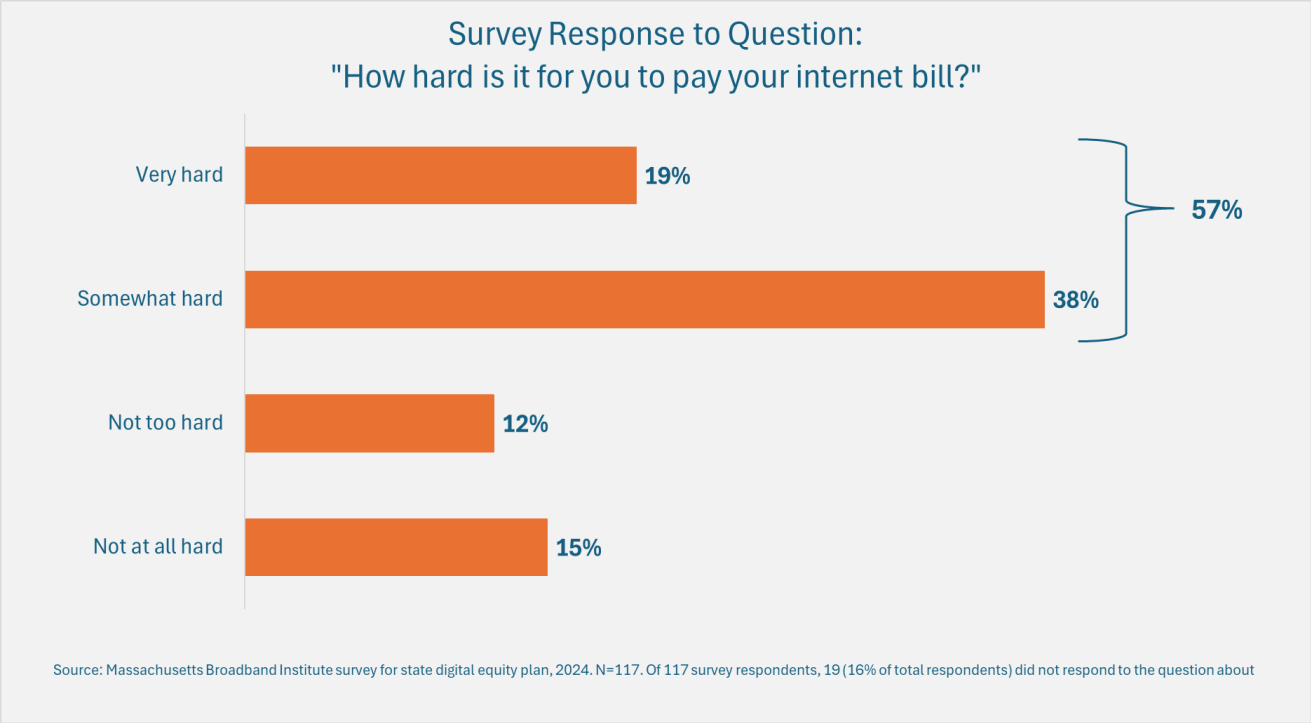


Figure 4: Survey response: Q: How hard is it for you to pay your internet bill?

Accessibility of Devices

Data in Figure 5 shows that a substantial share of Springfield residents continue to rely on a smartphone as their only computer device. Between 2018 and 2023, the share of residents using a desktop or laptop computer grew modestly, from 58% in 2018 to 64% in 2023. The decline in share of households with no computer device is striking, reflecting extensive efforts to improve digital equity over this period. Between 2018 and 2023, the share of households with no computer device has been cut in half, from 20% in 2018 to 9% in 2023.

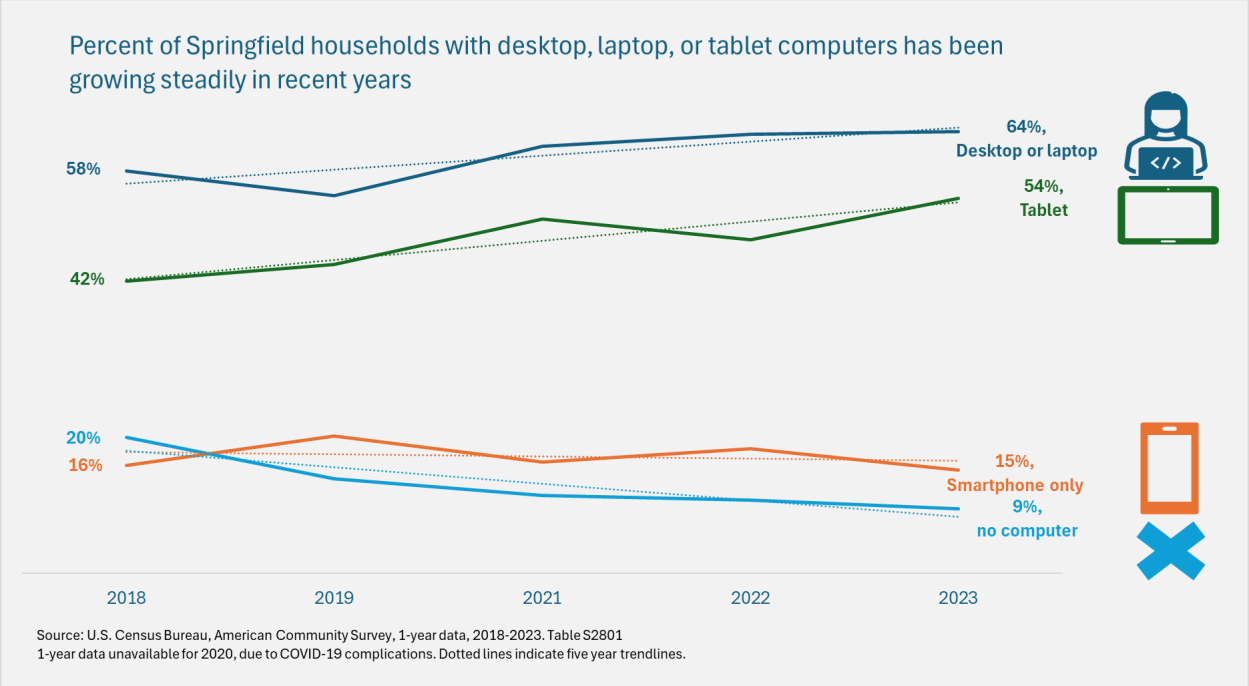


Figure 5: Types of Computer Devices used in Springfield Households, 2018-2023

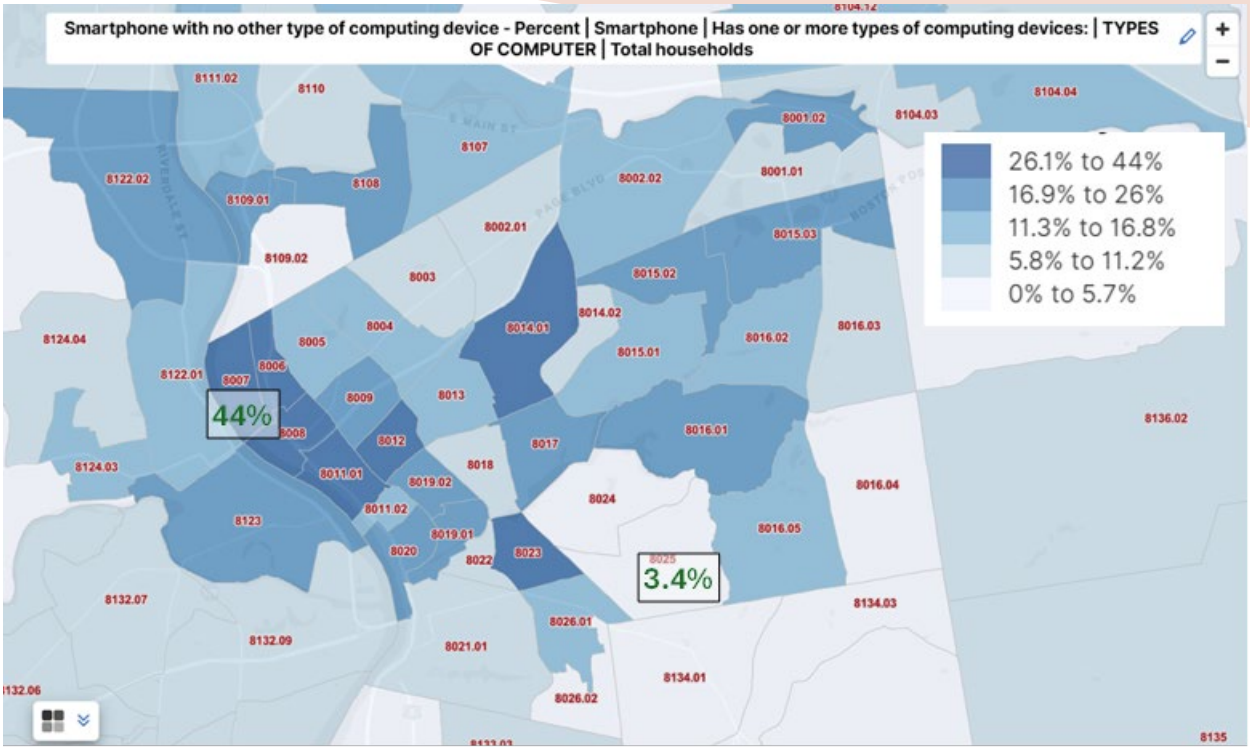


Figure 6: Share of homes in which a smartphone is the only computing device

Drilling down to the Census Tract level, as seen in Figure 6, we see a gaping divide between the Census Tracts with the highest and lowest shares of homes relying solely on a smartphone. In Census Tract 8007, which is located in the Brightwood Neighborhood, more than one in four (44%) households rely on a smartphone as their only computer, whereas in Census Tract 8025, in East Forest Park, only 3% of homes have just a smartphone.

Privacy & Cybersecurity

Springfield respondents[6] to MBI's survey used in preparing the Commonwealth's statewide digital equity plan, *Massachusetts Internet For All Plan* made clear that people are understandably concerned about internet safety. In response to the question "How concerned are you about internet safety?", survey respondents overwhelming affirmed that this was a concern for them. Fifty-four percent of respondents indicated they were "Very concerned", which another twenty-six percent indicated they were "somewhat concerned".

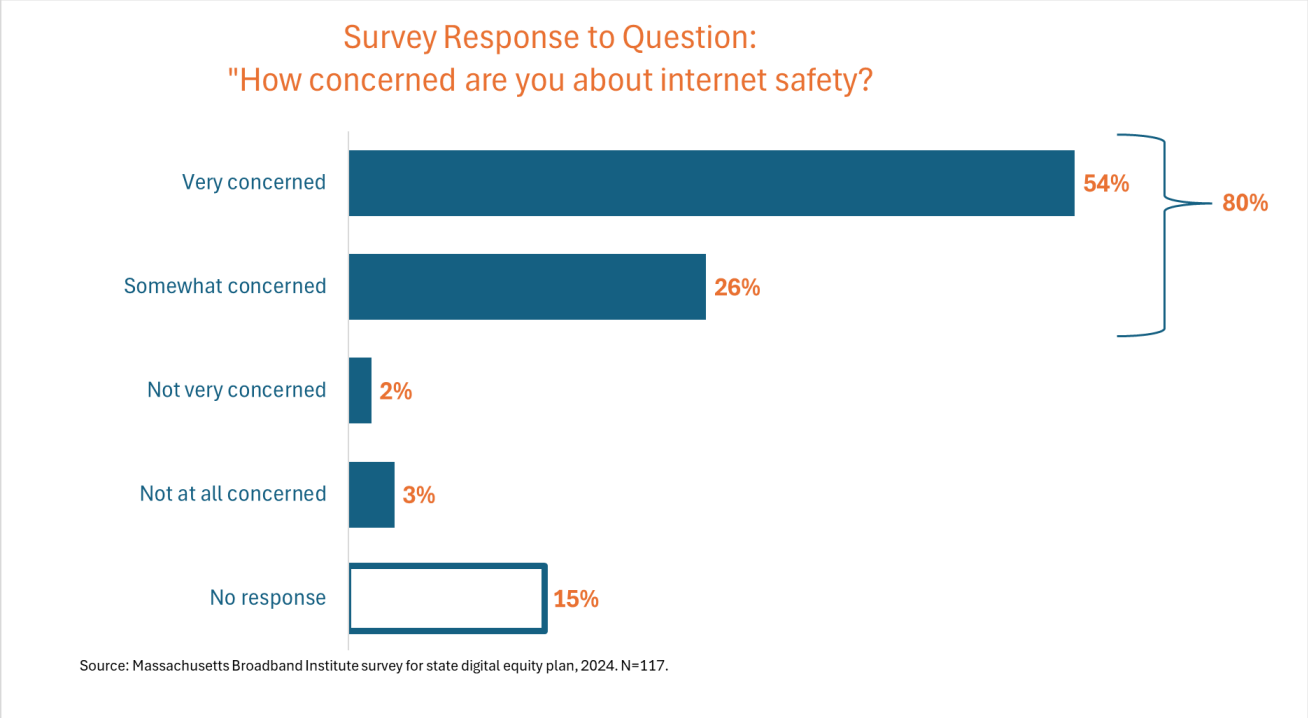


Figure 7

More than half of respondents expressed concern "That my data could get stolen or used without my consent" or that "That I or a loved one could get scammed or tricked", while nearly half worried "That I could be tracked or surveilled" or "That I or a loved one could be harassed or abused online". While each of these concerns are valid, information about appropriate measures to protect oneself online needs to be made available to residents to assuage their concerns and to ensure appropriate safety and security protocols are followed.

[6] While these survey results are informative, and reinforce patterns we know to be true from other jurisdictions, the results are not representative of the entire population of Springfield.

Digital Divide Reflects/Exacerbates Existing Socio-Economic Disparities

While this large disparity is stark, as seen in Table 1 below, it is consistent with the disparities between high and low income neighborhoods in Springfield across various socio-economic measures, including median household income, educational attainment, race and/or ethnicity, and language skills. Table 1 compares two tracts, one in Metro Center, and one in East Forest Park:

The Digital (and every other type of) Divide

Census Bureau Data Points	Census Tract 8012 (Metro Center)	Census Tract 8024 (East Forest Park)
Households without Broadband Internet	**38%**	**10%**
Median Household Income	$19,435	$83,991
Educational Attainment: Bachelor's Degree or Higher	12%	35%
Hispanic or Latino	59%	19%
Black (not Hispanic or Latino)	20%	10%
Speak English "Less than very well"	24%	3%
Below Federal Poverty Rate	58%	10%

Source: U.S. Census Bureau, American Community Survey, 5-year data, 2019-2023. (Race & Ethnicity data from 2020 Decennial Census)

Table 1: Highlighting the Digital Divide and other disparities across two Census Tracts

Notably, the digital divide exacerbates the impact on families of the other disparities they face, while closing the digital divide allows families to improve their economic situation.

