

CONNECTICUT BROADBAND REPORT

2024

Connecticut Department of
Energy & Environmental Protection

BUREAU OF ENERGY AND TECHNOLOGY POLICY



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EXECUTIVE SUMMARY

This second biannual broadband report highlights Connecticut's progress in closing the digital divide through strategic interagency collaboration and targeted initiatives. Building upon the baseline established in the inaugural report, it provides a comprehensive evaluation of advancements and ongoing challenges in achieving universal broadband access and fostering digital equity.

The report underscores significant strides, including the October 2024 announcement of \$28 million in grants to extend broadband service to over 3,000 unserved and underserved locations. Concurrently, round two of grant applications is underway. Moreover, six semi-annual data collections since 2022 have refined insights into serviceability, leveraging advancements in location-level data enabled by state and federal legislation. These efforts have supported a notable decrease in unserved homes, with locations lacking basic broadband connectivity (25 Mbps/3 Mbps) dropping from 1.7% in 2022 to just 0.4% in 2024.

The availability of gigabit-speed broadband has expanded dramatically. By mid-2024, nearly 850,000 locations statewide had access to gigabit symmetrical service (up from nearly zero residential and small business locations in 2022), and only 13% of locations lack the state goal of 1 Gbps/100 Mbps (down from 62% in 2022). Increased competition has also reduced the number of locations served by a single provider by approximately 60%, from over 500,000 in 2022 down to 197,103 in 2024.

Efforts to further enhance digital equity are evident in the state's digital equity plan and community events held at locations statewide. These types of initiatives continue to address price and nonprice barriers to broadband adoption, contributing to a rise in internet subscriptions, now covering 92.2% of households. Although disparities persist in low-income areas, progress is reflected in the narrowing income-adoption correlation.

This report serves to reaffirm Connecticut's commitment to ensuring universal, high-speed internet access and bridging the digital divide for all residents.



INTRODUCTION

Access to high-speed internet is increasingly intertwined with the growth, well-being, and resilience of communities. It opens doors to new economic opportunities by supporting local businesses and e-commerce, attracting investment, and enabling remote work. In education, it ensures all students can access digital resources, attend their classes, and complete assignments at home without barriers. High-speed internet also strengthens access to healthcare through telemedicine, enabling residents to reach timely medical care regardless of their mobility or scheduling limitations. Beyond these practical benefits, connectivity fosters civic engagement, allowing communities to stay informed, participate in local decision-making, and connect with one another. Whether in rural towns or urban neighborhoods, reliable broadband helps communities thrive by leveling the playing field and creating a foundation for future opportunity.

“Expanding broadband has been a team effort, and I’m proud of the progress we are making together. Still, our mission isn’t complete. We’ll keep working with communities, businesses, and local leaders to guarantee that everyone in Connecticut, no matter where they live, can benefit from the opportunities high-speed internet provides. As technology evolves, so must we. Ensuring every resident can access fast, reliable broadband will remain at the heart of our efforts moving forward.”

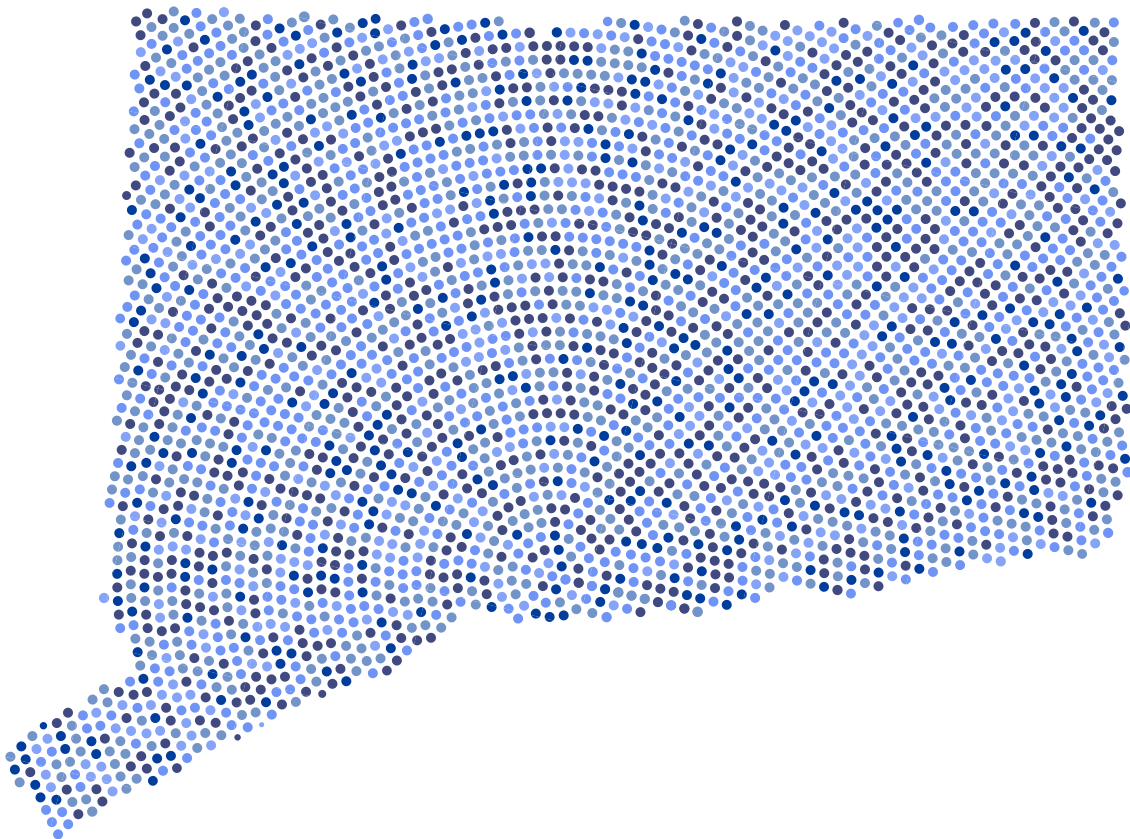
- Governor Ned Lamont

Over the past two years, Connecticut has made significant strides in bridging the digital divide, driven by a robust collaboration between state agencies, private sector partners, and community organizations. This collaboration has been critical in identifying and addressing the specific needs of unserved and underserved areas, ensuring that all residents have the opportunity to benefit from high-speed internet access. The initiatives undertaken have not only focused on infrastructure development but have also emphasized the importance of digital literacy and skills training to maximize the benefits of enhanced connectivity.

DEEP has begun to award infrastructure grants aimed at expanding broadband access, which will bring high-speed internet service to more than 3,000 households and businesses, with many more planned to begin buildout in the coming year. These grants will be pivotal in addressing the connectivity needs of communities across the state, ensuring that more residents and businesses can participate in the modern economy. The report provides details of these deployments, showcasing the positive impacts on local communities, and highlighting the importance of sustained investment in broadband infrastructure.

The Broadband Equity, Access, and Deployment (BEAD) Program, which is in the prequalification period as of the time this report, has already reached several important milestones. This phase involves rigorous assessments and preparations to ensure the program's success once fully implemented. The report outlines the milestones achieved so far, including the development of comprehensive project plans and stakeholder engagement strategies. These efforts lay the groundwork for a broader rollout that will further enhance digital equity across the state.

Lastly, the report examines the ongoing challenges and future directions for Connecticut's digital equity efforts. Despite the progress made, there remain pockets of the state where access and adoption lag behind. The report outlines strategic recommendations for addressing these gaps, including further infrastructure investments, enhanced collaboration with local governments, and innovative policy measures to sustain and expand digital equity initiatives. By continuing to build on the successes of the past two years and addressing remaining challenges, Connecticut aims to achieve its vision of a fully connected and digitally inclusive state.



BROADBAND INFRASTRUCTURE GRANT PROGRAMS

Connecticut's broadband infrastructure grant programs will allow eligible entities to significantly expand access to affordable and reliable internet service for all, especially low-income and underserved areas of the state. The programs will directly enable residents' ability to participate in modern social and economic life, including telework, remote learning, and online health services, while building future-proof infrastructure to serve their long-term needs. This section highlights DEEP's grant programs supporting broadband access deployment; however, a comprehensive summary of all broadband grant programs currently available from the State of Connecticut can be found on [page 27](#).

