



# TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

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## March 2024 – Broadband Updates

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Concord Broadband is pleased to share the following updates and information from the past month. Please do not hesitate to contact us at [broadband@concordma.gov](mailto:broadband@concordma.gov) should you have any questions, concerns, or feedback.

### Operations

We are happy to report that **we have hired a new Senior Network Engineer** who will start working on Tuesday, April 16th. This individual worked for CMLP for a little over a year starting in mid-2021. He ended up leaving due to commute and life circumstances, but he finds himself in a position to spend a few months working with the Broadband team again. We will continue to work hard to recruit another regular or Senior Network Engineer to reach fully staffed levels.

### Multi-dwelling units

It has long been a goal of Concord Broadband to expand into Concord's multi-dwelling units (MDUs) at a much higher rate than we have access to today. Historically these buildings have faced the following challenges:

- Many were built prior to Concord Broadband's existence, so they lack adequate conduit to the building and to each unit to run fiber.
- They may be managed by a board that needs to vote to authorize expenditures to gain access to install fiber.
- Internal unit wiring may be owned by a different internet service provider.

Concord Broadband staff have had meetings with Concord Greene and other MDU representatives to discuss expanding into these areas.

**One very promising area of development underway for planning is the expansion of fiber at the Concord Housing Authority's properties at Everett and Stow streets.** Through the [Residential Retrofit program](#) administered by the Massachusetts Broadband Institute, we may receive 100% reimbursement costs for getting high speed internet to these units.

Broadband Manager Dale Hartling has had several meetings with the Executive Director of the Concord Housing Authority and the Program Development Director at the Mass Broadband Institute and has responded to a Request for Information. He is obtaining quotes from vendors that can perform all of the actions required to hopefully prevent bottlenecks that result from needing to coordinate with CMLP overhead and underground crews.

### Upcoming Maintenance

No scheduled service-impacting maintenance is planned for the month of April.

We continue to test our next-generation equipment to prepare for future procurement and projects.

You can learn more about maintenance windows here:

<https://concordma.gov/3144/Broadband-Maintenance>

There may also be conversations about providing fiber to low-income housing in surrounding communities. We are extremely excited about these opportunities to expand access to more customers!

## Business modeling and analysis

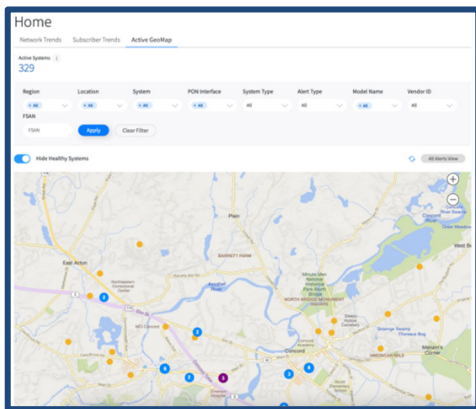
Back when Mark Howell was interested in utilizing CMLP's SmartGrid fiber as a backbone for a municipal fiber service, it was necessary to convince voters that this would be a sound business proposition. To do that, financial models were needed to show what the cost of doing business would be initially and five years into the future.

Those models were useful in proving that Concord Broadband would be cash flow positive in a few years, but the data and assumptions that fed those models were not kept up over the next 10 years of operation.

I'm pleased to report that **Concord Broadband has retained the help of the individual who constructed those models to provide updates to the underlying data and recalibrate assumptions with a decade of real-world experience.** We will also work to create clearer financial independence between the broadband and electricity divisions of CMLP and produce regular financial reports with more granular detail than we have today. These new models will allow us to put together comprehensive capital plans to outline expansion into underserved areas of Concord.



## Operations Cloud software



We have held a series of meetings with Calix, the vendor that makes the ONTs and switches for our network, to cover the result of our implementation of Operations Cloud. These were learning opportunities for staff to become familiar with the platform and also get some outstanding issues fixed.