Internet Access by Race/Ethnicity

Our research throughout Hampden County has found that many elements of digital inequity are experienced to a greater extent among residents based on their race or ethnicity. Among residents of the City of Springfield, Hispanic or Latino households are most likely to lack broadband internet subscriptions (12.5%), followed by Black residents (10.0) and white (not Hispanic)(7.8%). Across each of these three race/ethnicity groups, the percentages of households lacking broadband are larger in Springfield than in either Hampden County or the statewide averages across the Commonwealth of Massachusetts.

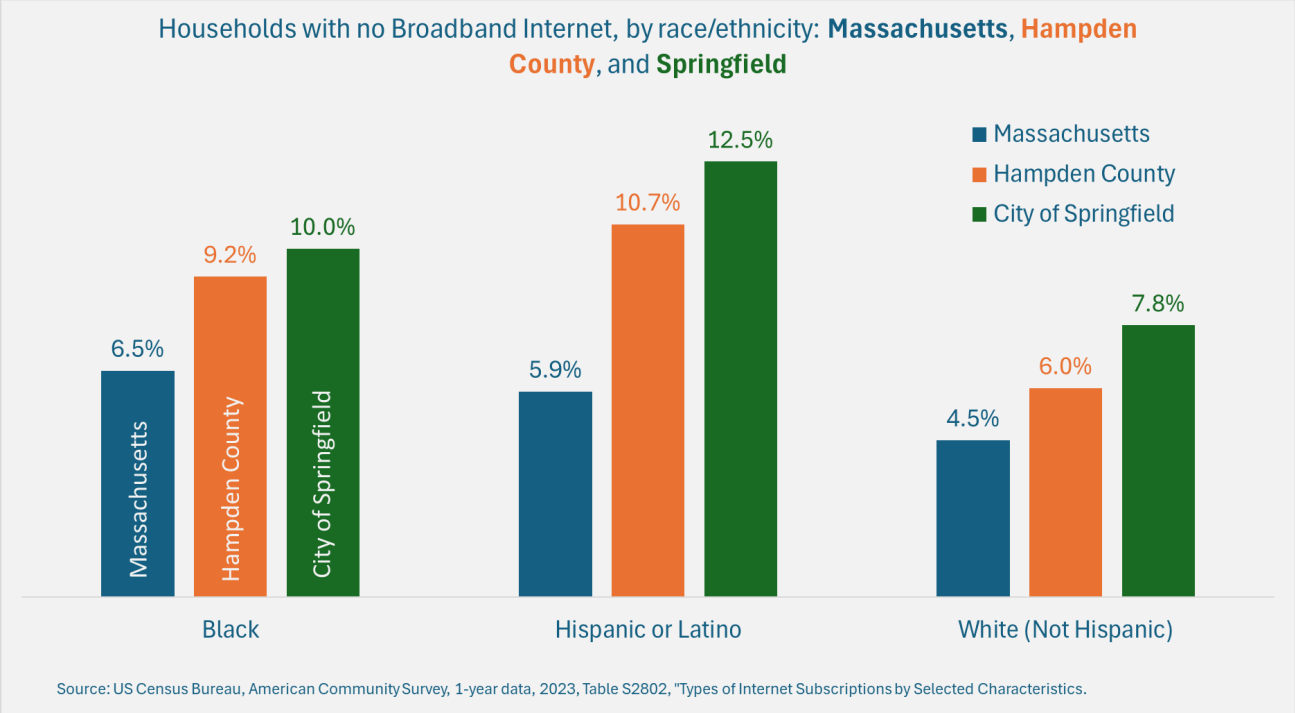


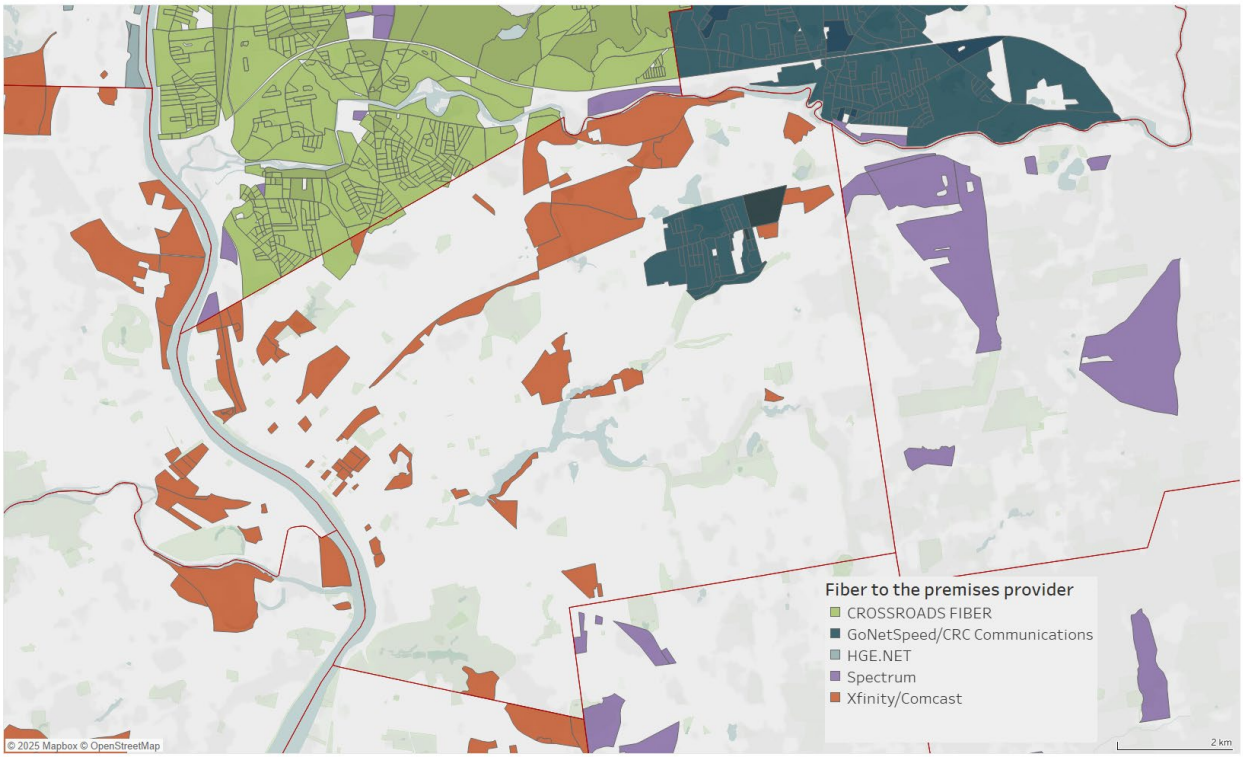
Figure 8: Households lacking broadband internet, by race or ethnicity

Lack of Competition

Our earlier research on the level of competition within the City of Springfield indicated a striking lack of competition. With fewer than 25% of customers having access to more than one provider. Preliminary data from the Massachusetts Broadband Institute indicated Comcast/Xfinity with 100% coverage citywide, while Charter Communications (which services neighboring East Longmeadow and Wilbraham) covered 2.4% of users, and Chicopee Electric Light (doing business as Crossroads Fiber) covered a very small number of users. T-Mobile also had "fixed wireless" service available to nearly one in four households.

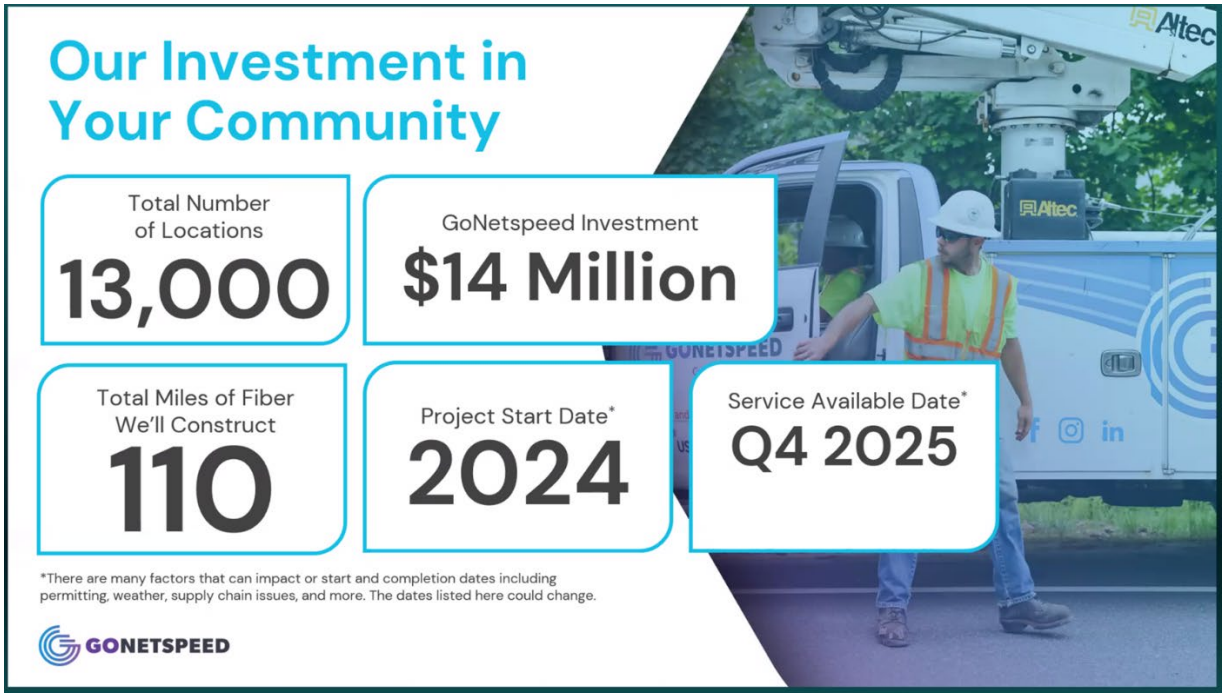
More recent data shows that Comcast/Xfinity has been laying fiber optic cable throughout much of the city, future-proofing their network, while indicating to other providers interested in pursuing fiber optic networks that they are positioned strongly to compete in that space, as they have with cable-based internet. We also see, though, that CRC Communications, LLC, doing business as "GoNetSpeed" is ramping up its efforts to lay fiber optic cable covering a substantial portion of the city.[7]

GoNetSpeed pursuing fiber network to compete with **Xfinity/Comcast** in several Springfield neighborhoods

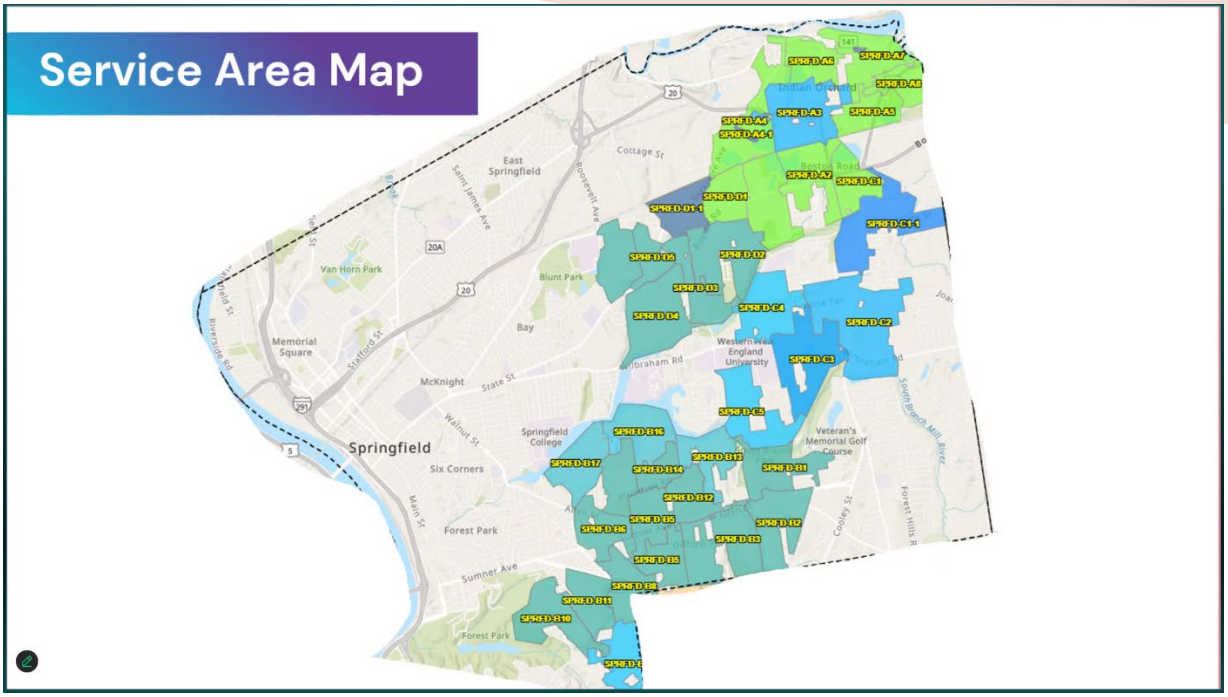


[7] Evidence of this ramp-up can be found in several recent "petition[s] to install and maintain fiber optic facilities" submitted by GoNetspeed in the City of Springfield. The June 9 meeting of the Springfield City Council considered seven such petitions, including several on Parker Street, one on North Brank Parkway, one on Patricia Circle, one on Parkerview Street, and one on Duran Street.

In a presentation to the City's Maintenance and Development Committee on June 17, 2025, GoNetspeed outlined plans to provide fiber to the premises service within the City of Springfield.[8] As summarized on the slide below, GoNetspeed is in the midst of investing $14 million as it installs 110 miles of fiber within Springfield, with the ability to service up to 13,000 locations within the city with service available by the end of 2025.



[8] GoNetspeed currently provides service in several states – Alabama, Connecticut, Maine, Massachusetts, Missouri, New York, Pennsylvania, Vermont, and West Virginia.



In GoNetspeed's "Service Area Map", the green shaded areas indicate areas in which GoNetspeed fiber to the premises service is currently available, while different shades of blue indicate areas to which they anticipate extending service through the end of 2025. While GoNetspeed anticipates that their presence in the city will benefit consumers via competition in pricing, their initial pricing structure for areas served within Massachusetts range from $64.99 to $104.99/month, with no current plans to introduce a plan at rates comparable to those previously available to Springfield residents through the Affordable Connectivity Program (ACP).

While GoNetspeed does not currently have plans to expand throughout the city, they indicated that they are "very open to the conversation about build-out throughout the whole city," while noting that achieving that target would depend on negotiating a "win-win" arrangement benefiting both the city and GoNetspeed.