DEEP Office of Telecommunications and Broadband

Two of Connecticut's broadband infrastructure programs will be administered by DEEP, which is focused on developing equitable policies and programs to bring the economic and social benefits of broadband access to the residents and businesses of Connecticut. Signed in 2021, Public Act 21-159 (Conn. Gen. Stat., Section 16-330c) fosters equitable access to broadband in the State of Connecticut and contains various provisions related to broadband internet access service and service providers. Among other things, it requires the DEEP Commissioner to establish and administer a grant program to support the deployment of broadband service, subject to the availability of federal funding. DEEP's Office of Telecommunications and Broadband was established within DEEP's Bureau of Energy and Technology Policy to support the Governor's vision and fulfill these requirements.

At the direction of the Governor, DEEP works to:

- Ensure the universal availability, affordability, and accessibility of high quality telecommunications services to all residents and businesses in the state
- Promote the development of effective competition as a means of providing customers with a choice of services
- Facilitate the equitable and efficient development and deployment of an advanced telecommunications infrastructure, including open networks with maximum interoperability and interconnectivity
- Encourage shared use of existing facilities and cooperative development of new facilities where legally possible, and technically and economically feasible

DEEP is in the process of implementing Connecticut's programs per the federal requirements established in the American Rescue Plan Act and Infrastructure Investment and Jobs Act.

DEEP is focused on developing equitable policies and programs to bring the economic and social benefits of broadband access to the residents and businesses of Connecticut

PROGRAM	TOTAL GRANT FUNDS	FUNDING SOURCE	STATUS
ConneCTed Communities Grant Program (Round 1)	\$28 million in awards announced	American Rescue Plan Act's Capital Projects Fund	Awarded
ConneCTed Communities Grant Program (Round 2)	\$12.8 million available to grant	American Rescue Plan Act's Capital Projects Fund	Accepting applications on a rolling basis
Broadband Equity, Access, and Deployment (BEAD) Program	\$144 million expected to be available to grant	Infrastructure Investment and Jobs Act	Prequalification period open

ConneCTed Communities Grant Program

The 2021 American Rescue Plan Act (ARPA) Coronavirus Capital Projects Fund (CPF) allocated \$10 billion for states to invest in high-quality modern infrastructure to support communities' critical needs as they recover from the COVID-19 public health emergency. The CPF allows for investment in the construction and deployment of broadband infrastructure projects that are designed to deliver service that reliably meets or exceeds symmetrical download and upload speeds of 100 Mbps. Recipients have been encouraged to focus on last-mile connections, and service providers for completed projects must participate in any successor programs of the FCC's Affordable Connectivity Program (ACP).

The Connecticut General Assembly set aside a portion of funding in House Bill 5506 of the 2022 Session totaling \$42.9 million (\$40.8 million after administrative costs) for broadband infrastructure development utilizing the CPF. The budget language directs DEEP to use this funding for "Low Income/Multifamily Curb-to-home and Business Broadband infrastructure

buildout and underserved area broadband infrastructure grants."

On October 11, 2024, DEEP announced \$28 million in grants to fund buildout to over 3,000 locations across the state in round one. Round two is currently accepting applications on a rolling basis.

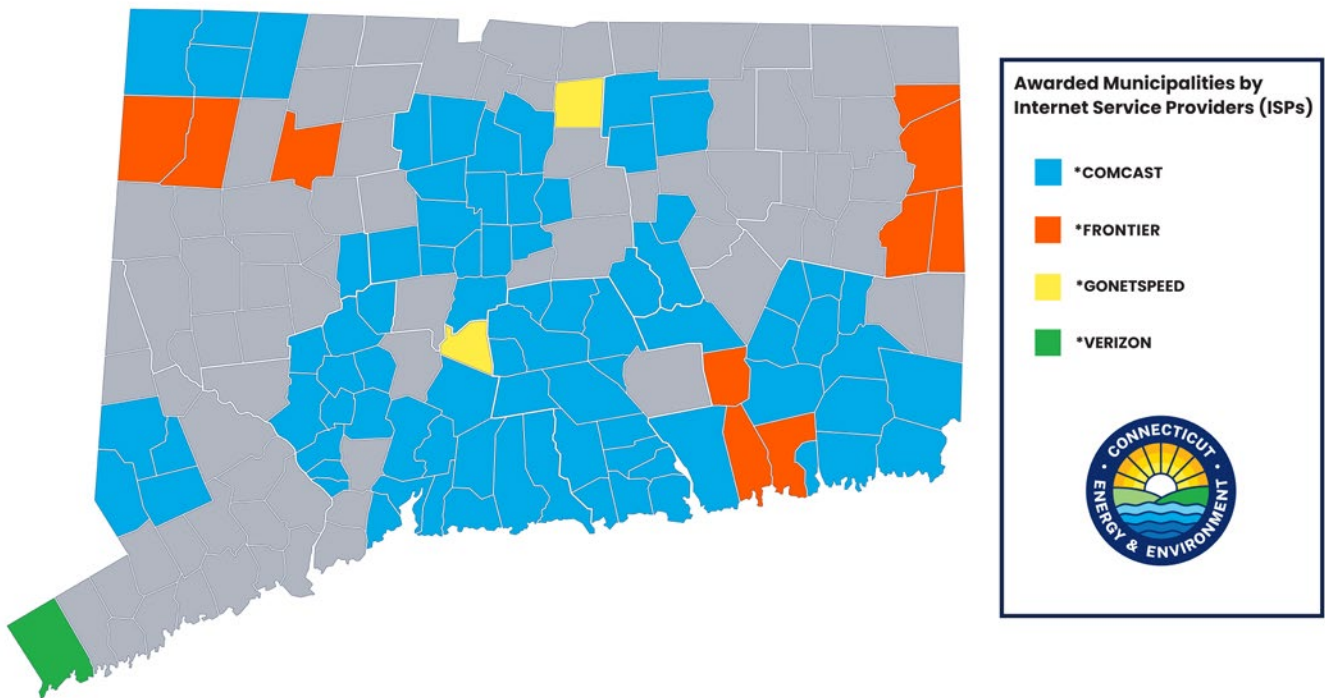
"Under Governor Lamont's direction we are using these funds to make Connecticut one of the most connected states in the country. We've dramatically expanded the availability of gigabit-speed broadband to nearly 850,000 locations statewide by mid-2024. We've increased basic access to 99.6% of Connecticut households, and improved adoption to 92.2% of homes where broadband is available. We are well on our way to closing the broadband access divide once and for all."

-Commissioner Katie Dykes

AWARDEE	AWARD AMOUNT	SUMMARY
Comcast	\$21,262,269	2,098 locations across 75 towns
GoNetspeed	\$1,879,890	283 in East Windsor and Meriden
Frontier	\$3,851,894	790 locations in Sharon, Cornwall, Putnam, Killingly, East Lyme, Salem, Sterling, Plainfield, Torrington, Waterford
Verizon	\$1,815,488	148 locations in Greenwich

Projects Funded in Round 1

A total of 88 cities and towns in the state, including 26 on the state’s Distressed Municipalities list, will benefit from the grants under the initial round. The second round of funding under this program is expected to distribute another \$12.8 million in grants. The application period for the second round opened on October 1, 2024, and applications are accepted on a rolling basis until funds are expended in advance of the December 2026 ARPA funding deadline. The second round will continue to support infrastructure buildouts and will also include support service in multi-dwelling units in Distressed Municipalities.



Broadband Equity, Access, and Deployment (BEAD) Program

The BEAD Program aims to bridge the digital divide by expanding high-speed internet access to underserved and unserved communities across the state. Funded through the federal Infrastructure Investment and Jobs Act, \$144 million was allocated to Connecticut to ensure that residents and businesses across Connecticut have reliable, affordable connections. The following explores the current status and implementation milestones of the BEAD Program in Connecticut. By addressing gaps in broadband infrastructure, the BEAD initiative aligns with Connecticut's broader goals for digital equity and community resilience.

1

Broadband Five-Year Action Plan: Setting a Strategic Vision

The Five-Year Action Plan is a strategic document that DEEP developed to outline its approach to expanding broadband access. This plan was required by the BEAD Program and serves as the foundation for how states will use BEAD funds. The plan includes an assessment of current broadband coverage, goals for expanding access, strategies for addressing gaps, timelines, and a framework for collaboration with local stakeholders. It also considers issues like affordability, digital literacy, and community engagement. The plan set the stage for subsequent phases of the BEAD Program, ensuring that efforts were aligned with Connecticut's digital equity and advancement goals.

2

Challenge Process: Promoting Accuracy and Fairness

The Challenge Process allowed broadband service providers, local and Tribal governments, and nonprofit organizations to challenge the accuracy of broadband data or the eligibility of certain areas for funding. This ensured that BEAD funds will be directed to the areas most in need. During this process, stakeholders submitted evidence to correct any inaccuracies in the State's broadband coverage maps or to challenge the classification of areas as "served," "underserved," or "unserved." The process helped to ensure that the allocation of BEAD funds is based on the most accurate and up-to-date data, directing funds to areas truly lacking in broadband access.