So far, only a few hundred of our ONTs are showing up on the outage map. The vendor has identified an issue with their software, and they are applying a patch on the week of April 8<sup>th</sup> to fix the problem.

We have been able to setup unique alarms and even stage software to be applied on a reboot – things not possible on our previous iteration of software. This new cloud platform is being enhanced monthly, which is a welcome change over our previous platform that had not received substantive updates in nearly a decade.

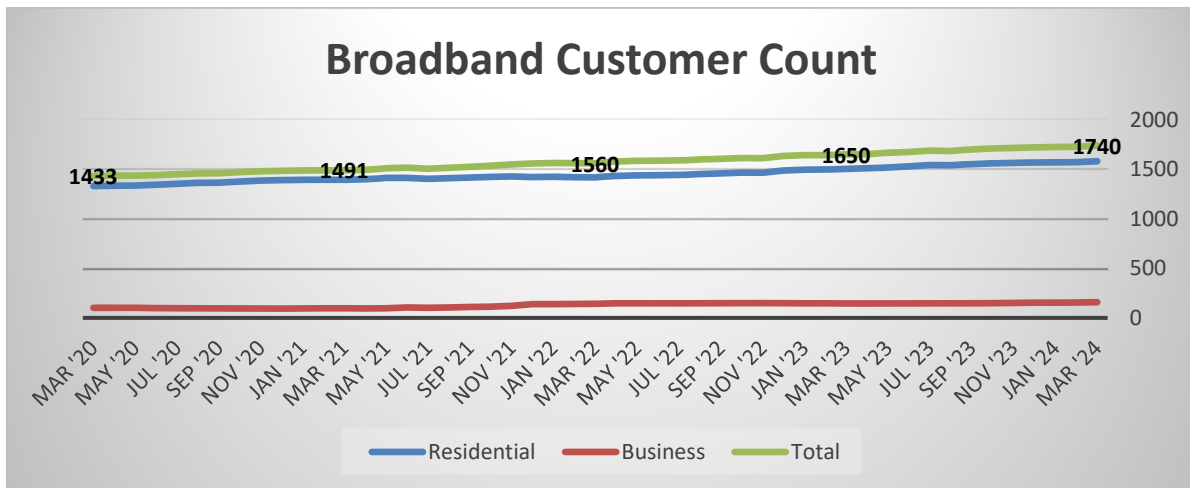
## Affordable Connectivity Program

The Light Board has approved a flat \$20 per month credit for any customer that is eligible for the electric rate assistance program. We are confirming with counsel the process and will be reaching out to eligible customers to notify them of the savings.

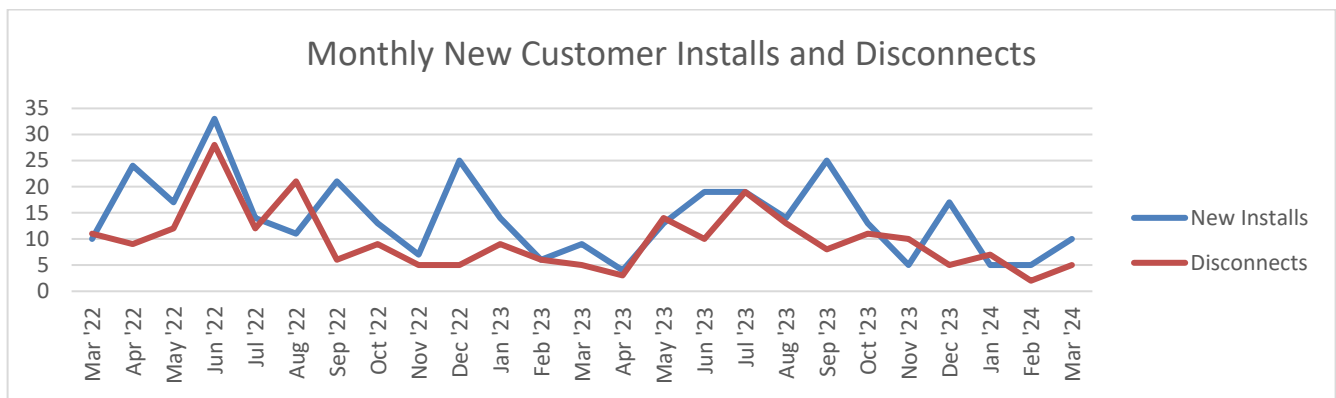
We also have learned that there are customers who have Broadband but whose multi-dwelling unit may handle their electricity, so while they may qualify for the electric rate assistance, they are not enrolled in the program. **After understanding how many of these customers exist, we will come to the Light Board at a future meeting to reframe the request for a credit to make sure these people can be eligible for the credit.**