Download Speeds

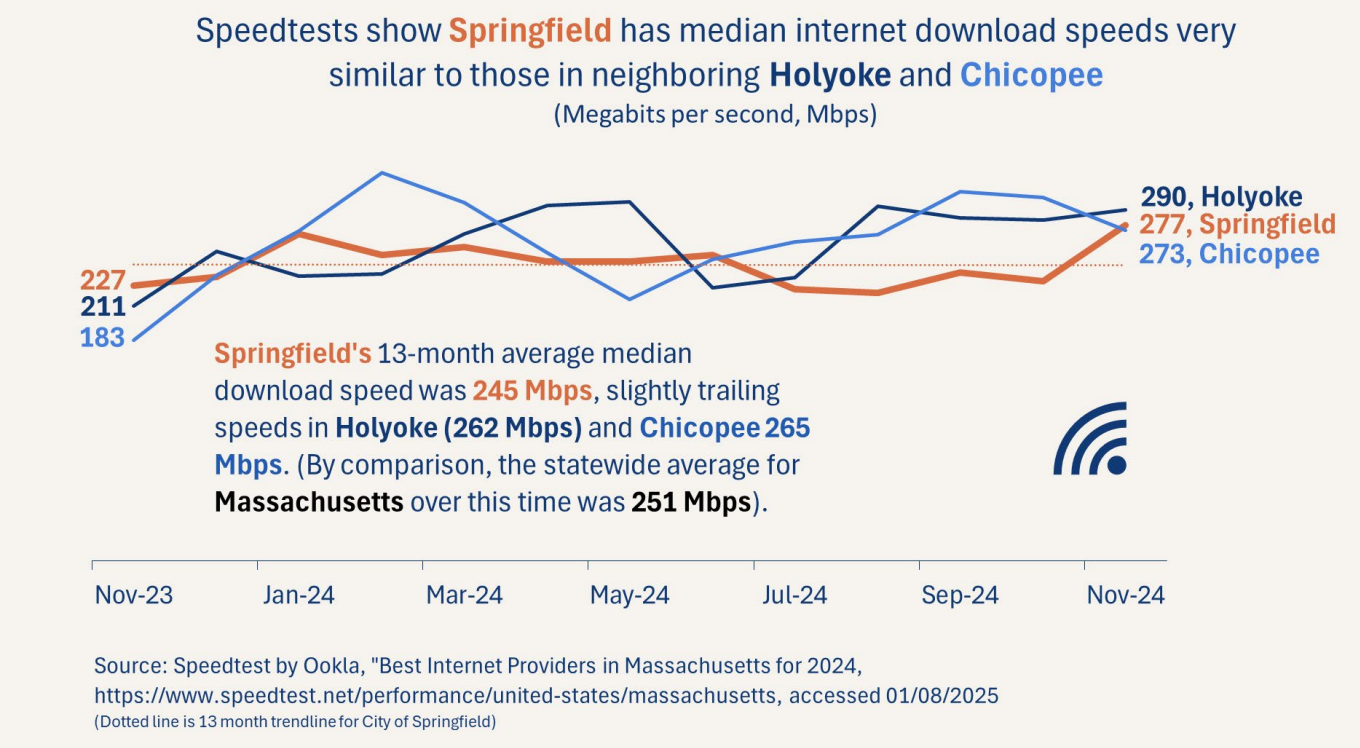


Figure 9: Average download speeds, Springfield and Holyoke Massachusetts

One factor that impacts the experience of Internet users is the speed at which data is transferred, during both the downloading and uploading of data. Available data shows that Springfield's average monthly download speed averaged approximately 245 Megabits per second (Mbps) over the thirteen-month period from November 2023 to November 2024, slightly lower speeds than available in the neighboring cities of Holyoke and Chicopee during the same period.

Data available from the Massachusetts Broadband Institute shows that of the 39,074 Broadband Serviceable Locations (BSLs), nearly 100% have service that meets or exceeds 100 Mbps [download] and 210 Mbps [upload] speeds. Citywide, MBI data shows 24 BSL's that are "underserved" and 54 that are "unserved" at the 100/20 level. (Importantly, BSLs in Springfield currently identified as either unserved or underserved will be served by Verizon under MBI's Gap Networks Program.) Currently there are some housing operators in Springfield currently enrolled in MBI's Residential Retrofit Program, put in place to help extend broadband service throughout buildings that might be experiencing physical or electronic barriers to broadband coverage.

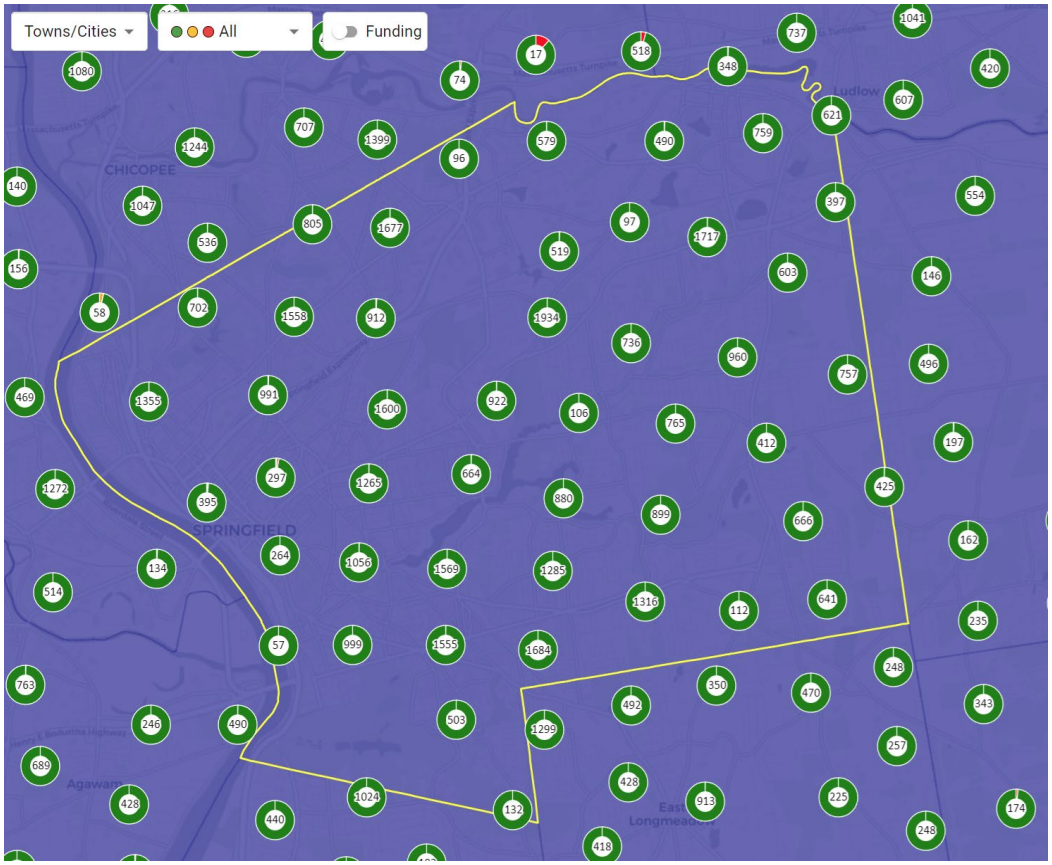


Figure 10: Nearly all Springfield Broadband Serviceable Locations have service at or above 100/20 Mbps

Zooming in we see that most of the underserved (yellow dots) and unserved locations (red dots) are non-residential locations.

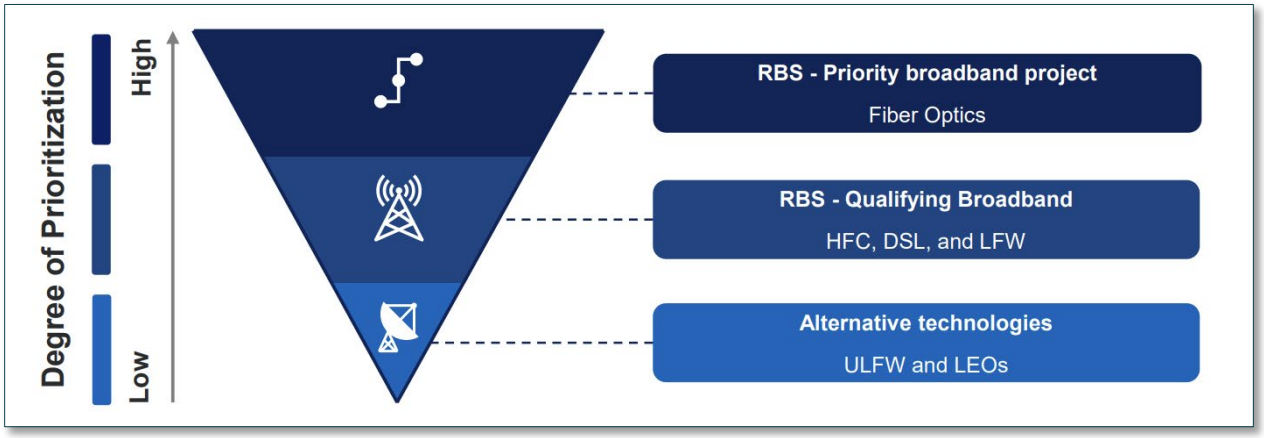
Figure 11: Categorization of residential, commercial, and industrial locations by level of service. [Green dots reflect availability of service at 100/20 Mbps level, yellow reflect underserved locations where lower rates are available, and red indicates an unserved location.]

Levels of Service

The National Telecommunications and Information Administration (NTIA) categorizes every **broadband serviceable area** (BSA) nationwide as either served, underserved, or unserved:
Served: access to at least 100 Mbps download /20 Mbps upload speeds (100/20 Mbps).
Underserved: available broadband provides service between 25/3 Mbps and 100/20 Mbps.
Unserved: no broadband internet available, or available internet is inadequately slow, less than 25/3

Different types of connectivity

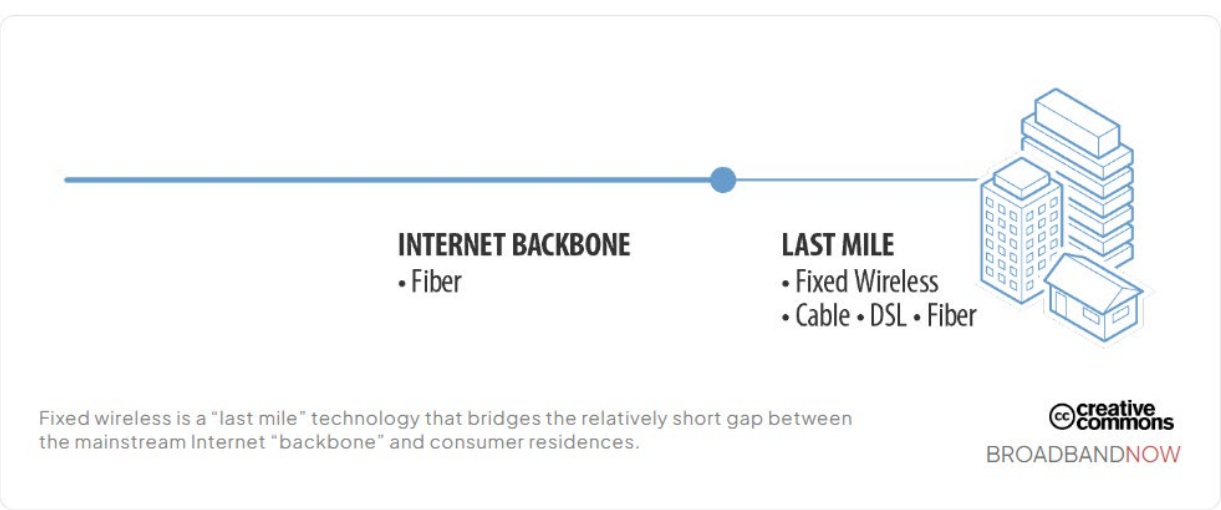
The NTIA has established a "technology hierarchy", to guide technology choices for deploying **broadband** to unserved and underserved locations. According to this hierarchy, two technology levels provide **reliable broadband service (RBS)**, i.e. "broadband service that meets performance criteria for service availability, adaptability to changing end-user requirements, length of serviceable life, or other criteria…"[9] At the top level of RBS service, priority broadband projects get served by **fiber optic** infrastructure. The mid-level of service, termed "qualifying broadband" includes **hybrid fiber-coaxial (HFC)[10], digital subscriber line (DSL)**, commonly known as "dial-up", and **licensed fixed wireless**[11].



NTIA classifies other options, including **unlicensed fixed wireless (ULFW)** and **low-earth orbit satellites (LEOs)** as **alternative technologies**. The Trump administration's June 2025 *policy notice* reverses course on this, moving instead to elevate ULFW and LEOs to

[9] U.S. Department of Commerce, National Telecommunications and Information Agency, January 2024. *Reliable Broadband Service & Alternative Technologies Guidance*.
[10] With hybrid fiber-coaxial, cable companies create optical nodes at which signals are converted to a format that can be transmitted via coaxial cable to customers (businesses, households).
[11] **Licensed fixed wireless** (LFW) is an alternative means to bridge the "last mile" from the internet backbone to households or businesses. It relies on radiowaves to bridge a relatively short distance to consumer homes. With licensed fixed wireless, providers pay to transmit over a specific spectrum band over a defined geographic area. Because signals travel ova reserved band of the radiowave spectrum, they are considered reliable broadband service.

compete equally with fiber optic cable. [This change reflects shifting priorities, rather than a reassessment of the technical merits of each technology].



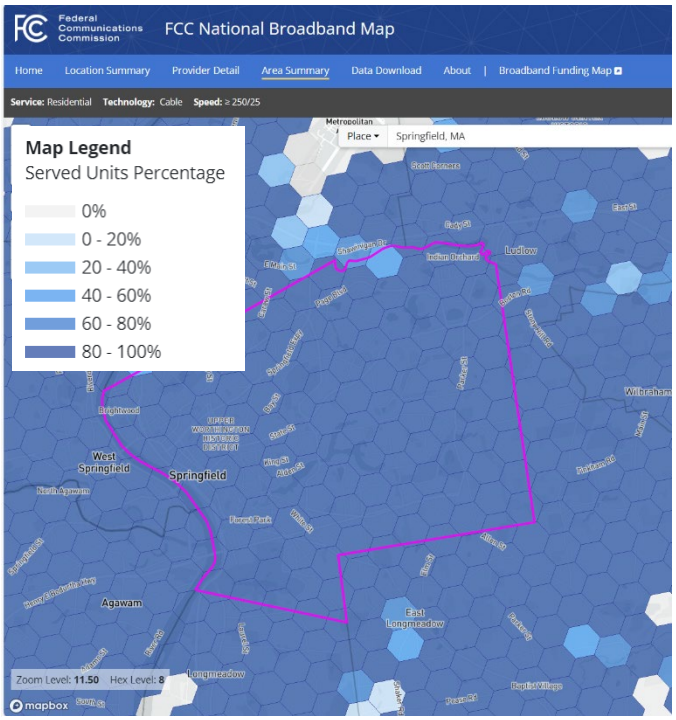


Figure 12

FCC maps illustrate the current levels of service available to Springfield residents. The majority of residents with broadband internet subscriptions currently receive service that is bundled with their cable television, which is provided by Comcast/Xfinity. Reflecting this, coverage is nearly complete with *coaxial cable* as the infrastructure for delivery. Figure 12 shows residential cable coverage at speeds of at least 250/25 Mbps. Figure 13 shows that the cable service that exists within the City of Springfield provides most areas of the city with service that is substantially faster: 1000/100 Mbps.