3

Initial Proposal: Building an Actionable Framework

The Initial Proposal is a detailed document that states submit to the National Telecommunications and Information Administration (NTIA) as part of the BEAD Program. It outlines how Connecticut intends to allocate and spend its BEAD funds, based on the goals and strategies defined in the Five-Year Action Plan. This proposal includes specific plans for deploying broadband infrastructure, addressing affordability, promoting digital equity, and other programmatic goals. It also details how the State will engage with governments, community organizations, and broadband service providers. The Initial Proposal was approved by the NTIA in July 2024. Approval signals that the State's plan aligns with federal goals and requirements.

4

Prequalification Period: Ensuring Capable Entities are Prepared to Implement Projects

The Prequalification Period is a stage in the BEAD Program where entities that wish to participate in broadband projects must demonstrate their capability to meet the program's requirements. During this period, potential applicants need to provide evidence of financial stability, technical expertise, and managerial experience in broadband deployment. Connecticut established specific criteria and processes for prequalification to ensure that only capable and reliable entities are involved in the projects. Prequalified entities are then eligible to participate in the competitive process for receiving BEAD funds to deploy broadband infrastructure. This helps ensure that the funds are used efficiently and effectively.

WHAT'S NEXT

5

Application Period: Selecting the Best Projects

The Application Period is the phase during which entities that successfully passed through the prequalification process submit their applications to receive funding from the BEAD Program.

Key Elements:

- **Eligibility and Criteria:** Connecticut, based on its Initial Proposal, set specific criteria for which projects or entities can apply for funding. These criteria will ensure that the projects align with the State's goals.
- **Submission of Applications:** Entities will submit detailed proposals outlining how they will use the BEAD funds to deploy broadband infrastructure and achieve other programmatic goals, such as improving affordability or digital literacy.
- **Evaluation:** DEEP will evaluate the applications based on factors such as the project's feasibility, impact on unserved or underserved areas, cost-effectiveness, and the applicant's ability to complete the project on schedule.

Successful applicants will be selected to receive BEAD funding to implement their proposed broadband projects.

6

Final Proposal: Formalizing Approval of Awards and Project Implementation

The Final Proposal is a comprehensive plan submitted by DEEP to the NTIA after the application period and selection of projects. It represents the culmination of the State's planning and selection processes and outlines the specific projects and initiatives that will receive BEAD funding.

Key Elements:

- **Selected Projects:** The Final Proposal details the projects that have been chosen to receive funding, including specifics on how each project will expand broadband access in unserved and underserved areas.
- **Funding Allocation:** The document will break down how BEAD funds will be distributed among the selected projects, ensuring that the allocation aligns with the State's strategic priorities as outlined in the Five-Year Action Plan and Initial Proposal.
- **Implementation Plan:** The proposal includes a detailed implementation plan, including timelines, milestones, and oversight mechanisms to ensure that the projects are completed as planned.
- **Compliance and Reporting:** The Final Proposal also addresses how DEEP will monitor the projects to ensure compliance with BEAD program requirements and how it will report progress to the NTIA.

Approval of the Final Proposal by the NTIA allows the State to begin disbursing funds to the selected projects and officially commence the implementation phase. This marks the transition from planning and selection to actual deployment of broadband infrastructure and services.

ACCESS AND ADOPTION

Tracking Broadband Accessibility and Adoption

The introduction of the Broadband Data Collection Act has dramatically changed the way stakeholders are able to view and understand growth and change in the broadband marketplace. The introduction of location-level data collection for broadband availability has allowed states to more accurately estimate the number of locations which lack service and target areas with clusters of unserved locations without time-consuming field data collection and tracking. On the other hand, it has introduced new challenges for states and created an inflated sense of certainty around the numbers – errors are still inevitable in both the classification of a location as broadband serviceable and in ISP reporting. This report attempts to track availability and adoption based on FCC’s fabric and broadband data collection and understand some of the caveats.

Number of Locations Eligible for BEAD Funding as a Result of the Challenge Process*

Unserved Locations** (lacking access to speeds of 25 Mbps/3 Mbps)	6,135
Underserved Locations** (lacking access to speeds of at least 100 Mbps/20 Mbps)	1,110
Served Locations (has access to speeds of at least 100 Mbps/20 Mbps)	1,083,950

*Subject to change pending review and approval by the NTIA.

**Please note that locations to be serviced by the Connected Communities Grant Program will be removed from these totals upon formalization of project contracts.

¹The first collection of ISP data was not based on a shared broadband serviceable location fabric and is therefore not equivalent to the data that providers submit now nor the data that has been used for BEAD and the BEAD challenge process, so has been excluded from this comparison.

² In this report two years ago, the state reported 7,883 unserved locations as unserved. These numbers were based on state efforts to more accurately capture the number of unserved and underserved locations in the state by removing non-serviceable locations from the FCC fabric and from more careful matching of ISP serviceability data to the FCC fabric. Changes in this number over time can both be attributed to build-out and improved data accuracy at the federal level. Figures in this report are based on v5 reporting to FCC as of June 30, 2024.

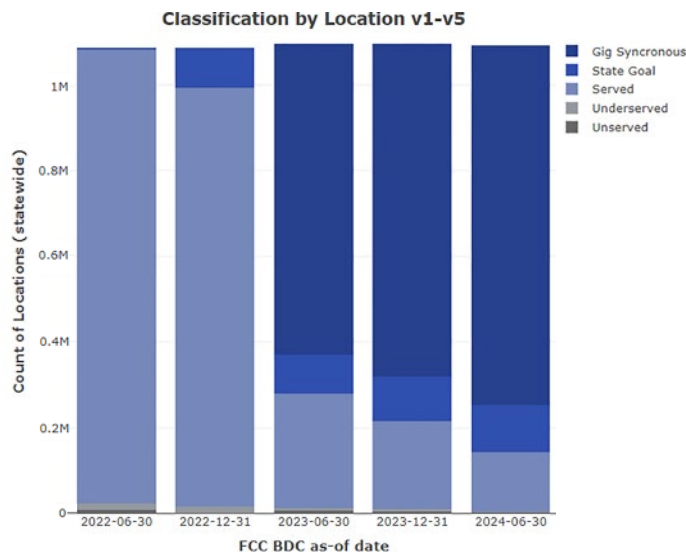


Figure 1 BSLs by Classification in CT Across V1-V5 of the BDC

Accessibility and Progress to State Goals

As of November 1, 2024, Connecticut has undertaken six¹ semi-annual data collections from internet service providers in the state to more effectively gauge the level of serviceability at its homes and businesses. The format and handling of this data has changed over time, but the location-level data collection enabled by Public Act 21-159 and the federal Broadband Data Collection Act has provided an unparalleled view of broadband serviceability in Connecticut. The State is on a clear path toward achieving its goal of universal availability of 1 Gbps download/100 Mbps upload while the number of homes lacking broadband service has continued to decrease. Since June 30, 2022, the number of homes that lacked a connection to 25 Mbps/3 Mbps service in the state has dropped from 17,970 (1.7% of all Connecticut locations) to 4,472 (0.4% of all Connecticut locations) as of June 30, 2024².

Progress: Download and Upload Speeds

When the State first reported on the availability of service within Connecticut, there had already been a significant uptick in available speeds from 2016–2022. This trend has only continued. While average speeds available within a given census block have started to stabilize, the number of locations with access to fiber has increased rapidly while maximum cable speeds have continued to increase. Over just two years, the number of locations with access to gigabit symmetrical service increased from 0³ to nearly 850,000 and as of June 30, 2024, only 13% of locations lack access to the State goal of 1 Gbps/100 Mbps.

Progress: Geographic Extent

This expansion of high-speed broadband infrastructure started along the I-84 and I-91 corridors, but now stretches to all four corners of the state (see figure 2 below).

