City of New Haven Broadband Initiatives

Status Update, September 2022



City of New Haven Broadband Initiatives

Status Update

The City of New Haven, in partnership with Magellan Advisors, studied the feasibility of enhanced broadband telecommunications for city and community use. This status report provides insights on findings to-date and pathways for implementation of a stronger, more resilient and inclusive network across the city.



RESIDENTIAL MARKET ANALYSIS



	Status	New Haven Plans	Collaboration Potential
Comcast	 Full city coverage with asymmetrical cable broadband. "Up to" 1.2 Gbps Downstream. Upstream estimated to be < 50 Mbps. 	 Technology upgrade over next few years. Limited new fiber deployments. 	 Yes, on MDUs* Yes, on ACP** Yes, shared construction
Frontier	 Full City Coverage with DSL. Overbuilding fiber in parts of Westville, Edgewood, West Rock and Amity. 	 Learn from current project and continue to overbuild fiber. Location and schedule in progress. 	 Yes, on prioritization Yes, on MDUs Yes, on ACP Yes, shared construction
GoNetSpeed	• Fiber in 25% of City.	• Will build to areas with sufficient up- front commitments from customers.	Yes, on MDUsYes, shared construction

OUTREACH SUMMARY



Government Officials

- Chief Administrative Officer
- New Haven Public Schools
- Transportation, Traffic and Parking
- New Haven Police Department
- New Haven Fire Department
- Arts, Culture and Tourism
- New Haven Free Public Library
- Elm City Communities

Other Agencies

- Chamber of Commerce
- Tweed New Haven Airport
- State Broadband Office
- State OPM
- Connecticut Commission for Educational Technology
- CT DEEP

Private Sector Entities

- Select Private Service Providers
- Select Non-Profits
- Yale University
- Yale New Haven Hospital

Stakeholder Meetings

50 Meetings 34 Organizations

MAGELLAN KEY FINDINGS



• Many multi-dwelling *buildings* (MDUs) may require in-building wiring upgrades to support gigabit broadband fiber to each unit

- Many MDU's suffer from poor in-building network infrastructure resulting in unreliable or underperforming services.
- Publicly assisted affordable housing needs funding to pay for wiring upgrades.
- Private owners need ROI and market pressures to fund upgrades.

•Lack of internet access in New Haven households needs to be more intentionally addressed

- Most New Haven households have access to Comcast and Frontier. Quality varies significantly.
- The Federal Affordable Connectivity Program (ACP) is underutilized. (\$30/mo. subsidy)
- City lacks gigabit competition, for now
 - Parts of Amity, Westville, East Rock, Fair Haven Heights, East Shore, the Annex, Beaver Hills and Edgewood have two gigabit providers. Westville has three gigabit providers.
 - Frontier is the only provider with existing plans to expand fiber to all New Haven.
- City has fiber assets that can be leveraged and expanded
 - Foundation for infrastructure-grade municipal network and private fiber expansions

CONH FOCUS AREAS BASED ON STUDY

- •<u>Frontier is building a citywide fiber network.</u> In the past 2 months, have completed their build of East Shore, Amity, Westville, West Rock, and partially built in Fair Haven Heights, Beaver Hills and Edgewood. Beginning construction of the rest of the city in January 2023.
- Frontier does not automatically install fiber within MDUs (buildings with >5 residential units) as part of their build, though there are paths for Frontier to install fiber within MDUs in some cases

•<u>Other companies are interested in building a fiber network</u> in New Haven that includes all MDUs as a baseline. Some companies would like a financial investment from the City, others will absorb 100% of cost.

 <u>Significant new State and Federal funding</u> will be available specifically for high-speed internet projects

• No Need to Design and/or Build a Municipal Network with 100% city money

•Gaps will remain, and that is where we will focus action steps

- Ensure that MDUs have access to high speed, affordable internet in the near term
- Ensure that there are affordable options so that families and individuals of all income levels can access high speed internet in the near term
- Ensure that a resilient municipal network exists for essential City functions

NEAR TERM FUNDING OPPORTUNITIES

ARPA - \$42.5 million from the State of Connecticut

NTIA's Broadband Equity, Access, and Deployment (BEAD) Program – \$42.45 Billion (DEEP)

 Access to <u>"at least \$200 million</u> in deployment grants [expected for the State of Connecticut]" – Burt Cohen, State Office of Broadband

Enabling Middle Mile Broadband Infrastructure Program - \$1 billion (DEEP)

State Digital Equity Planning Grant - \$60 million (CETN)

• Develop digital equity plan

State Digital Equity Capacity Grant Program - \$1.44 billion (CETN)

• Implement digital equity projects and support the implementation of digital equity plans

Digital Equity Competitive Grant Program - \$1.25 billion (CETN)

• Discretionary grant program for specific types of political subdivisions to implement digital equity projects.