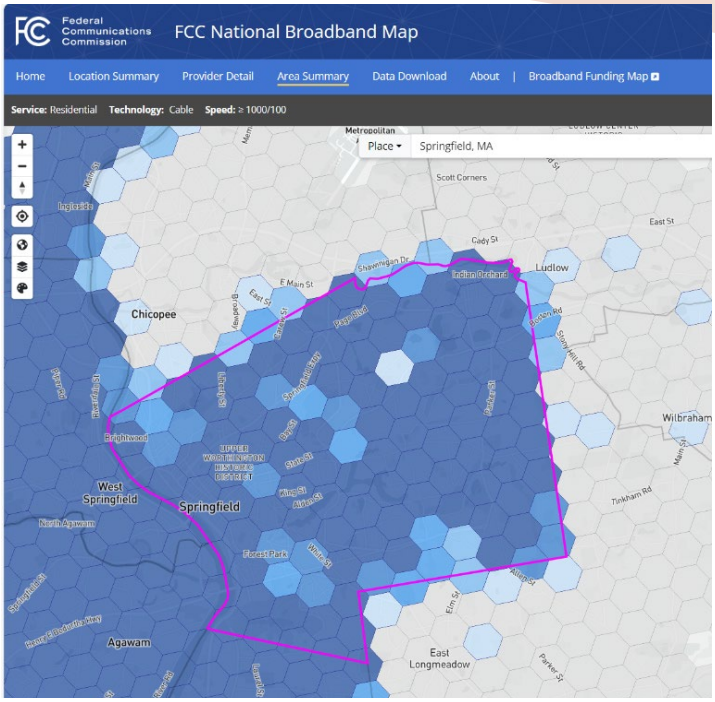


Figure 13

In Figure 14, we see the beginnings of fiber optic internet service within the City of Springfield. As noted above, the most significant new provider entering the Springfield market is *GoNetspeed*.

Fiber is widely considered to be superior to cable, and importantly, is "future proof", allowing for exponentially greater speeds that will accommodate the growing demand for bandwidth. According to the International Telecommunication Union (ITU), fixed broadband use in the Americas nearly tripled between 2019 and 2024, from 487 exabytes to to 1,335 exabytes [1 exabyte = 10^{12} megabytes].

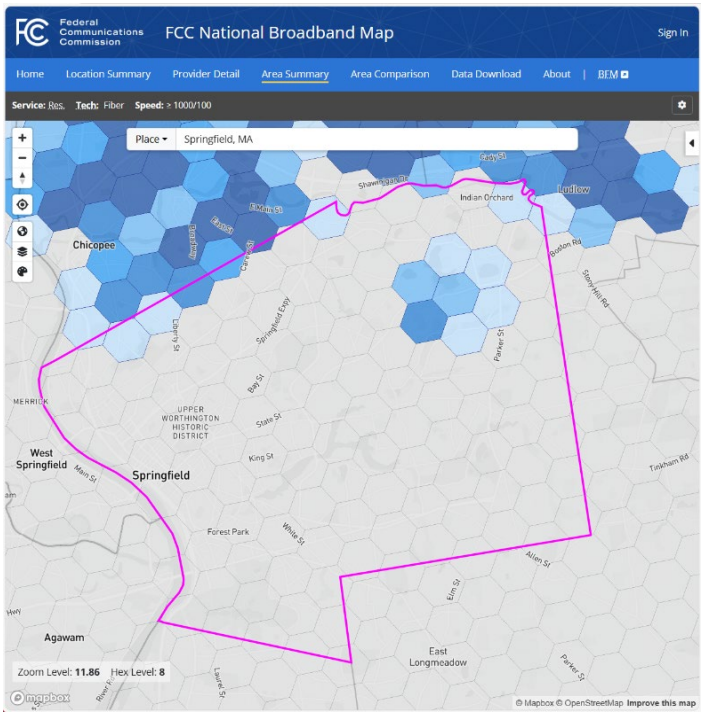


***Figure 14: ISPs begin to add fiber optic cable to Springfield** (12/31/2025 data, updated 5/27/2025)*

CNET, a leading technology publication, notes the following in comparing cable and fiber: "But when it comes to cable versus fiber internet, there's no question that fiber is the superior technology. Fiber-optic lines can deliver faster download and symmetrical upload speeds using the speed of light with greater reliability and less vulnerability to network congestion than coaxial cables."[12]

[12] David Anders, October 20, 2024. "Cable vs. Fiber Internet: How the Two Top Techs Compare", *CNET*, https://www.cnet.com/home/internet/cable-vs-fiber-internet/.

Notably, Springfield is far from unique in lacking fiber-optic internet infrastructure. Figure 15 zooms out to reveal that large pockets of Central and Western Massachusetts lack fiber infrastructure. By comparison, we see that in neighboring Connecticut, fiber is available to at least some residents in the majority of the state.

Notably, as seen above in Figure XX, several of Springfield's neighboring communities either currently have municipally owned fiber networks, or are exploring the possibility of going that route (including Chicopee, Holyoke, Wilbraham, and Westfield).

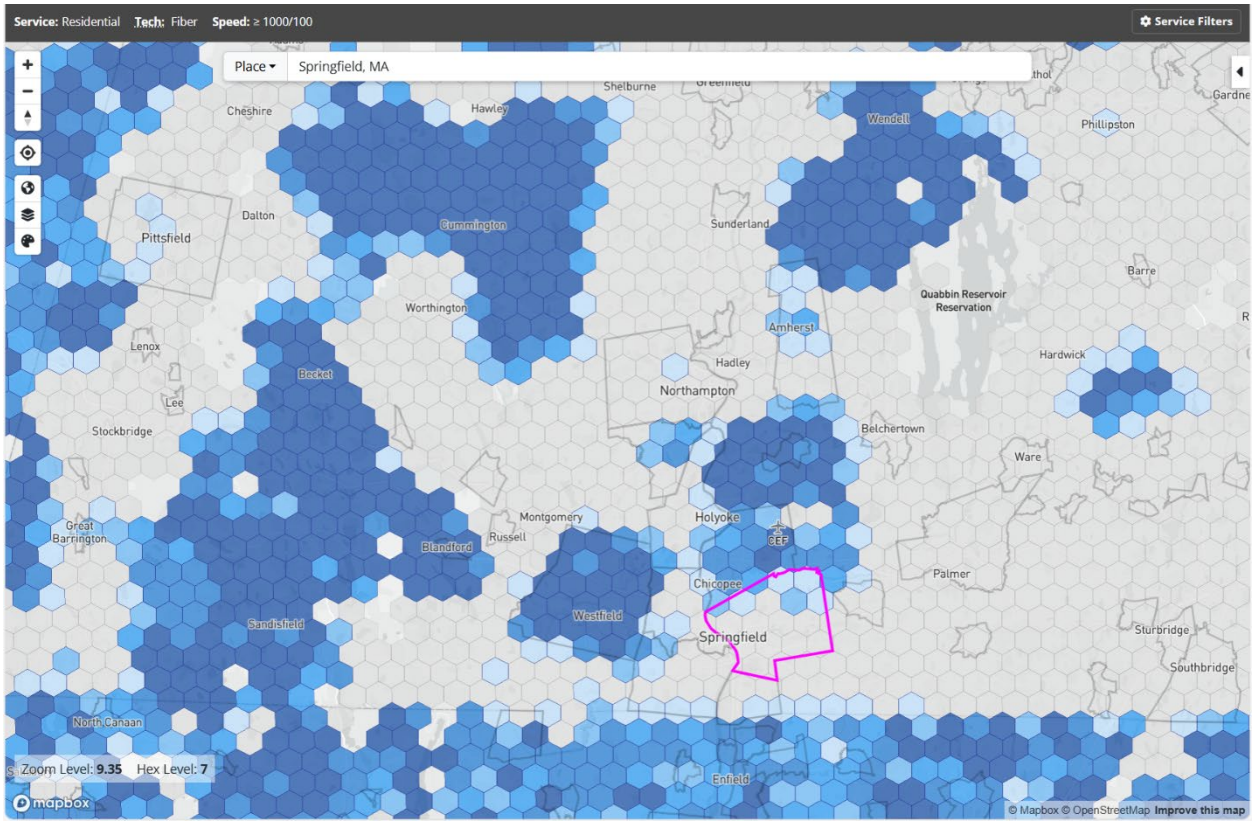


Figure 15

Demise of the Affordable Connectivity Program

Over the past two years there have been significant changes in terms of accessibility to broadband internet for low income residents. To its credit, the Federal government created the Affordable Connectivity Program to provide subsidized access to broadband services. ACP provided access to the internet at a significantly lower cost than market rate, and was a great benefit for those who used it. The Affordable Connectivity Program was a key component of the Bipartisan Infrastructure Bill passed in 2021 that made significant inroads at eliminating gaps in access to digital equity. The ACP replaced the previous EBB Program (Emergency Broadband Benefit).

Across Massachusetts, prior to the discontinuation of the program, the ACP helped 368,000 households to access affordable internet access and in some cases also devices such as tablets.

In the City of Springfield, the program helped more than 23,000 households to cross the digital divide, accessing the internet for prices that were much more affordable than

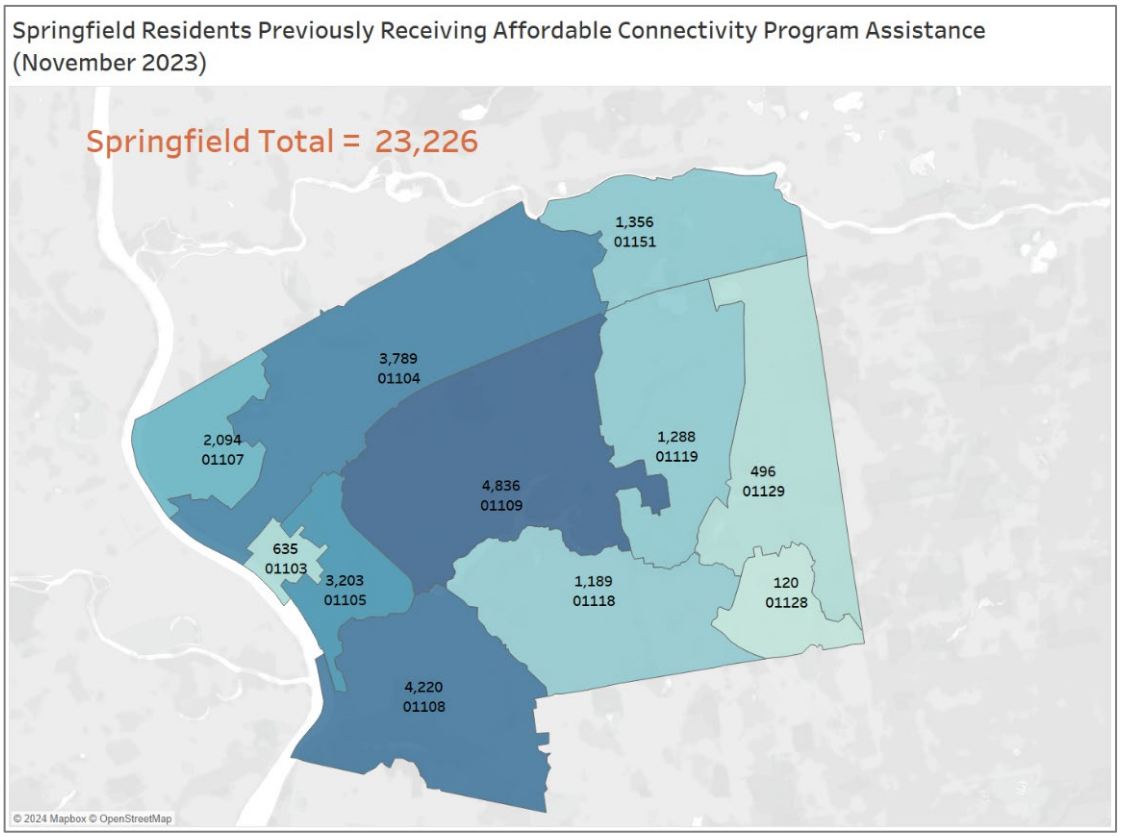


Figure 15: Number and location of residents receiving subsidized service through the now discontinued Affordable Connectivity Program

market rates.

From the program's inception at the beginning of 2022, ACP claimants in the city of Springfield were able to access millions of dollars in ACP benefits, helping those families

while also freeing up household income for other needs. Figure XX shows ACP recipients concentrated in three ZIP codes: 01104, 01109, and 01108, collectively accounting for over half of the city's program beneficiaries. These zip codes cover all or a substantial portion of the following neighborhoods: East Springfield, Liberty Heights, Brightwood, Memorial Square, McNight, Old Hill, Bay, Upper Hill, Pine Point, and Forest Park. With the failure of Congress to approve a funding extension for the program, it ceased operating in May, 2024, leaving the program's 23,000 participants in Springfield without this critically needed assistance.

Springfield Digital Assets

Springfield is fortunate to have several organizations doing critical work to advance access to digital resources. Below are three examples of such organizations, Way Finders, Tech Foundry/Tech Hub, and Tech Goes Home. As well, the entire region is well served by the collective efforts of the Alliance for Digital Equity.

Way Finders

Way Finders promotes digital equity in Springfield through its Community Building and Engagement team via several complementary channels.

"We are focused on engaging directly with residents and inspiring them to act as peer mentors, ready to help others overcome technological fears and barriers. We are focused on advocacy, and on exploring both the policies that have contributed to the digital divide and the local and national efforts to eliminate it. We also work in partnership: Way Finders is a core partner of the Alliance for Digital Equity, a regional task force working to enact policies and systemic changes to benefit underserved urban and rural communities in western Massachusetts."[13]

Digital Literacy Skills Training

Way Finders offers digital literacy skills training, focusing on helping residents learn how to send emails, navigate the internet, create and maintain passwords, make video calls, and create, share, and save documents. Their approach meets residents where they are in their

[13] Way Finders, https://www.Way Finders.org/western-ma/digital-equity/.

digital equity journey, teaching core skills as well as tailoring training to meet individual needs.

Digital Navigation Support

During the period of the federal Affordable Connectivity Program (ACP), Way Finders worked to maximize enrollment by Springfield residents. With the demise of the program, their focus has shifted to helping residents access the resources needed access the internet.