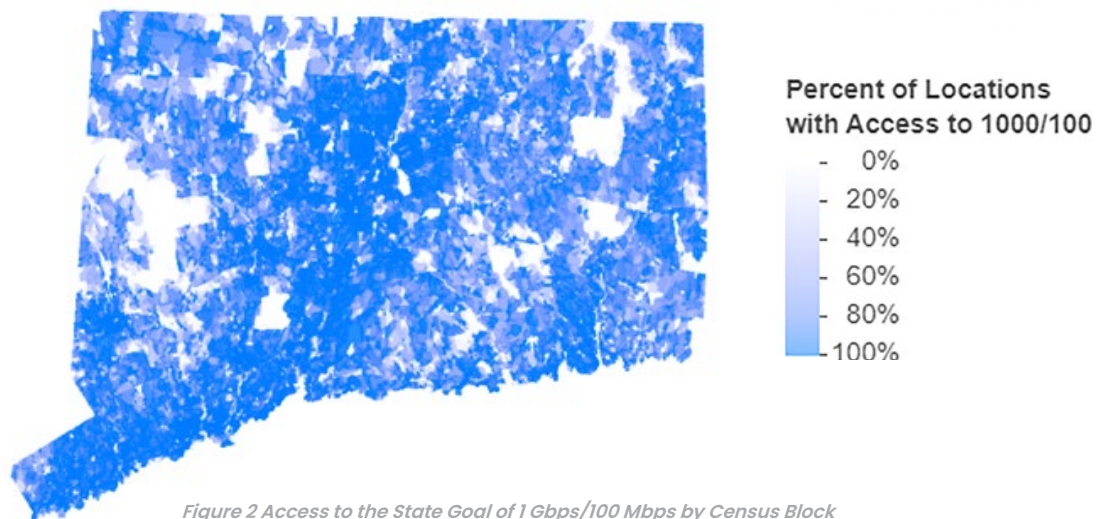


Figure 2 Access to the State Goal of 1 Gbps/100 Mbps by Census Block

While no Connecticut town has reported service of 1 Gbps/100 Mbps to *all* of its locations, eight towns (Ansonia, Berlin, Bloomfield, Derby, East Hartford, New Britain, West Hartford, and Windsor) have over 99% coverage and the remaining locations may be anomalies related to the FCC’s broadband serviceable location fabric. These towns are near major highways and population centers and have higher than average population densities, resulting in lower costs per passing and a higher return on investment for providers building out in these areas.

At the other end of the spectrum, eight towns across the state still have less than 20% of locations with 1 Gbps/100 Mbps service available (Bethany, Bethlehem, Chaplin, Hampton, Kent, Roxbury, Sprague, Washington). As seen in Figure 2 above, these towns are largely clustered together in the western and eastern parts of the state. These towns have population densities significantly below the state average and are relatively isolated from major highways, making build-out more difficult.

³ VI of the FCC’s BDC included no reported fiber gigabit synchronous locations and only 784 locations capable of 1000/100; however, there is an element of underreporting due to changes to the BDC in the initial BDC, but even in the second collection (as of 12/31/2022), less than 100k locations had access to 1000/100 or better.

Progress: Providers

Build-out over the past two years has also resulted in increased competition throughout the state, with the number of locations with only one provider offering qualifying broadband (100 Mbps/20 Mbps or higher) decreasing significantly. The number of locations with only one provider available dropped from just over 500,000 as of June 30, 2022, to 197,103 in the most recent filing as of June 30, 2024.

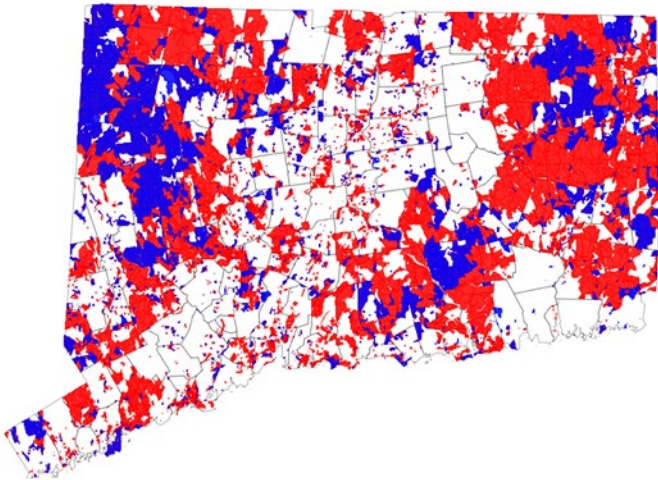


Figure 3 Shrinking Areas with Only One Qualifying Provider – red census blocks represent blocks with only one provider as of June 30, 2022, while blue represent census blocks with only one provider as of June 30, 2024

Adoption

All available data sources point to both increasing levels of subscription to internet services and higher service speeds. However, accurately measuring adoption and understanding what it means for Connecticut residents and businesses is challenging. Data collection for adoption is not as granular (at the census tract instead of the location) and less standardized (the definition of connection types, for example, may vary across carriers). Possibly most challenging is that there is no standard (federal or otherwise) defining the total number of possible connections (a single household may have two connections for distinct uses, a

business may subscribe to a residential plan or vice-versa, and enterprise customers exist in a different universe of counts altogether). As such, this report relies on a combination of adoption data.

According to the American Community Survey (2023, 1-year estimates), 92.2% of all Connecticut households have an internet subscription – a figure which has steadily increased since internet usage and subscription data was first collected in 2015⁴. Wireline broadband subscriptions, on the other hand, have seen a more gradual increase since 2016 and have seen slight decreases for two years running from 80.7% in 2021 to 79.6% in 2023 (the margin of error for statewide 1-year estimates on this point is $\pm 0.6\%$). These data suggest that more households are using alternative technologies – cellular data plans or satellite service⁵.

Total Internet and Wireline Subscriptions per ACS 1-year Estimates

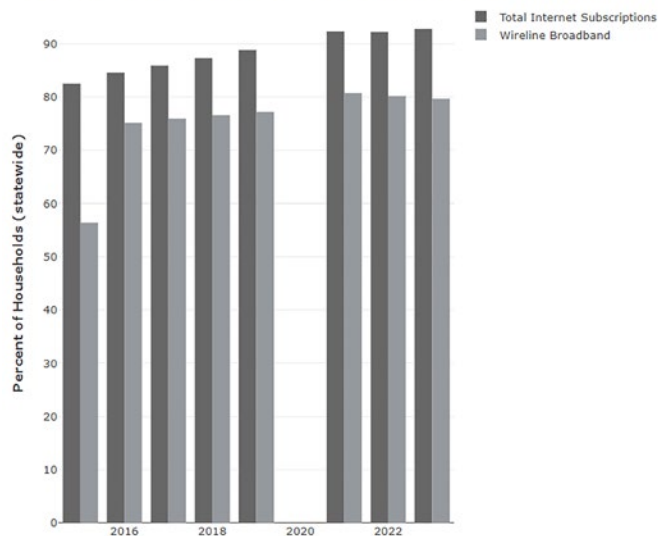


Figure 4 Change in Percent of CT Households Subscribing to Internet Service per ACS 2015–2023

⁴ ACS 1-year estimates are not available for 2020 due to the impact of COVID-19 on sampling.

⁵ An additional complication with these data may be that the increase in fixed wireless subscriptions is not easily captured by the existing option in the ACS survey where residents report that they have broadband such as cable, fiber optic, or DSL OR cellular, satellite, etc.

OPM-collected data provides a different perspective on adoption levels across the state and is limited to wireline carriers that are required to report service data to the State – mobile, satellite, and fixed wireless providers do not report subscription data to the state. This subscription data shows that there are 1,440,408 active internet subscriptions among wireline providers in the state for an estimated 1,091,125 broadband serviceable locations and a total of 1,712,326 units across those locations. These numbers are inclusive of business and residences that are subscribed to standard, mass-market broadband services and show steady levels of broadband subscriptions, around 83.6% – 84.1%⁶ across the state. Notably, despite the sunset of the Affordable Connectivity Program (ACP) prior to the most recent submission of subscription data, there was an increase of over 11,000 subscriptions in the state between December 2023 and June 2024.

While overall subscription numbers reported to the state have remained relatively stable, their composition has changed dramatically in geography and in quality of broadband service.

In 2022, over 50% of subscriptions in the state were to packages at speeds that would be considered unserved or underserved (below 100 Mbps download/20 Mbps upload). In 2024, that number dropped to just under 15%. The number of subscriptions between 100 Mbps download and 20 Mbps upload and the State goal of 1 Gbps download and 100 Mbps upload more than doubled from 458,765 to 1,006,224 and the number of subscriptions at or above the State goal have increased from just 2% of all subscriptions to 10.5%.

111 out of 169 Connecticut towns saw total increases in the number of reported subscriptions while 10 towns saw a decrease of 2% or more over the year. Large decreases in Plainfield and New London (Distressed Municipalities per the Connecticut Department of Economic and Community Development) may have been impacted by the sunset of the Affordable Connectivity Plan but given the lack of decreases in other high-poverty areas, this relationship is far from certain.

While overall subscription numbers reported to the state have remained relatively stable, their composition has changed dramatically in geography and in quality of broadband service.