There is still no identified funding of the Affordable Connectivity Program once it runs out of funding in April of 2024.

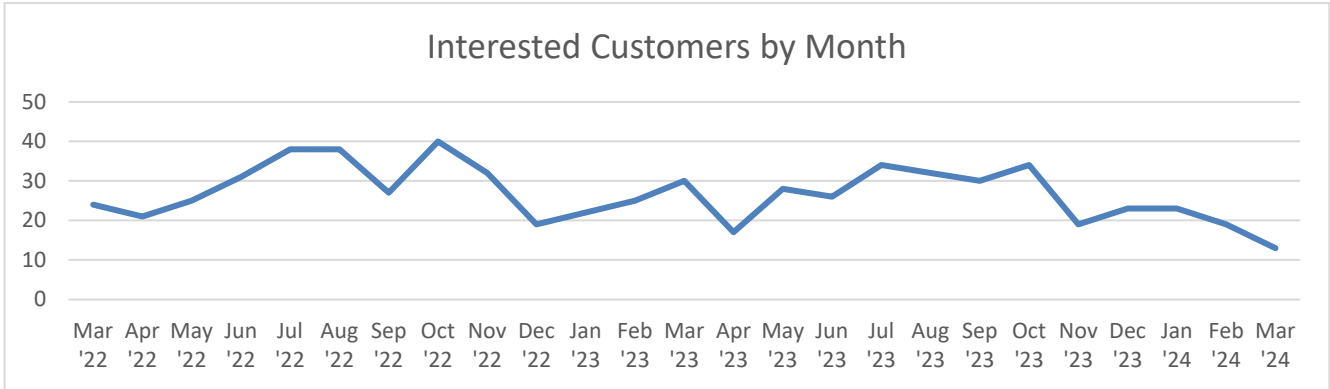
### Monthly Metrics and Business Data



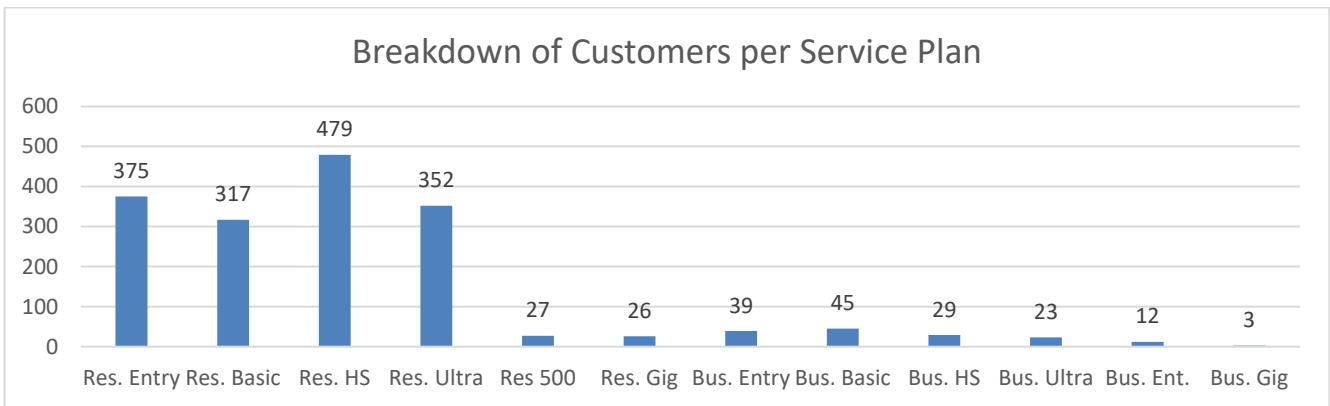
(Customer count: March 2020 – March 2024)



(The number of new installations and disconnects completed each month.)