Digital Equity Coalition

This resident-led coalition from Springfield and Holyoke works to advocate for all residents to have equal access to computers, internet connectivity and digital literacy. The Coalition has working groups for both the City of Springfield and the City of Holyoke. They have also created a Facebook group, the Connect Hampden County Coalition. Through the work of the Digital Equity Coalition, Way Finders empowers citizens to advocate for themselves and their communities.[14]

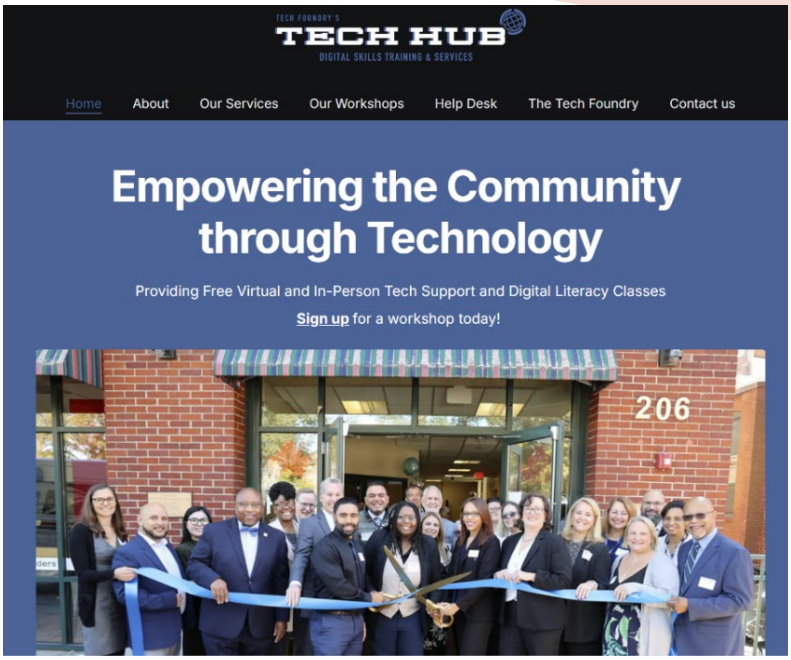
Way Finders' Community Engagement Director, Bea Dewberry addressing digital equity coalition meeting

Tech Foundry/Tech Hub

Tech Foundry has been serving the Springfield area for ten years. Tech Foundry's Mission is "To help people realize economic stability through equitable, accessible, and inclusive opportunities in the tech workforce." Prioritizing participants who "represent the diversity lacking in IT, including women, people of color, LGBTQA+ people and those from non-traditional educational backgrounds", Tech Foundry offers intensive education and training that builds upon a set of IT Fundamentals. Students engage in 14 weeks of coursework, followed by a four-week

[14] Residents interested in connecting with the digital equity work led by Way Finders should contact Keishla Archeval, Way Finder's Digital Equity Coordinator, at karcheval@Way Finders.org.

internship. The course format allows students to accelerate through several stages of digital literacy, allowing students to overcome barriers to digital equity and instead use their newfound expertise in IT to build a strong foundation for a more prosperous future.



In October, 2023, Tech Foundry created a "Tech Hub", located in the City of Holyoke, but serving the region. Tech Hub offers free virtual and in-person tech support and digital literacy classes. Appointments are required for either Help Desk or Device Assistance. Tech Hub has also partnered with Comcast to provide a limited quantity of computer devices to qualified individuals throughout Western Massachusetts. In March, 2025, Mayor Sarno announced funding for a Tech Hub in Springfield. This program is currently supported with City of Springfield ARPA funds.[15]

The Alliance for Digital Equity

The Alliance for Digital Equity ("The Alliance") has been coordinating extensive efforts throughout Western Massachusetts to advance digital equity since 2020. Founded by Baystate Health and the Community Foundation for Western Massachusetts, The Alliance "is an evolving coalition of organizations and individual stakeholders committed to addressing the Digital Divide." The Alliance recognizes the importance of building upon existing strengths, embodying the belief that the whole we create in alliance with like—minded organizations can be stronger than the sum of its parts. While the Alliance itself does not offer direct services, it plays a critical role in connecting the many organizations and agencies offering various digital equity

[15] Kristina D'Amours, WWLP.com, April 30, 2025, "Tech Foundry opens new Tech Hub in Downtown Springfield". https://www.wwlp.com/news/local-news/hampden-county/tech-foundry-opens-new-tech-hub-in-downtown-springfield/

programs and services. The Alliance believes that by bringing existing community resources together, the Alliance can accelerate the path towards expanded access to digital resources for all.

"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. The Alliance works to develop big picture solutions as well as the routes that lead to them."[16]

Alliance for Digital Equity Member Organizations Based in Springfield, MA	
American International College	Revitalize CDC
Baystate Health	SBSWF Consulting
Behavioral Health Network	Springfield Housing Authority
Caring Health Center	Springfield Library
Common Capital	Springfield Partners for Community Action
Community Foundation of Western MA	Springfield Rescue Mission
Dress for Success Western Massachusetts	Springfield Works (EDC)
Educare Springfield	Tech Foundry
New North Citizen's Council	United Way Pioneer Valley
O'Dell Womens Center	Way Finders
Pioneer Valley Planning Commission (PVPC)	Western New England University
Public Health Institute of Western MA	

Digital Access and health

There is a strong relationship between digital access and access to health care. While telehealth options can serve as a great convenience for people who might otherwise lack the ability to access health care in person (due to time constraints, physical disabilities, or lack of transportation), it can also exacerbate existing disparities in health care access in the absence of measures to achieve digital access for all. A 2020 report prepared by the Office of [then] Attorney-General Maura Healey notes that "[t]elehealth eliminates the time and cost of travel and allows those with limited mobility to access care more easily…", warning that "[a]lthough telehealth is an opportunity to increase access to care, government entities and health systems must ensure that the expansion of telehealth does not worsen existing health disparities by leaving behind low-income, older, rural, and non-English speaking residents."[17] In a November 2020 webinar, Healey reflects on the

[16] The Alliance for Digital Equity, https://alliancefordigitalequity.org/about-the-alliance/.
[17] Office of the Attorney General, Commonwealth of Massachusetts, 2020. *Building Toward Racial Justice and Equity in Health: A Call to Action*, https://www.mass.gov/info-details/building-toward-racial-justice-and-equity-in-health-a-call-to-action. Accessed 12/17/2024, 11:36 am.

longstanding existence of health disparities, noting the role that COVID-19 played in shining light on them:

"Now these inequities are heartbreaking, and they're not new, of course. I think what COVID-19 did was just amplify, reveal, certainly exacerbate, the healthcare disparities that have existed in our society…from the beginning."[18]

Although "telehealth" has been available in various forms for years, reliance on telehealth emerged as a key tool for people in need of health care during the peak period of the COVID-19 pandemic. The renowned Mayo Clinic explains what telehealth is: "Telehealth is the use of digital information and communication technologies to access health care services remotely and manage your health care. Technologies can include computers and mobile devices, such as tablets and smartphones."[19] In order to access such health care services, patients need both a reliable remote connection, and access to or ownership of appropriate devices such as outlined above.

> "THE ONGOING PROLIFERATION OF INNOVATIVE DIGITAL LEARNING TECHNOLOGIES AND THE NEED TO CONNECT STUDENTS, TEACHERS AND CONSUMERS TO JOBS, LIFE-LONG LEARNING, AND INFORMATION HAVE LED TO A STEADY RISE IN DEMAND FOR BANDWIDTH IN SCHOOLS AND LIBRARIES.
>
> FCC, E-rate: Universal Service Program for Schools and Libraries, https://www.fcc.gov/consumers/guides/universal-service-program-schools-

Achieving equitable access to telehealth services requires building upon a foundation of digital accessibility. Moreover, in the absence of bold measures to address the digital divide, people will get left even further behind as technological change progresses at exponential rates. Baystate Health's most recent federally mandated Community Health Needs Assessment (CHNA) drives this point home: "[A]s technology grows, so does the digital equity divide (the disparity in access to digital technologies – limited access to devices, unaffordable or unreliable broadband, limited technology knowledge."[20]

Digital equity and education

It also has been recognized that universal access to online learning ensures that all our children have access to the education and information needed to achieve their full academic potential. In the past, digital skills were something that a comparatively small

---

[18] Attorney General Maura Healey, November 16, 2020. "Building Toward Racial Justice and Equity in Health: A Call to Action", https://www.youtube.com/watch?v=w8WlS6LXM0U.
[19] Mayo Clinic Staff, "Telehealth: Technology meets health care." https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/telehealth/art-20044878. Accessed 12/17/2024, 11:15am.
[20] Baystate Medical Center, *2022 Community Health Needs Assessment*, p. 87.

share of students would acquire, through discrete courses such as computer science. Today, every subject area has content that can be delivered digitally (remotely, via access to the internet), or that requires and builds upon a base of knowledge of various digital skills.

The Commonwealth of Massachusetts has recognized the importance of leveraging digital skills for building a prosperous economy, and for developing a future-focused workforce development strategy. Both schools and libraries have, for example, been providing both computer devices [tablets/laptops], and mobile access devices to students who may not own or be able to afford such devices. The challenge of overcoming existing digital equities was recognized as a major area in need of significant support by educators during the initial phases of the COVID-19 pandemic. While the pandemic posed unique challenges, many of these challenges continue to exist today, Massachusetts schools and libraries continue to play important roles helping to achieve greater digital equity.

Massachusetts school districts and libraries have been effectively leveraging **e-rate**, a federal program—delivered through the Universal Services Administrative Company (USAC), which is overseen by the FCC. E-rate is application based, not grant based, meaning all districts are eligible. In its current form, E-rate funding is generously funded, with an inflation-adjusted $4.7B funding cap, which has not been fully utilized in recent years. The program uses discount rates, based on each school district's poverty level, as determined by eligibility for the national school lunch program (NSLP).

Springfield Public Schools has successfully leveraged federal e-rate funding, drawing down $1.9 million in FY 2023 to support operating costs of maintaining internet connectivity throughout the K-12 education system. Since FY2016, Springfield has leveraged $17.5 million funding via the e-rate discount program.

Looking at the most recent year for which we have e-rate funding data, we see that among the 10 largest school districts in the Commonwealth of Massachusetts, Springfield Public Schools has the second highest e-rate discount funding per student, at $83/student, approximately double the statewide funding average of $39/student.

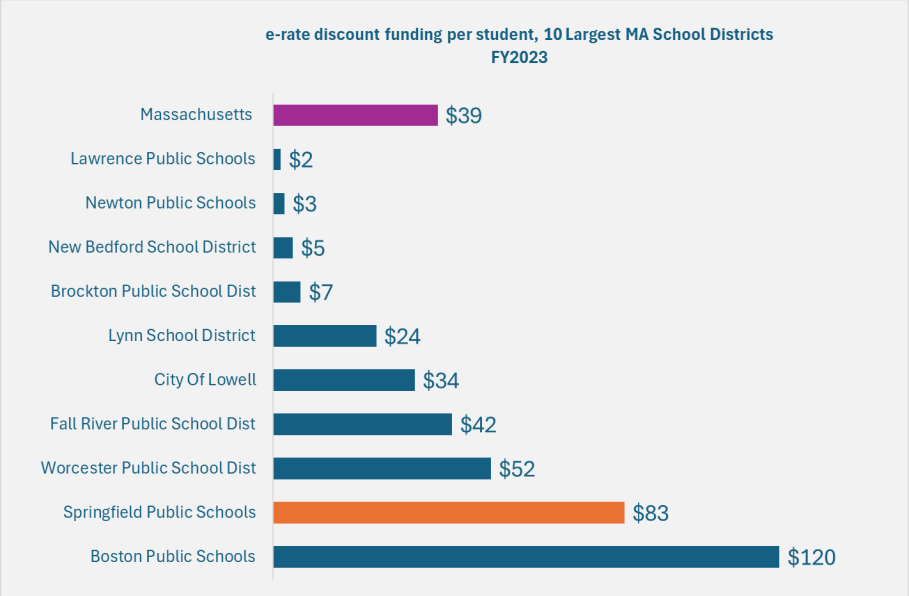


Figure 26

While true digital equity in education requires equitable access to

digital resources in both home and school, the Springfield Public School system has made full use of available resources to ensure digital equity for its students.

PART 3: IMPLEMENTATION PLAN

PVPC recognizes that in order to make tangible progress improving access to digital resources in Springfield, the city needs a focused approach. The city has expressed its 7 top priorities, to be addressed acknowledging that PVPC will work with the City on their implementation efforts in this final phase of the program.

Municipal Digital Equity Implementation Program

The municipal digital equity implementation program, administered by the Massachusetts Broadband Institute (MBI) channels funds to municipalities to implement eligible components of their municipal digital equity plan. Funds are available through one or more of the following **seven identified focus areas**:

- Staff capacity for digital equity
- Wi-Fi access and innovative connectivity technology
- Public space modernization
- Connectivity for economic hardship
- Digital literacy
- Device distribution and refurbishment
- Education, outreach, and adoption.

Available funds: up to $100,000

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

RECOMMENDATIONS, FUNDING OPTIONS, & CONCLUSIONS

Recommendations:

Here are the top recommendations that the PVPC makes for the City of Springfield to effectively advance digital equity for its residents.

1. Create Permanent Digital Equity Working Group
The Digital Equity Working Group has been an essential conduit for the digital equity planning. Consisting of members of the community and city government, the Work Group has guided community engagement, evaluated findings and helped inform the prioritization of future efforts. Going forward into implementation, a similar body should be established to serve as a permanent advisory group for the city. The PVPC would recommend opening up membership anew to reflect changes in personnel/roles over the past two years and to reflect the shift from planning to implementation. We recommend that membership should draw from the following: Springfield Public Schools, Springfield City Library, members of the City Council (not fewer than one, not more than three, as determined by the President of the City Council), at least three citizen representatives, and representatives of Springfield community based or non-profit entities such as Way Finders, Tech Foundry, or New North Citizen's Council.

Priority: High
Barrier addressed: Facilitate addressing all digital equity barriers
Completion date: July 31, 2025

2. Assign responsibility for overseeing city's digital accessibility work to a specific person within the City Assign Digital Accessibility Responsibilities to one staff person – This person could pursue relevant funding opportunities and serve as the primary point of contact and coordination for digital accessibility work pursued by the city. While this could be a city employee, it could also be achieved through a consultant working in conjunction with the city.

Priority: High
Barrier addressed: facilitate addressing all digital equity barriers
Completion date: August 31, 2025
Cost: depends on time spent.
Possible Source: MBI Implementation funds; one-time donation by PVPC of $20,000 using grant received from Comcast.