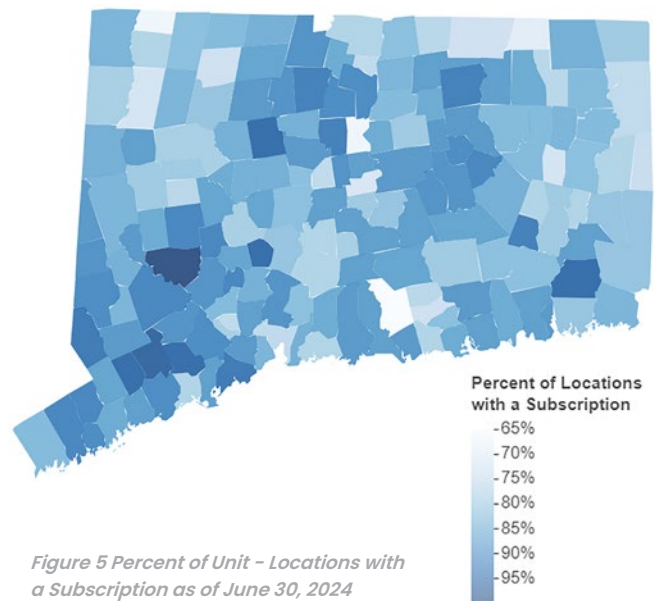


Figure 5 Percent of Unit – Locations with a Subscription as of June 30, 2024

⁶ For this calculation we are using the CostQuest “unit count” for the entire state to derive a percent of subscriptions out of the total number possible. This number is not highly reliable, but does have a strong relationship to how ISPs now report and manage their data. If compared with the total number of households in the state, this number would be over 100% as it does not account for businesses.

As in 2022, towns with the lowest levels of adoption are 1) those with lower levels of availability and 2) towns with high poverty. Of the 10 towns with the lowest levels of adoption, Union, Scotland, and Cornwall are all also in the top 10 towns for unserved locations. Where service quality is poor or non-existent, residents may choose not to adopt or may often adopt alternative technologies not covered by OPM's data collection.

High-poverty towns are still significantly overrepresented in low subscription towns and approximately 45% of statistical variance across towns can be accounted for by variation in incomes across the state. While this is still of significance, it has come down from 60% in 2022. This suggests that efforts to increase adoption in low-income neighborhoods has found some success. Still, large cities with high rates of poverty, such as Hartford (67%), New Haven (76%), and New Britain (76%) are all still all in the bottom 20 towns when it comes to adoption despite having service available at over 99% of locations within their borders.

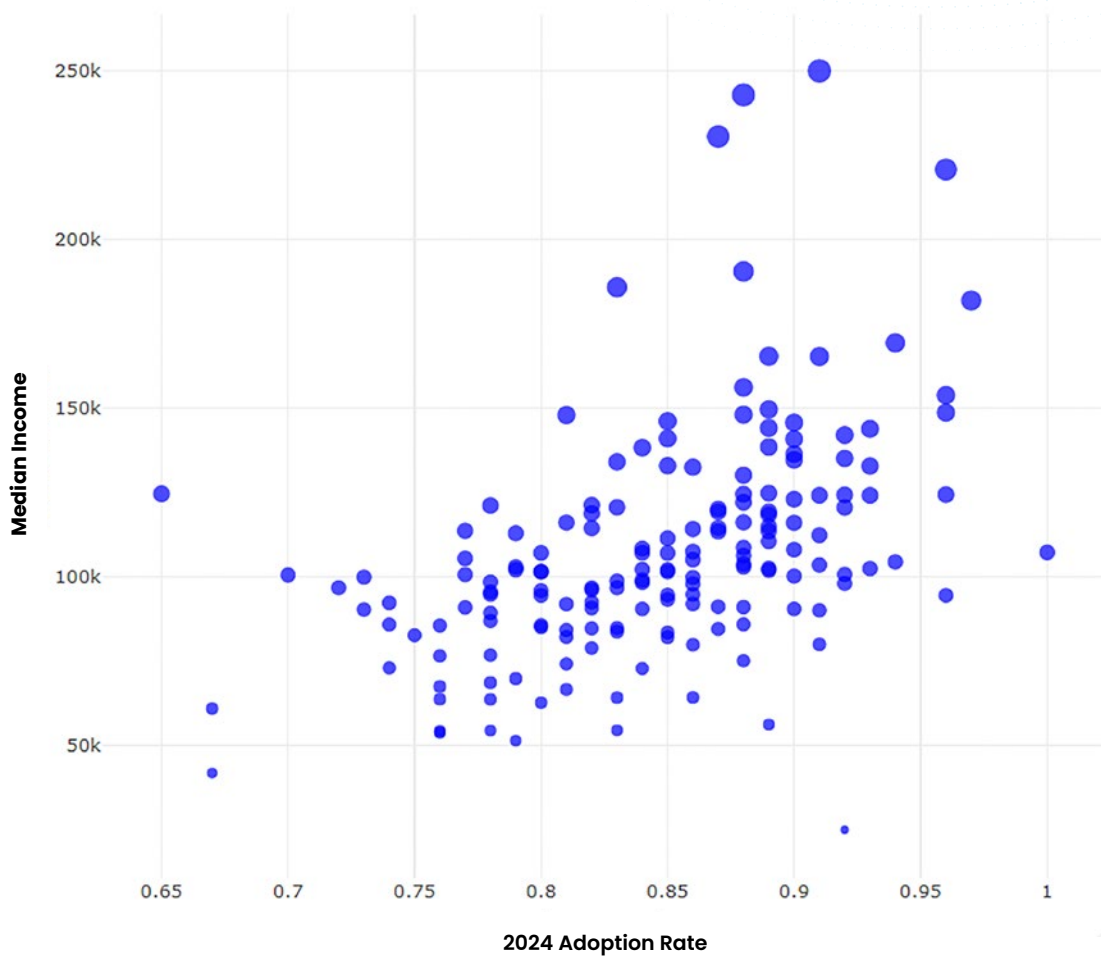


Figure 6



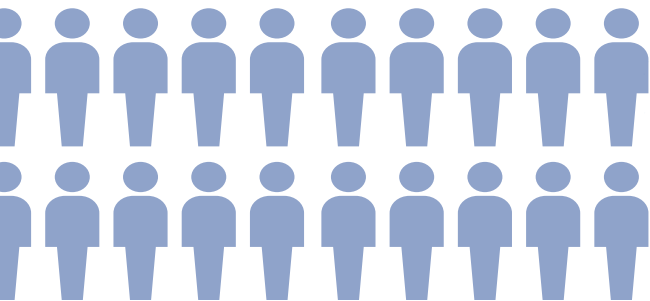
DIGITAL EQUITY AND ADOPTION

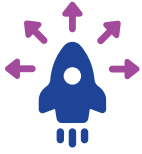
In 2024, Connecticut Department of Administrative Services' (DAS) Commission for Educational Technology completed an exhaustive digital equity plan titled "Connecticut: Everyone Connected" to guide the State's efforts over the next five years in closing the digital divide and ensuring that every resident has access to the digital tools and skills they need to thrive. The plan is now available for public viewing and engagement at www.CT.gov/DigitalEquity.

Integrated, Resident-First Digital Inclusion Activities

Digital inclusion is more than just connecting people to the internet; it requires a holistic, resident-first approach that addresses a range of interconnected needs, including fixed and mobile connectivity, access to devices, digital skills, and support systems. Connecticut's Digital Equity Plan identifies key activities and strategies to address these needs by focusing on four main areas:

1. **Current Levels of Need by Population:** The plan includes baseline data by population that examines the current levels of digital access, device availability, skills, and support needs across the state. This data serves as a foundation for understanding the digital equity landscape and tailoring solutions to specific communities.
2. **Existing Resources to Address Those Needs:** An asset inventory outlines the existing resources available to support digital inclusion efforts across Connecticut. This includes libraries, community organizations, educational institutions, and other stakeholders already working to close digital gaps.
3. **Gaps in Access and Skills:** The plan sets benchmarks to identify gaps in access to digital resources and skills among various populations, highlighting where disparities exist and where efforts should be focused to achieve digital equity.
4. **Five-Year Equity Plan:** The strategic objectives and implementation framework lay out a comprehensive five-year roadmap for Connecticut to address digital inequities. This plan focuses on collaboration across sectors and leveraging local, state, and federal funding to implement sustainable solutions.





Launching Digital Equity Projects

DAS is preparing to launch a series of key projects under the Digital Equity Plan. Pending initial funding approval, these initiatives will drive Connecticut's efforts to build an inclusive digital environment:

Digital Equity Collaboratives: Aimed at fostering collaboration among educators, policymakers, community organizations, and other stakeholders, this initiative will create inclusive digital ecosystems to bridge the digital divide.