BROADBAND FUNDING SCHEDULE

Q1+Q2 FY 2023

- CT Broadband Grants Application
- Updated FCC Map
- CT-OPM Broadband access map
- CT Broadband Equity Plan
- FCC ACP Grant Applications

Q4 FY 2023

- Awarding Federal BEAD grant funds to applicants
- CT NOFOs for BEAD allocations
- CT Equity Capacity Grants financed by Feds

Q3 FY 2023

- Rollout of BEAD initial allocations
- BEAD grant applications begin
- Rules and guidelines established
- CT Broadband Grants Awarded
- FCC ACP Grants Awarded

Q1 FY 2024 and on

- CT BEAD funding awarded and disbursed
- Continuing disbursement of Federal funding through grants
- CT Equity Capacity Grant NOFOs

TOP 4 ACTION STEPS

- Connect residents with high-speed internet that is affordable and accessible to very-low and low-income households, in part through new programs.
- 2. Ensure citywide coverage with diversity of fiber options, likely need to partner with an additional fiber internet provider.
- 3. Ensure 100% coverage of multi-family dwelling units (MDUs) with a focus on publicly-assisted & naturally occurring affordable housing.
- 4. Enhance the resiliency of the City's municipal network.

1 - CONNECTING RESIDENTS

ſ	Problem	Goal
	People with physical access to internet can't afford it	Raise awareness of Affordable Connectivity Plan with NHFPL, BOE, ECC, YNHH
	People with internet don't have the speed or reliability that they nee	Technical Issues Remote Team - students provide tech support

ACTION STEPS COMPLETED

- Coordinated with the NHFPL to confirm that they will support New Haven residents with signing up for ACP program
- Provided marketing and educational materials to NHFPL for ACP program
- Coordinated webinar with FCC to educate NHFPL staff on how to sign people up for ACP program
- Coordinated with Elm City Communities (ECC) to strategize marketing the ACP plan to residents
- Provided blurb for quarterly magazine and marketing/educational materials for ECC to utilize
- Coordinated webinar with FCC to educate ECC staff on how to sign residents up for ACP program
- Coordinated Fall resident event to advertise ACP program

1 - CONNECTING RESIDENTS

Problem	Goal
People with physical access to internet can't afford it	Raise awareness of Affordable Connectivity Plan with NHFPL, BOE, ECC, YNHH
People with internet don't have the speed or reliability that the	y nee Technical Issues Remote Team - students provide tech support

ACTION STEPS PLANNED

- Coordinate with ECC to apply for the FCC "Your Home, Your Internet" grant program to fund promotion of the ACP
 program in affordable housing <u>https://www.fcc.gov/document/fcc-creates-your-home-your-internet-pilot-program-0</u>
- Coordinate with NHFPL and identify other partners to apply for the ACP Outreach Grant program to fund the general promotion of ACP <u>https://www.fcc.gov/fcc-establishes-affordable-connectivity-outreach-grant-program</u>
- Organize community sign up events at ECC properties, libraries and other community spaces for the ACP program with community partners
- Organize FCC training for ECC, NHFPL and City staff on how to sign residents up for the ACP program
- Bring providing information about ACP as part of the Financial Empowerment Center's toolbox for residents to lower bills

2 – CITYWIDE NETWORK

Problem	Goal	
MDLI's have copper wiring and make up 70% of housing stock	Understand the timing and expected avbailability of funding Collect data on existing access to broadband internet	
	Obtain cost estimate for how much internal rewiring will cost Identify a partner to negotiate rewiring of MDU's, focus on affordable units	

ACTION STEPS COMPLETED

- Coordinated with State offices to evaluate funding opportunities and learn timing expectations
- Responded to CT DEEP RFI regarding State approach to IIJA and ARPA Broadband funding
- Coordinated with Comcast and Frontier carriers to understand service availability (ongoing)
 - Frontier is in the process of creating cost estimates for bringing fiber to some ECC properties
- Reached out to fiber providers including SiFi, UTOPIA and Google Fiber to discuss potential for building fiber in New Haven with a focus on affordable housing
- Met with fixed wireless providers including Spot On, Civitas and Bear Com to compare approaches to bringing internet to affordable housing at a lower cost

2 - CITYWIDE MDU COVERAGE

Problem	Goal
	Understand the timing and expected avbailability of funding
MDLL's have conner wiring and make up 70% of housing stock	Collect data on existing access to broadband internet
MDU's have copper wiring and make up 70% of housing stock.	Obtain cost estimate for how much internal rewiring will cost
	Identify a partner to negotiate rewiring of MDU's, focus on affordable units

ACTION STEPS PLANNED

- Partner with CT DEEP Broadband to establish a pilot data collection effort focused on MDUs "every unit"
- Conduct follow up visit to SiFi's East Hartford fiber construction project and meeting with City staff
- Continue meeting with other fiber companies, Google Fiber and UTOPIA scheduled
- Continue coordinating with Frontier to truly understand their fiber project, esp. re: MDUs
- Meet with New Haven MDU owners about access to broadband in their buildings and opportunities for residents
- Prepare for upcoming grant opportunities

3 - MUNICIPAL NETWORK

Problem	Goal
Struggles with high bandwidth tasks like cameras, not future ready	Discuss internally the need for an upgraded City network

ACTION STEPS COMPLETED/ONGOING

- Joint meeting with IT and Crown Castle to discuss existing network and ideas of expanding capacity
- IT coordinating with Crown Castle on cost estimates for potential upgrade of City network

City of New Haven Broadband Initiatives



Contacts:

Dean Mack, <u>dmack@newhavenct.gov</u> Chet Sawicki, <u>csawicki@newhavenct.gov</u>

Thank You.