3.Expand Hot Spot Program
While permanent in-home wired or wireless internet connections are preferrable for most residents, the need for connectivity remains, further aggravated by the loss of the Affordable Connectivity Program (see section above, "Demise of the Affordable Connectivity Program"). To meet temporary needs or the needs of unhoused or transient residents, the PVPC recommends the expansion of a hot-spot loan program. These programs proved highly successful through the libraries during the pandemic but face resource constraints limiting their potential. Hotspots require a monthly or annual subscription in addition to one-time purchase of the devices. The City Library should continue to coordinate the Hotspot Loan program, partnering with community organizations as well as libraries, to meet the connectivity needs of residents.

Priority: High
Barrier addressed: Connectivity
Completion date: August 31, 2025

Cost: Approximately $12,000/ year for 100 hotspots (includes purchase of unit and annual subscription)
Possible Source: MBI Implementation funds

4. Explore and pursue options for expanding competition from other providers, particularly providers of fiber to the premises.

A common complaint is the lack of competition with the current dominant Internet Service Provider (ISP) which serves all of Springfield. In discussions with residents there was clear interest in municipally-owned fiber network or an arrangement where an upgraded city-wide fiber network could be built and leased to private ISPs. In discussion with city officials, ownership and operation of a fiber network was not considered viable but the need to attract additional ISPs was understood and supported. GoNetspeed's recent efforts to enter the Springfield market should be encouraged. The growth of competition should improve the quality/reliability of service, while reducing costs for consumers.

Priority: High
Barrier Addressed: Connectivity and Affordability
Completion date: Unknown
Costs: borne by ISPs [though there may be a role for the city to play in ensuring that ALL residents have access to fiber optic services.]
Possible source: to be determined

5. Pursue a phased-in deployment of publicly available Wi-Fi installations including public buildings and public places.

Creating free, Wi-Fi access in key locations throughout the city will increase greater access to the internet for all residents, including those lacking access in their homes, those needing to connect while away from home, and those experiencing periods of homelessness. The city is in the process of phasing in Wi-Fi installations throughout public buildings, and has a toehold in the city's public parks. Continuing this phased in approach is recommended.
Priority: High
Barrier addressed: Connectivity
Completion date: Sept 30, 2025
Cost: May vary. Approximately $5,000 - $10,000 per location (with additional annual costs for maintenance).
Possible Source: MBI Implementation Funds

6. Establish a fund to support distribution of computer devices (loaned, discounted, or free), helping people in arrears on payments to provider.

Many residents lack devices appropriate for connecting to the internet. Devices such as laptops, desktop computers, tablets or Chromebooks could be distributed through intermediary organizations. One noted approach could use the Tech Goes Home model which bundles digital skills training with a device and one year of internet service (if needed). To enable residents to enroll in discounted internet packages such as Internet Essentials, the City could provide targeted assistance.

Priority: Medium
Barriers Addressed: Affordability/Devices/Connectivity
Completion date: Begin by Sept. 30, 2025; Ongoing
Costs: Contingent on size of fund created [Devices: Approximately $300/device x 25 devices = $7500]
Source: MBI Implementation Funds/General Revenues

7. Work with ISPs and owners of multi-dwelling units (including the Springfield Housing Authority) to ensure all residents have access to high speed internet at affordable cost.
PVPC has determined (with confirmation by MBI) that in many instances the internet connection to a dwelling (often cable) might have high quality, high throughput capacity but that this superior connection ends at the street, outside the building. Especially for older housing stock and multi-dwelling units, this can be the case. As a result, residents in these homes or apartments do not have adequate internet service; PVPC heard multiple complaints about bad service which might be caused by poor wiring inside a dwelling.
Priority: High
Barrier Addressed: Connectivity
Completion date: Ongoing
Costs: None needed
Possible Source: None needed

Springfield Recommendations Compared with those of other Massachusetts Cities

While the above recommendations address the specific needs of the City of Springfield, as seen in the table below, many other communities across the Commonwealth have similar recommendations for advancing internet for all. [A more comprehensive list of recommendations can be found in Appendix A4: Recommendations for Advancing Digital Equity in Comparison Communities: Worcester, Somerville, New Bedford, Greenfield, Easthampton, Brockton, Lynn.]

Recommendations	Worcester	Somerville	New Bedford	Green-field	Easthamp-ton	Brockton	Lynn
1. Create Permanent Digital Equity Working Group	X			X	X		
2. Create Digital Equity Coordinator Position	X	X					
3.Expand Hot Spot Program		X		X			
4. Advocate for future funds from MBI and other potential sources		X					
5. Identify strategic locations for publicly available Wi-Fi installations		X		X			
6. Establish program to work with internet provider(s) & landlords to increase connectivity City wide		X	X			X	X
7. Establish a fund to support distribution of computer devices; assistance for residents in arrears on payments to provider		X	X	X		X	
8. Coordinate city-wide provision of digital skills training, digital navigator/mentor efforts for residents with other City entities (libraries, Councils on Aging, Housing Authority) and community based groups.	X	X	X	X			
Other potential initiatives considered							
Work to replace Affordable Connectivity Program	X	X		X			X
Undertake a feasibility study for development of a Mesh area network(s) for unserved areas							
Explore options (including municipally owned/operated ISP) for providing competition for provision of internet services	X	X		X			

Springfield Recommendations Compared with Other Municipal Digital Equity Plans

Funding Options

Funding sources to implement the recommendations outlined above are extensive in number but also limited in size. Funds supporting the current round of initiatives aimed at increasing digital equity have primarily been coming from the federal government, through funding available through the American Rescue Plan and via the Infrastructure Investments and Jobs Act (also known as the Bipartisan Infrastructure Law, or BIL). Given the ambitious goals of digital equity efforts funded through these federal omnibus deals, funds have by definition been spread throughout the nation.[21]

The following section highlights some of the more significant potential funding sources.

State Funds

Digital Equity Partnerships Program

In 2022, MBI used ARPA money allocated by the legislature to establish the Regional Partnership grant program. The first awards under this program were announced in 2023. One of the original three grantees was the *Alliance for Digital Equity*, a four-county coalition with Baystate Health serving as the backbone organization for the grant and program activities. As part of the Alliance's program design and implementation, funds and program support were provided throughout western Massachusetts, including to Springfield-based organizations. The total funds received by the Alliance from MBI for the Digital Equity Partnerships Program was $6.1 million, awarded in 2023 and 2025, for work to be completed by December 2026. In addition, the Alliance received funding from private sources including MassMutual, Davis Foundation, the Community Foundation of Western Massachusetts (all Springfield-based) and from Comcast to support digital equity activities; some of these funds were directed to organizations based in Springfield.

Springfield-based organizations receiving funds via the Alliance for digital equity activities including digital skills/literacy, digital navigation, and enrollment assistance include Way Finders, Springfield Partners for Community Action, New North Citizens Council, Common Capital, Western New England University, Public Health Institute, Tech Foundry, Revitalize CDC, and Springfield Housing Authority. The Alliance, in partnership with the Community Foundation of Western Massachusetts, also provided grants to organizations to buildout public access Wi-Fi; Springfield-based organizations receiving these grants included Make-It Springfield, New North Citizens Council and the Center for Human Development.

The Alliance has also used its MBI grant to provide devices and hotspots to organizations that directly support individuals. Springfield-based organizations receiving hotspots with these funds include: Way Finders, Revitalize CDC; an upcoming round of distributions will include the Springfield City Library, Springfield.community, New North Citizens Council, and Tech Foundry. Springfield organizations receiving devices (laptops, Chromebooks

[21] By point of comparison, according to 1-year American Community Survey data, there were 180 cities larger than Springfield, MA, in the United States.

and/or tablets) from the Alliance include: Springfield Partners for Community Action, New North Citizens Council, Tech Foundry, Springfield City Library, Revitalize CDC, Dress for Success, and the Springfield Rescue Mission. Device refurbishment is provided in partnership with Springfield-based Tech Foundry.

Finally, the Alliance has used MBI funds to establish and support networks of organizations to better promote coordinated digital equity activities. The Alliance's library network has included the Springfield City Library since the network's inception. The Alliance's Digital Navigation Network, created in 2024 includes staff from Springfield Partners for Community Action, Way Finders, New North Citizens Council, Springfield Housing, and Revitalize CDC. Both networks are coordinated by Springfield-based Public Health Institute.

Another recipient of the Regional Partnership grant was an eastern Massachusetts organization, *VinFen* with partner organizations supporting people with mental and behavioral health challenges. **Clinical Support Options (CSO)** and **Behavioral Health Network (BHN)** were subgrantees with VinFen. Funds received also support digital navigation and related digital equity activities.

Other important work funded through this partnership includes work undertaken by AgeSpan & the Massachusetts Healthy Aging Collaborative to assist seniors with digital accessibility. Additional information is available via James Fuccione, the Executive Director of the Massachusetts Healthy Aging Collaborative.[22]

Municipal Cybersecurity Awareness Grant Program

The Municipal Cybersecurity Awareness Grant Program, administered by the Office of Municipal and School Technology, within the Executive Office of Technology Services and Security (EOTSS), provides no-cost cybersecurity training to interested municipalities.

Additional information: https://www.mass.gov/orgs/office-of-municipal-and-school-technology

[22] See https://mahealthyagingcollaborative.org/. James' email address is James.Fuccione@mahealthyaging.org

Federal Funds[23]

NTIA FUNDING

[On May 8, President Trump announced the cancellation of funding via the federal Digital Equity Act, a decision that led to MBI suspending both the state's Launchpad Program and planned expansion of the Municipal Digital Equity Planning and Municipal Digital Equity Implementation Programs].

A primary source of federal funding for digital equity work has been the National Telecommunications and Information Administration (NTIA). Following the passage of the Digital Equity Act, $2.75 billion was allocated to establish three grant programs to promote digital equity and inclusion. These were the *State Digital Equity Planning Grant*, The *Digital Equity Capacity Grant Program*, and the *Digital Equity Competitive Grant Program*.

The State Digital Equity Planning Grant was available only to states and territories and intended to pay for the development of state or territorial digital equity plans. These plans were intended to inform subsequent state-level federal investments.

The Digital Equity Competitive Grant Program, a $1.25 billion funding opportunity, was open to a range of eligible entities including municipalities. Grants were estimated to be between $5-12 million and would cover a range of digital equity activities. Applicants were required to have a 10% non-federal match but it was conveyed through written materials and presentations that competitive applications would have a 20%-30% match. Programmatically, applicants that represented partnerships or served either multiple federally designated covered populations or broad geographic areas were deemed more competitive. Applications were due on September 23, 2024. Based on information, PVPC is aware of only four applications made in Massachusetts; only one from a single municipality; that being Boston. As of January 2025, less than half of the funds were awarded; additional awards have been halted as of this writing.

The Digital Equity Capacity Grant program was available only to states, territories, and tribal governments. Massachusetts received $14.1 million for use at the discretion of the Massachusetts Broadband Institute. Governor Healey suspended state programs dependent on this funding in mid May, subsequent to federal funding cuts discussed above.

Community Development Block Grants (CDBG)

The Community Development Block Grant is available to municipalities throughout the nation, to develop viable urban communities by providing decent housing and a suitable

[23] There remain federal funds committed by the Bipartisan Infrastructure Law to facilitate implementation of digital equity plans. There is currently some uncertainty regarding future allocation of federal funds. Massachusetts Attorney General Campbell has partnered with other Attorneys General to prevent the federal government from withholding previously committed funds across a broad range of program areas.

living environment, and by expanding economic opportunities, principally for low- and moderate-income persons. CDBG funds are intentionally very flexible, allowing cities to direct funds where most needed. One element of CDBG allows municipalities to leverage their grant funding to "to access low-cost, flexible financing for economic development, housing, public facility, and infrastructure projects. Section108 can be used for communities to upgrade their broadband infrastructure to create more 'connected' communities."

Available Funds: FY2024 CDBG funding for the City of Springfield was $3.7 million.

Additional Information: https://www.hudexchange.info/programs/section-108/

E-rate Program

The federal E-rate program provides funds to public schools and libraries to fund either data transmission services or internal connections. As noted above, E-rate funding follows a discount rate whereby eligible institutions submit claims for reimbursement, with discount rates determined by the poverty rate of the area served. Discounts range between 20% and 90% of full cost. The program is administered by the Universal Service Administrative Company (USAC), under direction of the Federal Communications Commission (FCC).

Available Funds: Because program is discount based, funding depends on expenditures for approved projects. Average annual disbursements over past nine years is approximately $1.8 million for Springfield Public School District.

Notable Date: Deadline for applications for FY 2025 is March 26, 2025. **Additional information** on timelines available here: https://www.usac.org/e-rate/resources/upcoming-dates/.

Workforce Innovation and Opportunity Act (WIOA)

The Workforce Innovation and Opportunity Act is the backbone for federal funding of workforce systems throughout the United States. Under the parameters of WIOA, states can spend a portion of their funding allocations to help residents access digital skills training. Recent funding through WIOA to the Commonwealth of Massachusetts has included the following:

- Adult Activities: $16.2M (PY2024)
- Youth Activities: $18.9M (PY2024)
- Employment Services: $14.4M (PY2024)
- Community Service Employment for Older Americans: $8.1M (PY2023)

WIOA funds are distributed throughout the Commonwealth of Massachusetts through the MassHire Workforce Boards.

Conclusion

With this report, the City of Springfield is well positioned to begin an organized and intentional effort to expand digital equity for its residents and businesses. PVPC's recommendations address all three legs of the "digital equity stool": access to both the internet and devices, and attainment of digital skills. They also address the important element connecting each of the legs—affordability—recognizing that socio-economic status is a powerful factor contributing to the digital divide.

Especially as 2025 begins and the once in a lifetime investment in digital equity is likely to ebb, the challenge for Springfield will be to begin this work with an eye towards sustainability. In this context sustainability means thinking about how resources, both financial and personnel, are deployed so they are integrated in all that the city does and supports. Similarly, the commitment to digital equity must be sustained in the context of ever-changing technology; while technology will evolve and the expectations of how people use technology will similarly shift, the commitment to digital equity should remain solid. If nothing else, this report should leave the city asking the question, "How do we support digital equity internally for city government and externally with our community in all that we do?" Doing so will not only close existing digital equity gaps, it will lay a strong foundation for the future prosperity of the city. This is the shift that the Springfield Digital Equity report seeks to catalyze.

Appendices

A1: Relationship between median household income and percent of homes lacking internet subscription, by Springfield neighborhood.

A2: Full set of unprioritized options for advancing digital equity in Springfield

A3: Recommendations for Advancing Digital Equity in Comparison Communities: Worcester, Somerville, New Bedford, Greenfield, Easthampton, Brockton, Lynn

A4: Glossary of Terms

A5: Funding Matrix

A6: Executive Summary of Statewide Digital Equity Plan, Massachusetts Internet for All Plan

Appendix A1: Relationship between median household income and percent of homes lacking internet subscription, by Springfield neighborhood.