Digital Equity Curriculum: This project will develop a structured, educational program to equip diverse learners with essential digital skills and knowledge, ensuring that everyone has the opportunity to thrive in the digital world.

Asset Map: A visual database will be created to identify and categorize community resources related to digital equity, aiding stakeholders in coordinating efforts, reducing duplication, and efficiently addressing digital disparities.

Short-Term Pilots: These experimental initiatives will quickly test and evaluate new strategies for addressing digital inequities. Focused pilots, such as Rural and Urban Digital Navigation, will provide targeted solutions to unique community needs.



Ongoing Efforts and Future Funding

Digital inclusion efforts are currently taking place across the state every day, funded locally and through other federal investments, with libraries and community partners playing a vital role in these initiatives.

Additional resources may also become available through the BEAD program if funding remains after addressing access issues. As DAS implements these plans, they will continue to evolve to meet future needs:

Program Evaluation: A continuous evaluation framework will measure the effectiveness of digital equity initiatives across the state, assessing impacts on internet accessibility, digital literacy, and other key metrics to ensure accountability and inform future planning.

Plan Updates: Regular reviews and updates of Connecticut's Digital Equity Plan will help adapt to emerging challenges and incorporate innovative approaches to promoting digital equity.

“Connecticut: Everyone Connected” provides a clear, actionable framework for achieving digital equity across the state. With its focus on collaboration, innovation, and ongoing evaluation, Connecticut is working to ensure that every resident has the tools, connectivity, and skills necessary to thrive.

OUTREACH AND ENGAGEMENT

Over the past two years, DEEP has made significant strides in its efforts to expand broadband access and promote digital equity across the state. Through a series of targeted engagement activities, the State has brought together a diverse range of stakeholders, from internet service providers (ISPs) to community organizations and local governments. These efforts have centered around fostering collaboration, gathering input, and ensuring that Connecticut's future is inclusive, accessible, and sustainable.

"A fully connected East Hartford means the expansion of possibilities for our residents."

- Sarah Kline Morgan, Library Director, East Hartford Public Library, Town of East Hartford

Key Engagement Events

To understand the needs and priorities of Connecticut's diverse communities, DEEP hosted multiple engagement events across different formats. These events were critical in shaping the strategic direction of our broadband and digital equity initiatives:



STAKEHOLDER ROUNDTABLES

These virtual events, held quarterly, facilitate discussions with key stakeholders from community organizations, nonprofits, local governments, tribal governments, state agencies, and ISPs. The roundtables provide a platform for dialogue on pressing broadband issues, opportunities for collaboration, and identification of barriers to digital inclusion.



REGIONAL COMMUNITY FORUMS

Held in each of the nine COG regions of the state, these forums engaged residents, community leaders, and other local stakeholders to provide input on broadband needs, share experiences, and discuss potential solutions. They were instrumental in capturing diverse perspectives and ensuring that all voices were heard in the BEAD planning process.



MISCELLANEOUS EVENTS

A series of program-specific events, such as **office hours**, **one-on-one meetings**, and **public comment periods**, allowed stakeholders to engage more deeply on specific topics and proposals. These events provided additional opportunities for direct feedback, clarification of project details, and greater community involvement in shaping broadband policies and programs.

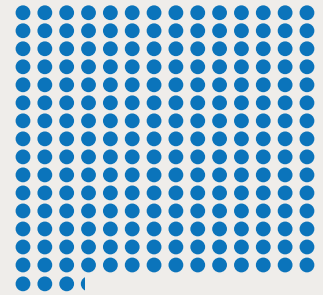
Key Numbers at a Glance

To understand the needs and priorities of Connecticut’s diverse communities, DEEP hosted multiple engagement events across different formats. These events were critical in shaping the strategic direction of our broadband and digital equity initiatives.

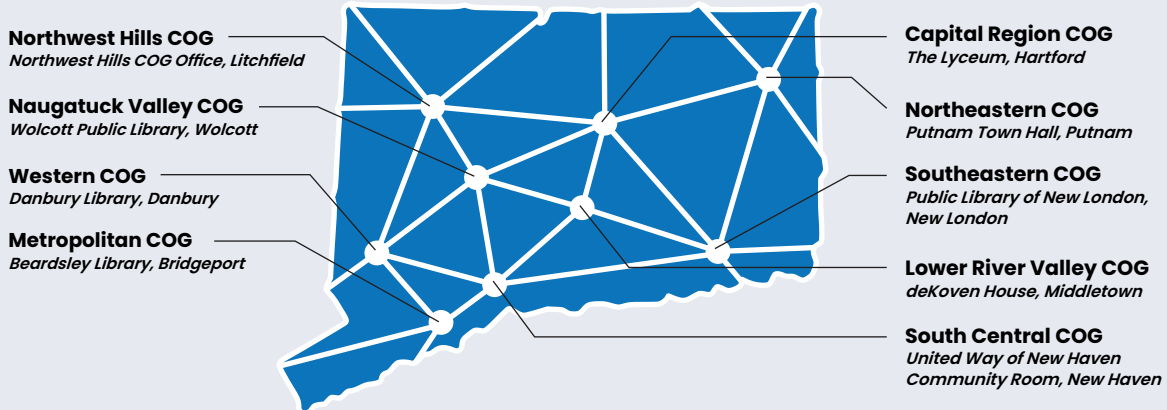
2133

STAKEHOLDER ENGAGEMENTS

● = 10 STAKEHOLDERS



REGIONAL COMMUNITY FORUMS BY LOCATION



“A truly connected community would look like internet access in every home. A child should not have to visit their local library just to complete an assignment for school. Growing up, I was that kid that had to go to the library in order to type out an essay. Internet is essential, not a luxury, in this day and age, and everybody deserves access to it.”

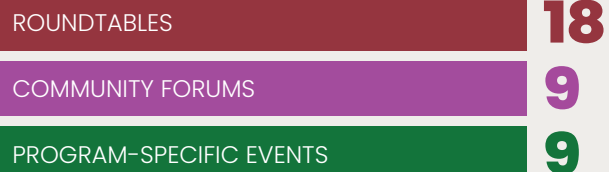
–Chevanne Spencer, Digital Community Navigator, CFAL For Digital Inclusion

149

TOTAL ENGAGEMENTS

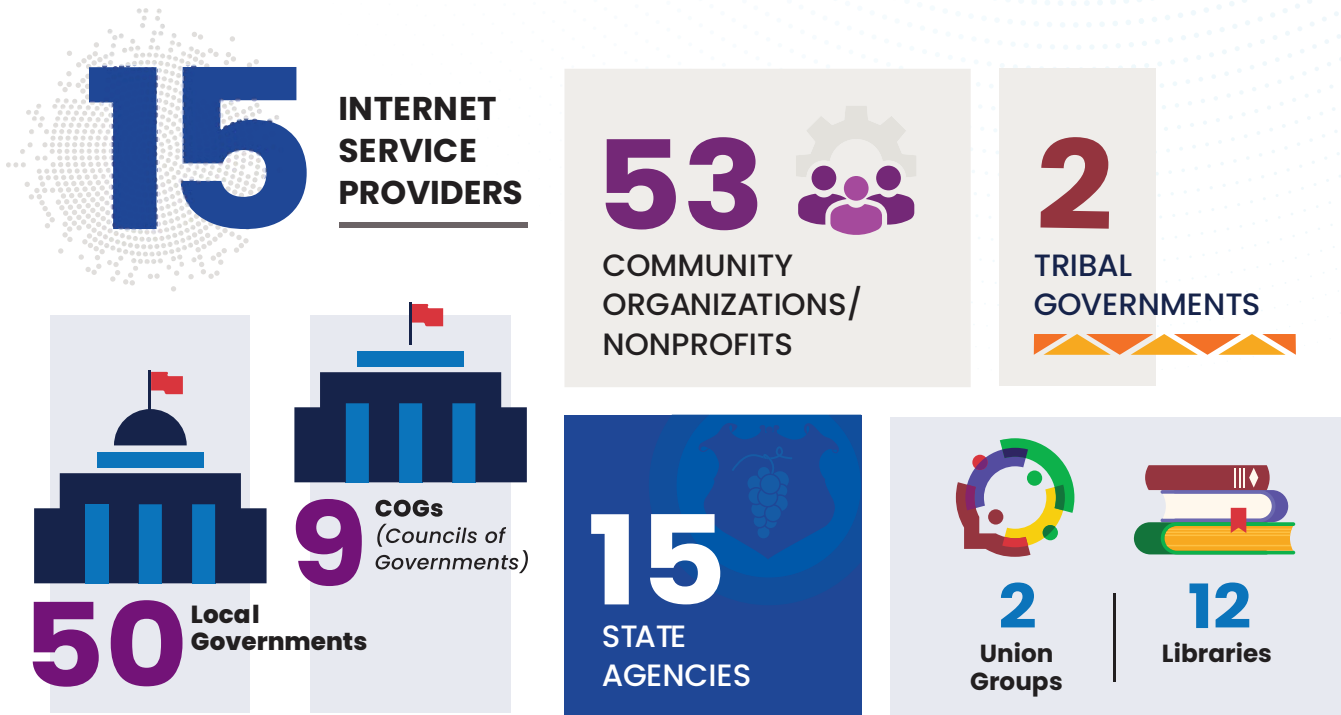


ENGAGEMENT BY TYPE



Breakdown by Stakeholder Type

Engagement efforts spanned a range of stakeholders for a comprehensive and inclusive approach to broadband planning.