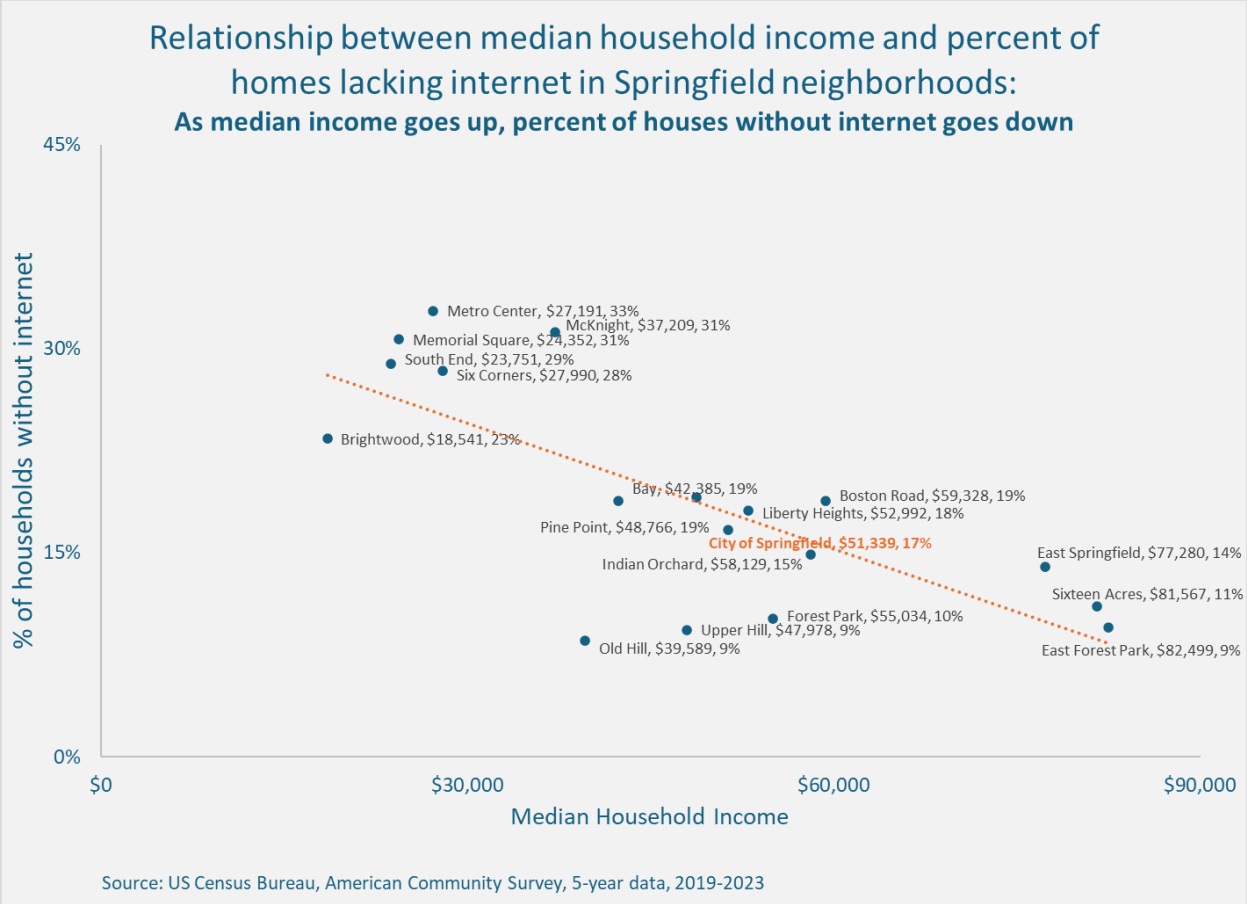


Figure A1

Appendix A2: Full set of unprioritized options for advancing digital accessibility in Springfield

The City of Springfield would benefit from the following interventions and programs.

1. **Create a permanent Digital Equity Working Group (DEWG) for the city.** The original working group that consisted of residents and key stakeholders provided an important conduit for input and guidance to inform the City's digital equity efforts. This should be continued.
2. **Create publicly funded digital equity coordinator position -** A digital equity coordinator position could help identify funding opportunities and lead efforts to secure funding and serve as the primary point of contact for any of the digital equity interventions selected by the city. If a short-term deployment of this role is required, a consultant could be engaged rather than a city employment, with medium term plans for converting the position to city employee status. It could be full or part time or shared with another community such as Holyoke, or Chicopee.
3. **Expand hotspot lending program.** Hotspots are available at approximately $120/month (based on Verizon and T-Mobile vendors). This involves purchasing the unit and a required annual subscription. Libraries in Springfield have experience distributing hotspots on a lending basis.
4. **Advocacy to secure MBI/BEAD funds** There has been much discussion about the need to create better connectivity options for Springfield residents. Most expensive would be the development of an open fiber network (see below) but could also include development of wireless options (strategically placed Wi-Fi or mesh networks). The needs of the city should be made known now before funding programs are established by MBI. should include the City Council, the Mayor and the legislative delegation.
5. **Work to replace federal Affordable Connectivity Program ("ACP")** There is no federal response to replace ACP in the upcoming Congress. Mass. has stated it cannot afford the $7M/month cost of subsidizing residents at $30/month. However, Springfield could subsidize some residents at a lesser amount if budgetarily feasible
6. **Create Network of free public access points** [based on areas of greatest need] Installation of publicly accessible Wi-Fi would help connectivity in areas where residential connectivity is poor due to quality or affordability. This would require planning and implementation costs with a 1–3-year deployment window, depending on how extensive the deployment is.
7. **Develop wide area mesh networks to connect underserved neighborhoods.** Similar to strategic Wi-Fi deployment, deploying wide area mesh networks that would cover wide parts of the city to address current connectivity barriers will require planning and deployment. The level of planning and time for deployment would likely be longer than limited Wi-Fi deployment but with likely broader impact.

8. **Monitor implementation of MBI's Residential Retrofit program, improving internet quality/reliability in Springfield multi dwelling units (MDUs)/apartments, especially public and other affordable housing units.**
9. **Create city-fund to assist people in arrears** with their Internet bill if they are income-eligible for subsidized program (Internet Essentials) In order for customers to receive discounted Comcast service through Internet Essentials, they cannot be in arears. A city fund could help address this situation for eligible residents. Parameters would need to be developed and the fund created and managed.
10. **Explore program to provide ownership for free or low-cost computer devices** The lack of internet-accessible devices continues to be a barrier. This includes laptops, desktops, tablets and Chromebooks. These could be distributed through a system of intermediaries. One noted approach could use the Tech Goes Home model which bundles digital skills training with a device and one year of internet service (if needed).Also included here could be Devices available to borrow , for example Springfield libraries have provided some devices via loan. Funds could be provided to distribute laptops, Chromebooks or tablets through libraries or community-based intermediaries.
11. **Coordinate city wide with places/programs to get digital skills training** or support [including advice about cyber security. There are currently many organizations intentionally offering digital equity support in Springfield and others that more informally provide these services, as needed. Additional funding to support and formalize these efforts could create a more systematic approach to providing residents with digital skills. Could support it with =digital mentors [buddy system, pairing user with someone with greater comfort and knowledge, youth corps pairing older adults with young tech-savvy volunteers]
12. **A place to get tech support for your devices**. For example**,** Tech Foundry currently offers this "Apple Store for the People" approach through the Tech Hub in Holyoke. Since Tech Foundry is a Springfield-based organization, funding to support replication of the Tech Hub model is possible. Or there could be other organizations interested in providing these services if funding is available that could include the library, senior centers, etc. This latter solution could be addressed through funding for a circuit rider tech support model with community-based office hours.
13. **Encourage schools to provide more devices & digital navigation services.** Schools are likely providing some support for students. How and if this support could be expanded for students as well as household members or community members, might be explored with additional funding.
14. **Work with Libraries, Council on Aging and housing authority** to continue to provide coordinated support and access and education to improve digital literacy
15. **Subsidized Open fiber network to create high quality**, competitive internet access to encourage competition in internet services [not just Comcast/Xfinity. This would be an expensive and forward-thinking intervention to both address connectivity needs of residents and businesses but also as an economic

development strategy to attract residents and business to a 21 century Springfield. This will require significant funds for assessment and planning prior to any deployment. Planning would include both engineering and financial plan.

16. **Provide cross agency digital skills training to City agencies engaging with the public.** This would likely require the identification of appropriate city agencies, point people within those agencies and then the training of those employees. Clarification of what support can be provided to residents via these agency staff versus referrals for more extensive support would need to occur.
17. **Create system for referrals for digital equity services.** No single entity can meet all the digital equity needs of a resident or business. Therefore, to create efficiency and enhance impact, a system of referrals to trusted and/or funded partners that can offer various and appropriate digital equity services to residents and businesses should be established. This could be through 413Cares.org or managed through a city agency.
18. **Beyond the Working Group, Provide for community input, education and awareness** regarding digital equity issues and efforts should be formalized. This could include a City Webpage, posting of meetings on YouTube, email notifications, etc.
19. **Step up city's efforts to share data with citizens, encourage accountability.** If the City embraces the idea that its residents and businesses should have digital equity, then the tracking of data regarding connectivity, devices and skills could be established and then posted online for public accessibility. These metrics would promote accountability for efforts to advance the City's goals for digital accessibility.
20. **Incorporate digital equity services into all cities grant proposals** to ensure adequate funding to support ongoing implementation. As a way of integrating digital equity into all of its work, the City can begin to seek funding for digital equity services through its regular funding for operations. This would increase available funding generally for digital equity. This would create a need for a digital equity plan so that funds that are sought align with what is needed by the city.
21. **Plan for evolving technology, ensuring funding to remain current.** There must be the recognition that technology is continually evolving and that no solution established in 2025 will continue to be sufficient in 5-10 years. Given this the City needs to identify a group or process that can continually monitor emerging opportunities and challenges.
22. **Establish an on-going Digital Equity Action and Accountability subgroup that reports to the Digital Equity Working Group**. This subgroup can monitor progress and ensure fidelity to the recommendations adopted from this report or for other city supported digital equity initiatives including the municipal implementation activities. This will include review of the measurable objectives, advice regarding outside funding opportunities, and adherence to the implementation plan and its strategies. While this will be a smaller group with more a more focused charge, it

should include community representation, departmental representation and knowledge/expertise in program monitoring. Meetings should be no less than quarterly.

23. **The City, with input from the Digital Equity Working Group should publish an annual status report on digital equity progress and current conditions**. This report and relevant metrics should be posted on the City's website for public access.

Appendix A3: Recommendations for Advancing Digital Equity in Comparison Communities: Worcester, Somerville, New Bedford, Greenfield, Easthampton, Brockton, Lynn

CITY	RECOMMENDATIONS
Worcester	Create Digital Equity Coalition
	Create Digital Navigator position
	Create a DE manager position
	ACP replacement grant program
	Support digital skills training through library
	Partner with educational institutions to enhance learning and resources
	Targeted digital skills on cyber security
	Support healthy use of digital by youth
	Create device refurbishment program
	Explore expanding of ISP providers
Somerville	Build asset map to create Directory for residents
	Create digital navigator program
	Create multi-lingual educational resources for residents
	Create multi-lingual education materials on cyber security and safety
	Create free public wifi
	Expand Hotspot distribution
	Expand device distribution/lending
	Organize device donation drives
	Fund computer labs in CBOs
	Funding to CBOs for device refurbishment and distribution programs
	Convene a community of practice for CBOs doing digital equity work
	Collaborate with anchor institutions to coordinate and expand services
	Dig Once policy - adding fiber when roadwork is done
	Engage ISPs to encourage more competition
	Consider consumer advocacy and protection policies
	Provide direct financial support to household given loss of ACP
	Consier open fiber infrastructure
	Regional partnerships with neighboring municipalities
	Improve connectivity in residental units
	Create permanent Digital Equity position in City
	Incorporate digital equity funding requests in other city grant proposals
	Continue digital equity discovery of needs
	Coordinate among city departments for shared digital equity goals
New Bedford	Convene a digital equity coalition with annual meetings
	Unspecified grant program ($50K)
	Hire two digital navigators for schools
	Seek funding for digital navigators at library
	Seek funding for COA computer lab
	Explore partnerships to establish device distribution
	Improve connectivity in residental units
	Explore cyber security programs
	Seek funding for digital skills at Charter school

CITY	RECOMMENDATIONS
Greenfield	Apply for MBI funds to expand local wifi ISP (GCET)
	Explore ways to fund an ACP replacement program
	Expand public wifi
	Continue hotspot lending thru library
	Adopt a city digital equity policy
	Continue funding library's computer lab
	Expand device distribution/lending
	Create Steering Committee to coordinate digital equity activities
	Continue funding library's digital navigator
	Seek funding to continue digital skills training thru library and GCC
	Support CBOs providing digital equity services
Easthampton	Be an active member of the Western Massachusetts Alliance for Digital Equity
	Apply to NDIA Trailblazer program for recognition and ideas
	Assess business needs through Chamber of Commerce
	Support legislation for "one touch" to promote installation of fiber
	Work with neighboring municipalities for improved reliability of broadband networks
	Create a digital equity coalition to advance the digital equity plan
	Create an asset map that can be used to assist residents with DE needs
	Create and maintain fiber and cable maps and providers
	Encourage anchor institutions to expand DE involvement and resources
Brockton	Create a digital equity coalition to advance the digital equity plan
	Assign city employee to coordinate digital equity activities
	Establish goals and identify data to establish benchmark progress
	Outreach for ACP
	Improve connectivity in residental units
	Increase eligiblity for federal infrastructure funding
	Monitor ISPs for improved performance
	Expand device distribution/lending
	Establish a device refurbishment program
	Support digital navigation at CBOs
	Build national and state partnerships for digital skills
Lynn	Convene a digital equity coalition with annual meetings
	Create city grant funding to support ACP replacement or digital skills
	Explore funding for public TV to do digital skills
	Explore funding for digitgal navigators
	Explore funding for CBO digital skills training including Tech Goes Home
	Explore funding for support specialist at the community college
	Improve connectivity in residental units
	Support CBOs for device purchases (for distribution?)
	Explore cyber security programs

Appendix A4: Glossary of Terms[24]

Digital Divide: *The digital divide is the gap between those who have affordable access, skills, and support to effectively engage online and those who do not.*

Digital Equity[25]: 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 Inclusion[26]: Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs).

Digital Literacy: Digital Literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

Digital Redlining: Digital redlining is discrimination by internet service providers in the deployment, maintenance, or upgrade of infrastructure or delivery of services. The denial of services has disparate impacts on people in certain areas of cities or regions, most frequently on the basis of income, race, and ethnicity.

Digital Navigators: Digital navigators are trusted guides who assist community members with ongoing, individualized support for accessing affordable and appropriate connectivity, devices, and digital skills.

Broadband Equity: Broadband equity is achieved when all people and communities are able to access and use affordable, high-speed, reliable internet that meets their long-term needs.

---

[24] This glossary of terms is based on several sources, including the National Digital Inclusion Alliance (NDIA), https://www.digitalinclusion.org/definitions/.

25 NDIA, Ibid. "Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services….It is important to note here the use of "equity" vs. "equality." When we use the word equity, we accurately acknowledge the systemic barriers that must be dismantled before achieving equality for all."

[26] NDIA recognizes five elements of digital inclusion:

- Affordable, robust broadband internet service;
- Internet-enabled devices that meet the needs of the user;
- Access to digital literacy training;
- Quality technical support; and
- Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Digital Foundation Skills: The set of skills required to effectively operate computing devices to access the internet and use resources available.[27]

[27] These foundational skills may include the following:

- Turn on a computer device [desktop computer, tablet computer, smartphone] and operate its controls;
- Make use of accessibility tools on device to make it easier to use;
- Interact with the home screen on device;
- Understand that the internet allows one to access information and content and can be connect to through Wi-F;i
- Connect computer device to a safe and secure Wi-Fi network;
- Connect to the internet and open a browser to find and use websites;
- Understand that computer passwords and personal information need to be kept safely as they have value to others;
- Update and change computer password when prompted to do so.

Appendix A5: Potential Funding Options for Implementation of Springfield's Digital Equity Plan

The Matrices below provide an extensive (but not exhaustive) examination of funding sources available to offset costs of implementing Springfield's Municipal Digital Equity Plan. Funding streams examined include the following:

Federal and State Funding

- State Digital Equity Capacity Grant Program
- Broadband Equity, Access, and Deployment (BEAD) Program
- Digital Equity Partnerships Program
- Capital Projects Fund: Gap Networks
- E-rate: Universal Service Program for Schools and Libraries
- Emergency Connectivity Fund
- Lifeline program for Low-income consumers
- Investments in Apprenticeship to Support the Telecommunications Workforce
- Community Development Block Grants (CDBG)
- Workforce Innovation and Opportunity Act (WIOA)
- English Language Acquisition State Grants

Philanthropic and Corporate

- Connect Humanity
- Bank Foundations (under Community Reinvestment Act (CRA))
- Health Care Organizations (including, e.g. Baystate Health)
- Barr Foundation
- Project UP (Xfinity/Comcast
- Internet Essentials (Xfinity/Comcast)
- Tech Goes Home
- MassMutual Foundation
- AARP Community Challenge Grants

Details of these funding streams are available below.

Funding streams	Timeline	Period of availability	Funding type	Funding amount	Administering entity	Benefits/ implementation areas	Eligible entity or grantees/ who can apply?
State Digital Equity Capacity Grant Program **[Under DEA]**	Long-term	Starts once the SDEP is complete	Federal (NTIA) Digital Equity specific Grant type	$1.44 billion	Massachusetts Technology Collaborative (MassTech) on behalf of the Massachusetts Broadband Institute (MBI)	1. Develop, implement, and oversee DE plans + make awards to other entities help develop DE plans 2. Improve online accessibility & inclusivity of public resources 3. Implement DE plans and digital inclusion activities 4. Provide digital literacy and skills education to covered populations 5. Facilitate adoption of high-speed internet by covered populations	
Broadband Equity, Access, and Deployment (BEAD) Program	Long-term	MBI currently in the 5-year plan development stage; once completed remaining funds to be used for access, adoption, and equity	Federal (NTIA) Digital Equity specific Grant type	Total: $42.45 billion Initial Planning Funds for the state: **$5,000,000**	Massachusetts Technology Collaborative (MassTech) on behalf of the Massachusetts Broadband Institute (MBI)	1. Deploying/ upgrading internet in unserved and/or underserved areas OR improving service to community anchor organizations 2. Planning for high-speed internet- research, data collection, outreach, and training. 3. Installing internet and Wi-Fi in multi-unit residential buildings. 4. Adoption and digital equity programs. 5. Workforce deployment programs and vocational training 6. User training- cybersecurity, privacy, and other digital safety matters 7. Remote learning or telehealth services/ facilities. 8. Digital literacy/ upskilling 9. Education programs- computer science, coding, and cyber security 10. Implementation of Eligible Entity digital equity plans 11. Broadband sign-up assistance and programs that provide tech support 12. Multi-lingual outreach to support adoption and digital literacy. 13. Prisoner education to promote pre-release digital literacy, job skills, online job acquisition skills, etc. 14. Digital navigators. 15. Direct subsidies for use toward broadband subscription 16. Costs associated with stakeholder engagement, including travel, capacity-	1. Focus on deploying unserved locations (access under 25/3 Mbps) and underserved locations (access under 100/20 Mbps) 2. Community Anchor Institution- school, library, health clinic, health center, hospital or other medical provider, public safety entity, higher education institution, public housing organization, or community support organization
Digital Equity Partnerships Program **[Under Broadband Innovation Fund; ARPA 1.0 legislation]**	Long-term	Expanded version- Funding for Core Initiatives and Municipal Planning Implementation- $100k for participants of Municipal Digital Equity Planning Program	Federal (NTIA) Digital Equity specific Grant type	Total: $50 million	Massachusetts Broadband Institute (MBI)	1. WiFi Access Initiative: WiFi systems in affordable multi-unit buildings or low-income neighborhoods will provide free, in unit, broadband use. 2. Public Space Internet Modernization Initiative: Improvements to inadequate broadband infrastructure and digital use in public spaces to increase daily use and services 3. Connectivity Initiative for Economic Hardship: Provision of WiFi cellular hotspots to individuals lacking stable housing and unable to have a fixed broadband internet subscription will provide briadband connectivity to this vulnerable population. 4. Digital Literacy initiative	Communities that lack broadband access
Capital Projects Fund: Gap Networks **[Under ARPA]**	Moderate-term	2026-12-31	State Digital Equity specific Formula type	$145 million	Massachusetts Broadband Institute	1. Deployment of broadband infrastructure in areas that currently lack access to sufficient broadband internet service (download 100 Mbps & upload 20 Mbps). 2. Provide internet service with speeds of 100/100 Mbps symmetrical to households and businesses upon project completion.	Local government entitites, Native American Indian Tribes, non-profit organizations, private entities, co-operatives, public private partnerships, and other entitites that develop and/or operate broadband networks
E-rate: Universal Service Program for Schools and Libraries **[Title 47 USC]**	Short-term	06/30/2024 (for FY 2023)	Federal (FCC) Telecommunications and Digital Equity specific Subsidy and discount type	$4.456 billion	Universal Service Administrative Company (USAC)	Discounts for telecommunications, internet access, and internal connections, internal broadband services, and basic maintenance Discounts of 20% to 90%, based on poverty levels of schools	School, library, non-instructional facility (NIF), non-traditional elementary and secondary education,Educational Service Agencies (ESA)

Funding streams	Timeline	Period of availability	Funding type	Funding amount	Administering entity	Benefits/ implementation areas	Eligible entity or grantees/ who can apply?
Emergency Connectivity Fund **[Under ARPA]**	Short-term	2024-06-30	Federal (FCC) Digital Equity specific Subsidy type	$7.1 billion under ARPA	Universal Service Administrative Company (USAC)	1. Enable eligible schools and libraries to purchase Wi-Fi hotspots, modems, routers, and connected devices. 2. Schools & libraries can reimburse households for internet service (enable students to participate in remote learning). This is funneled through the E-rate program, but allows schools & libraries to support students off-campus	Schools and libraries
Lifeline program for Low-income consumers **[Under Communications Act 1934]**	Short-term	Calendar year	Federal (FCC) Digital Equity specific Subsidy type	$2.385 billion	Universal Service Administrative Company (USAC)	1. Discount on phone or broadband service for qualifying low-income consumers. 2. 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	Low-income consumers; must have income at or below 135% of federal poverty guidelines
Investments in Apprenticeship to Support the Telecommunications Workforce			Federal (Dept of Labor) Telecommunications specific Discretionary type	$15 million (public-private partnership)	Dept of Labor/ Employment and Training Administration	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,	Businesses that develop, build, own, and operate wireless infrastructure. Includes wireless carriers, infrastructure providers, and professional service firms.
Not Digital Equity specific							
Community Development Block Grants (CDBG)	Long-term	N/A	Federal (HUD) Locally managed/administered Loan or Loan Guarantee type	As sought by applicant Total: $300 million	Local CDBG Grantee	1. Conduct broadband needs assessment 2. Install wiring, fiber optic cables, and permanently affixed equipment 3. Provide digital literacy classes.	MSAs, metro citites with population at least 50,000, qualified urban counties with population of at least 200,000, states and insular areas. They are targeted to help low- and moderate-income persons
Workforce Innovation and Opportunity Act (WIOA)	Long-term	N/A	Federal (Dept of Labor) Focus on workfroce development Formula type	$4.41 billion (FY 23)	Employment and Training Administration (ETA)	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.	
English Language Acquisition State Grants **[Office of Elementary & Secondary Education, Title III Part A]**	Short-term	N/A	Federal (Dept of Education) Focus on education Grant formula type	Total: $890 million	State government	Enhance instruction for English learners with digital resources	English learners and immigrant children and youth

Funding Matrix (Corporate and Philanthropic)

Funding streams	Funding type/ amount	Benefits/ implementation areas	Implementation target entity	Reference
Connect Humanity	Grant/$2.5M	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	underserved rural and low-income communities	https://connecthumanity.fund/
Bank foundations **Under Community Reinvestment Act**	Grant/Need-based	**Broadband** 1. Purchase mobile hotspot devices, for lending to low income families/learners. 2. Investment in local broadband infrastructure development in an LMI community **Hardware** 1. Purchase and provision of computers 2. Donation to LMI learners of recent model, fully furbished computers, bundled with financial literacy courseware and other resources for skill development. 3. Grants to nonprofits to refurbish computers that then are donated to LMI learners and families. 4. Donation by banks both of theri owne recent used computers along with grant funding to refurbish them and provide them for free to LMI learners with financial literacy content. **Tech Support** 1. Training for low-income earners of all ages, often accompanied by provision of a free new or recent well-refurbished computer and sometimes often by free or deeply discounted broadband. Training for youths to provide tech support in LMI communities. **Librarian assiatance** 1. Training in cybersafety and information literacy in LMI communities. 2. Lending out mobile hotspot devices, coupled with training in how to use them for library patron in LMI communities. **Numeracy (or "math literacy)** 1. Grant funded efforts that focus on math literacy since it is essential to educational and economic opportunity. **Financial literacy education** 1. This is a well-established purpose for which banks have received CRA credit, like affordable housing. **Digital age skills** 1. Training children, youths, and adults in coding, including often extended exposure to coding careers and workplaces. 2. Training for youths in how to provide tech support for peers and adults at school, home, and in the community. 3. Leadership development for disadvantaged youths. 4. Digital literacy skills development for "middle skill" jobs- jobs that don't require a college degree	Low and moderate income populations	National Collaborative for Digital Equity funding guide
Health care organizations	Grant	Examples of technology-enabled healthcare programs (https://healthcare.rti.org/insights/improving-digital-health-equity-with-technology): 1. Boston Medical Center: Mothers at risk for hypertension received blood pressure cuffs and a QR code, monitoring their blood pressure remotely for six weeks. The program, featuring multilingual device instructions and minimal data requirements, significantly reduced readmission rates, supported by web portal assistance from high-risk obstetric nurses. 2. Nemours Children's Health: Throughout the pandemic, the health system provided staff as digital health navigators, assisting patients and families with different technology issues such as filling out online forms, fixing connectivity problems, and accessing telehealth visits. 3. Ochsner Health: The O Bar offers physician-recommedned digital products and is staffed by full-time technologists who help patients choose the right digital technology, providing setup guidance and support.		
Community foundations				
Barr foundation	Grant	Funding opportunities- Sector Effectiveness strategies, Decision-making: Ensuring public debates on critical issues that are informed by rigorous research and analysis as well as public engagement. They focus on building awareness of the need and demand for credible data, including constitutent voice that reflects the diversity of our communities, employing strategic communications and enegagement approaches, building knowledge to bridge divides re reduce polarization. Education: Partner with education and community leaders, intermediaries, and reserchers to provide opportunities to adopt new high school models, engage in stakeholder-driven high school design and planning processes, support school teams to launch and evolve school models, and distill insights from partners and support new research.	Community leaders and local government	Barr Foundation
Corporate Social Responsibilty				
Project UP by Comcast	Income-eligible/ $10 billion total	Connectivity & adoption: Connecting people to the internet, technology, and resources needed to succeed in a digital world. Skills & creativity: Creating opportunities and new caeer 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.	Low income population	Program website
Internet essentials from Comcast	Grant /$1B	1. Awarenss & training: Work with a network of partners to offer free in-person, online, and printed digital literacy training materials and classes. 2. Low-cost & free service: provide low-cost, high-speed broadband to low-income households across our service area- 50/10 mbps for $9.95 + tax or $100/10 Mbps for $29.95 + tax. Both tiers are free when customers apply for their $30/month ACP credit 2. Equipment: Internet Essentials can purchase a new, heavily subsidized and discounted computer for less than $150 through partnership with Dell technologies, Inc.	Low income population	Program website
Tech Goes Home	Service; Funded by MBI	Programs for adults, families- Partner with social service org to deliver courses focused on fundamental digital skills. Offered in libraries, community centers, public housing, and other nonprofit org. TGH Connect- partner with cities, libraries, CBOs, schools, health care centers, and faith-based org to disseminate critical info and help community access online resources.	Communities most affected by structural injustices- low-income, BIPOC, speakers of primary language other than English, unemployed adult learners.	
MassMutual Foundation	Grant (Foundation grants take a variety of forms, most commonly: general operating, capacity building, program support, capital campaign.)/no set budget	Focus areas include: 1. building networks; 2. fostering financial health, 3. fulfilling basic financial needs, 4. expanding employment opportunities. Grants primarily focus on existing partnerships with local/regional organizations serving their target populations, and include several organizations actively engaged in efforts to advance digital equity: Union Capital, Way Finders, Neighborshare (which in turn partners with New North Citizen's Council, Way Finders, and United Way of Pioneer Valley.	MassMutual Foundation is focused on building the capacity of community organizations working to **diminish systemic barriers** and **increase the financial resilience of households and communities**.	Mass Mutual Foundation website
AARP Community Challenge Grants	Annual grant program: **2025 program Applications due March 5, 2025** Multipurpose grants	3 types of projects funded: 1. permanent physical improvements in the community; 2. temporary demonstrations leading to permanent change; 3. new, innovative programming pilots or services. **Flagship grants** available to support [among other things] I**ncreasing digital connections and enhancing digital literacy skills of residents**; **Demonstration Grants** funding [among other things] "Expanding high-speed internet (broadband) access and adoption, with a focus on people age 50-plus, with funding support from Microsoft."	available to community based organizations (non-profits with 501(c3,c4, or c6 designations), government entities, other organizations on a case by case basis.	AARP Liveable Communities site

Appendix A6: Executive Summary of Statewide Digital Equity Plan, Massachusetts Internet for All Plan