“In a truly connected community, broadband fiber reaches every home that electrical lines can reach. Where that is not possible, robust Wi-Fi service provides all Connecticut residents with the connectivity necessary to fully participate in society, education, healthcare, and employment. In our wired world, connectivity should have the status of a civil right.”

– Susan Domanico, Ed.D., Director, EdAdvance Adult & Continuing Education

Key Themes

Throughout these activities, several key themes and priorities emerged that will inform Connecticut's broadband strategy. Stakeholders emphasized the need for equitable access to reliable broadband, noting that the remaining access disparities are still most pronounced in low-income and rural communities. Additionally, feedback highlighted the importance of balancing immediate infrastructure improvements with long-term solutions to ensure sustainable growth.



Affordability: A primary concern across all stakeholder groups continues to be the cost of internet services. Many residents, particularly those in low-income and underserved communities, highlighted the need for more affordable options. Since the Affordable Connectivity Program ended earlier this year, DEEP is investigating opportunities to support initiatives that reduce costs through subsidies, public-private partnerships, and other innovative approaches.



Choice in Provider: A lack of competition and choice among internet service providers (ISPs) was raised as a concern by residents and community organizations, particularly in rural areas and residential complexes. Stakeholders expressed concerns about being limited to a single provider or aging technology option, which can result in higher costs and lower service quality. Addressing these concerns will involve exploring options to encourage competition and increase consumer choice.



Digital Skills and Internet Safety: A recurring theme was the need to improve digital literacy and skills, particularly for vulnerable populations such as older adults. Many members of the aging population expressed concerns about navigating the internet safely, fearing scams, fraud, and misinformation. Addressing these concerns will require expanding digital skills training programs that not only cover basic internet use but also focus on internet safety, privacy, and security to empower older residents to use digital tools confidently and securely.



Pole Attachment and "Make Ready" Processing Times: Internet Service Providers raised concerns about the slow processing times for pole attachment requests, which can significantly delay broadband expansion efforts. These delays impact the ability of ISPs to deploy new infrastructure and extend service to underserved areas. Addressing this issue will require collaboration with the pole administrators and the Public Utilities Regulatory Authority to streamline and accelerate broadband deployment.



ADVOCACY

DEEP's Office of Telecommunications and Broadband and the OCC's Office of State Broadband (OSB) advocate for the interests of broadband consumers and regulatory parity at both the federal and state levels.

Broadband Advocacy Efforts at the Public Utilities Regulatory Authority (PURA)

Pole Attachment Working Group: OCC acts as a voting member and DEEP as a participant of Connecticut's Pole Attachment Working Group, which includes a monthly meeting of pole owners and communications attachers. The Working Group meets to discuss issues involving double pole relocations and removals; one touch make-ready; a successful pilot program to utilize a single contractor to move all communications attachments on poles that are being replaced to the new poles (designated as the "Single Visit Transfer Pilot Program"); temporary attachments; and backlogs in the pole permitting process.

In Docket No. 24-01-15, Petition of Office of Consumer Counsel for Investigation of Quality of Service Standards for The Southern New England Telephone Company D/B/A Frontier Communications, PURA investigated whether Frontier failed to meet the mandatory minimum QoS for completing maintenance appointments as scheduled and for repairing out of service telephone lines within 24 hours. PURA later issued a Final Decision and subsequent Notice of Violation. PURA is proposing a collective \$2,481,000 in civil penalties for the aggregated violations. Consumers who were impacted by Frontier's failure to meet those minimum standards were, in some cases, also subscribers to Frontier's DSL internet service.

In Docket No. 24-06-15, Petition of Verizon New York Inc. to Reclassify Remaining Services as Competitive and to Retire the Alternative Form of Regulation Plan, PURA investigated whether to approve a petition by Verizon that sought reclassification under Conn. Gen. Stat. Section 16-247f and retirement of its Alternative Form of Regulation Plan. OCC filed a brief expressing concerns that Verizon has not proven that local exchange service competition exists in Greenwich and Byram and recommended that the Petition be denied. In its final decision, PURA denied Verizon's petition to reclassify the company's remaining services in Connecticut as competitive. Consumers impacted were also actual subscribers or potential subscribers to Verizon's internet services.

Broadband Advocacy Efforts at the Federal Communications Commission (FCC)

Support for the FCC’s Efforts to Provide Clear and Accessible

Broadband Labeling: The OCC led a coordinated effort with DEEP and other CT State Broadband leaders to support the FCC’s initiative to provide a uniform format for clear, concise, easily accessible, and user-friendly labeling of broadband service offerings and rates. The implementation of this format will provide consumers with transparent and standardized information to evaluate before they commit to a service, giving them the necessary tools to understand and make an informed decision about what they are purchasing. The OCC and DEEP jointly submitted written comments in response to the FCC’s Notice of Proposed Rulemaking and urged the FCC to establish a state-FCC concurrent jurisdiction standard for enforcement in order to leverage local partnerships to increase the impact of these measures on local communities. The FCC has since released an order updating the template for the recently adopted broadband consumer label and putting a number of the State’s recommendations into policy. All providers must comply with the FCC’s broadband labeling requirements as of October 10, 2024.

Broadband Labels are designed to provide clear, easy-to-understand, and accurate information about the cost and performance of high-speed internet services.

Broadband Facts	
Provider Name	
Service Plan Name and/or Speed Tier	
Fixed or Mobile Broadband Consumer Disclosure	
Monthly Price	[\$]
This Monthly Price [is/is not] an introductory rate. [if introductory rate is applicable, identify length of introductory period and the rate that will apply after introductory period concludes]	
This Monthly Price [does not] require[s] a [x year/x month] contract. [only required if applicable; if so, provide link to terms of contract]	
Additional Charges & Terms	
Provider Monthly Fees	[\$]
[Itemize each fee or enter "None.,"]	
One-time Fees at the Time of Purchase	[\$]
[Itemize each fee or enter "None.,"]	
Early Termination Fee	[\$]
Government Taxes	[Varies by Location/Taxes Included]
Discounts & Bundles	
Click Here for available billing discounts and pricing options for broadband service bundled with other services like video, phone, and wireless service, and use of your own equipment like modems and routers. [Any links to such discounts and pricing options on the provider’s website must be provided in this section.]	
Affordable Connectivity Program (ACP)	
The ACP is a government program to help lower the monthly cost of internet service. To learn more about the ACP, including to find out whether you qualify, visit GetInternet.gov .	
Participates in the ACP	[Yes/No]
Speeds Provided with Plan	
Typical Download Speed	[] Mbps
Typical Upload Speed	[] Mbps
Typical Latency	[] ms
Data Included with Monthly Price	
Charges for Additional Data Usage	[\$/GB]
Network Management	Read our Policy
Privacy	Read our Policy
Customer Support	
Contact Us: example.com/support / (555) 555-5555	
Learn more about the terms used on this label by visiting the Federal Communications Commission’s Consumer Resource Center.	
fcc.gov/consumer	
[Unique Plan Identifier Ex. F0005937974123ABC456EMC789]	

Support for the FCC’s Safeguarding and Securing the Open Internet Initiative: The OCC supported the FCC’s decision to make Broadband Internet Access Service (BIAS) a Title II telecommunications service to better protect consumers and improve public safety. The OCC, with the National Association of State Utility Consumer Advocates (NASUCA), [filed joint comments](#) in favor of strengthening state oversight of telecommunications services.

Key suggestions included:

- Providing states with the authority to require affordability programs and low-income service tiers for customers;
- Maintaining state utility commission authority to ensure that updates to infrastructure in the public streets and highways are performed safely and efficiently;
- Allowing for increased data privacy and security for all consumers by ensuring providers are cooperative with state cybersecurity and network resiliency efforts;
- Establishing clear, straightforward rules to prevent BIAS providers from engaging in practices harmful to consumers, competition and public safety, and subsequently, penalties enforced by state regulators for failure to meet these standards;
- Allowing states to continue to do their own broadband mapping, which is used for many localized purposes other than those of federal broadband maps; and
- Clarifying jurisdictional language to allow states that choose to take consumer complaints to better facilitate resolution between consumers and service providers in a prompt and meaningful way.

Guidance and Recommendations as FCC Adopted First-Ever Broadband Access

Anti-Discrimination Rules: The FCC adopted new rules to address discriminatory practices or acts of internet service providers that impact access to that service. The rules protect against both intentional discrimination and disparate impact practices. Protected classes include income level, race, ethnicity, color, religion, and national origin. The rules were enacted as a result of the bipartisan Infrastructure Investment and Jobs Act of 2021. OCC provided guidance and recommendations to the FCC which were cited in the FCC’s Report and Order on seven occasions. As recommended by the OCC, the rules cover all consumers, including both current and prospective subscribers.

RECOMMENDATIONS AND NEXT STEPS

Progress on 2022 Recommendations

Develop and Implement a Comprehensive Outreach and Engagement Plan

UPDATE: An outreach and engagement plan has been successfully rolled out, reaching more than 2,000 key stakeholders across Connecticut's communities. Over 145 outreach events have been conducted statewide, including regional community forums, virtual roundtables, and technical assistance sessions, resulting in increased awareness of broadband expansion efforts. Feedback indicates strong community interest in digital equity efforts and improved stakeholder collaboration.

Use Results of the State Broadband Mapping Initiative to Inform State Programs

UPDATE: The state broadband mapping initiative data has been fully integrated into program planning. This data has identified priority areas for broadband expansion, guiding targeted grant allocations to underserved locations in the state. Mapping insights have already led to the announcement of projects planned in nearly 90 towns, including over 25 Distressed Municipalities.

Incorporate Affordability Mechanisms into State Programs

UPDATE: Affordability considerations have been incorporated into the State's broadband infrastructure grant programs, including the scoring criteria by which awardees are selected as well as the requirements to which they are held upon award. DEEP will continue to investigate opportunities and incentives to increase affordable service plan options as the infrastructure projects are built out.

The effectiveness of Connecticut's broadband efforts will be measured by the increased opportunities, improved quality of life, and the strength of connections built in our communities.

New Recommendations

Explore Opportunities to Streamline the Make-Ready Process for Faster Deployment

Collaborate with the Public Utilities Regulatory Authority, pole owners, local governments, and other stakeholders to simplify and expedite the "make-ready" process, which involves preparing infrastructure like utility poles, conduits, or rights-of-way for broadband installation.

Delays in the make-ready process can significantly slow down broadband deployment. Streamlining this process reduces bottlenecks and accelerates the timeline for getting broadband services to underserved communities.

Implement and Enhance Grant Monitoring and Reporting

Build upon the monitoring and reporting frameworks developed to track key performance indicators such as project progress, resulting service quality, affordability, and adoption rates, by refining data collection methods and enhancing reporting tools to ensure continuous improvement.

Frequent evaluation of the monitoring and reporting framework will ensure that grant funds are used effectively, with measurable progress towards program goals. Enhancing the system will allow for proactive adjustments and more accurate performance tracking, ensuring that projects remain on track.

Develop a Risk Mitigation Strategy for Potential Implementation Challenges

Establish a risk mitigation strategy to address potential challenges such as supply chain disruptions, permitting and make-ready delays, or technical issues during broadband infrastructure deployment.

Identifying potential risks early and work with subgrantees on contingency plans to ensure that the program can adapt and continue making progress even with unforeseen challenges.

Expected Outcomes

Education: While pandemic-era images of students completing homework in fast-food parking lots and teachers conducting remote lessons from their vehicles have faded, the importance of digital equity remains a top priority. As traditional in-person learning has resumed, ensuring all students have consistent access to high-speed internet, devices, and digital literacy tools is essential for personalized learning and academic success. The focus now shifts to sustaining and expanding these efforts through strategic, long-term solutions that address the evolving technological landscape. By investing in digital infrastructure and support systems, Connecticut aims to further reduce disparities in educational opportunities and outcomes, strengthening the foundation for future successes across the state.

Economy: Gaps in digital access can limit career growth and economic mobility, especially for those from historically underserved communities. Ensuring that all residents have access to affordable, high-speed broadband is essential for building a competitive workforce and expanding economic opportunities. By investing in digital infrastructure and promoting broadband adoption, the State can create pathways to high-quality jobs, support career advancement, and unlock the potential of diverse talent. These efforts will not only strengthen individual economic security but also fuel broader economic growth and innovation across Connecticut.

Quality of Life: By ensuring that everyone has equal access to reliable internet and the digital skills to use that connection for their needs, we empower individuals to engage fully in education, employment, and healthcare opportunities. This connectivity enables online learning and skill development, fostering career advancement and economic mobility. It also allows for better access to telehealth services, improving health outcomes by making healthcare more accessible. Furthermore, digital equity promotes social connections, reducing isolation and enhancing community engagement. As a result, individuals can enjoy a more informed, connected, and fulfilling life, contributing to overall well-being and societal resilience.

CONNECTICUT'S BROADBAND PROGRAMS

Working Together To Close The Digital Divide

FUNDING PROGRAM	ELIGIBLE APPLICANTS	TOTAL FUNDING
<p>Broadband Equity, Access, and Deployment (BEAD) Program <i>Department of Energy & Environmental Protection</i></p> <p>This competitive grant program provides funding to bring broadband service to unserved locations (<25 Mbps/3 Mbps) and underserved locations (<100 Mbps/20 Mbps). Any remaining funds may be used to support access, adoption, and equity-related projects, such as bringing gigabit connections to community anchor institutions.</p>	<p>Applicants must have the technical, managerial, and financial expertise to design, build, and operate high-speed broadband service infrastructure.</p>	<p>\$144,180,792</p>
<p>CEN ConneCT - Community WiFi <i>Connecticut Education Network (Department of Administrative Services)</i></p> <p>This competitive grant program provides funding to expand WiFi-based internet access in public spaces for communities in need. Anchor institutions are eligible for Eduroom setup and fiber build back to CEN.</p>	<p>This program is open to community anchor institutions.</p>	<p>\$10,719,936</p>
<p>CEN ConneCT - Connecting Connecticut's Communities Initiative (C3I) <i>Connecticut Education Network (Department of Administrative Services)</i></p> <p>This program provides grant funding for fiber builds that deliver enterprise grade, secure, dedicated bandwidth for primary or resilient (backup) internet service.</p>	<p>Eligible applicants include municipalities, COGs, libraries, and charter schools not already directly connected to CEN.</p>	<p>\$22,136,669</p>
<p>CEN ConneCT - Next Generation Infrastructure (NGI) <i>Connecticut Education Network (Department of Administrative Services)</i></p> <p>This program provides funding for a comprehensive update of the CEN network, improving reliability and increasing handoff capacity by four to 10 times, at no additional cost, to over 670 member organizations.</p>	<p>There is no need to apply. All existing CEN members benefit.</p>	<p>\$41,109,884</p>
<p>ConneCTed Communities Grant Program <i>Department of Energy & Environmental Protection</i></p> <p>This competitive grant program provides funding for broadband infrastructure projects that can deliver service at speeds of at least 100 Mbps/100 Mbps, focusing on low-income and multifamily curb-to-home and business broadband infrastructure development in underserved areas.</p>	<p>Eligible applicants include government, private for-profit and nonprofit entities, as well as co-operatives, mutual organizations, and utilities.</p>	<p>\$42,966,125</p>
<p>Digital Equity Capacity Grant <i>The Commission for Educational Technology (Department of Administrative Services)</i></p> <p>This grant program provides funding to carry out digital equity and inclusion activities in alignment with the Digital Equity Act.</p>	<p>To be announced in 2025.</p>	<p>\$9,183,114 (Tentative)</p>
<p>State and Local Fiscal Recovery Funds (SLFRF) Program <i>The State of Connecticut & Municipalities</i></p> <p>This program provides funding to support the local response to and recovery from the COVID-19 public health emergency. A portion of these funds is allocated to local broadband goals.</p>	<p>N/A</p>	<p>To view the list of funding portions, please visit Local Fiscal Recovery Fund PDF</p>



Connecticut Department of
Energy & Environmental Protection
BUREAU OF ENERGY AND TECHNOLOGY POLICY