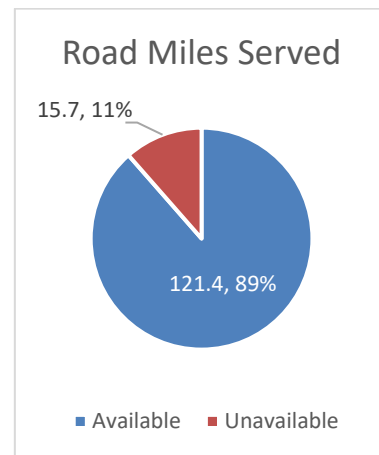
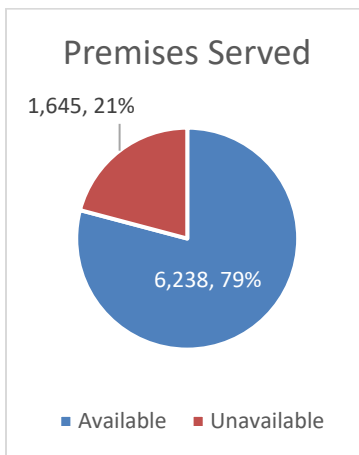
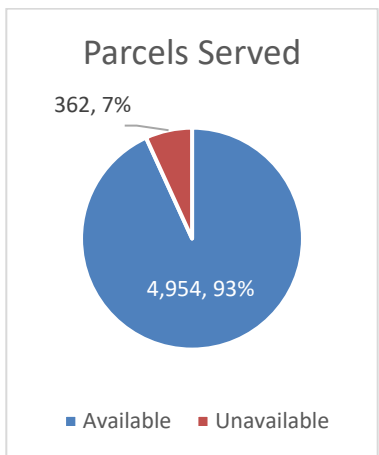


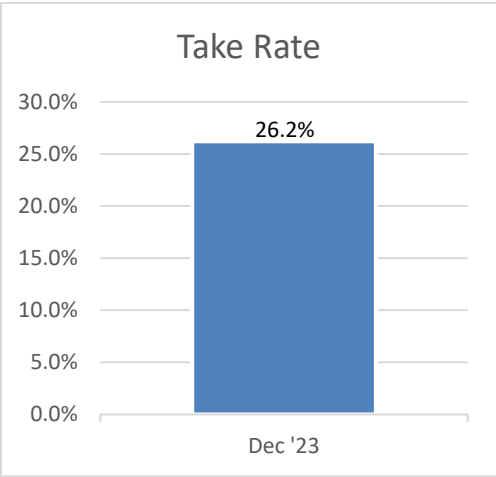
*(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)*



*(This is the number of each customer on our different service plans as of 3/31/2024.)*

## Other Metrics





*(As of 12/1/2023)*

## Appendix

### Fiber Broadband Completion Task Force's Draft Report Goals

Goal	Type	Priority	Responsible Party	Additional Info.
<b>Policies (p.39)</b>				
<ul style="list-style-type: none"> <li>Universal Access</li> </ul>	Policy	Highest	Select Board/Town Meeting	
<ul style="list-style-type: none"> <li>Expansion outside current territory</li> </ul>	Policy	Low	Select Board/Town Meeting	Conversations happening
<ul style="list-style-type: none"> <li>Support Economic Vitality, Sustainability, Equity &amp; Inclusion</li> </ul>	Policy	High	Select Board/Light Board/TM Economic Development	Rate subsidy planned
<ul style="list-style-type: none"> <li>Affordable Housing</li> </ul>	Policy	Medium	Select Board/Housing Groups	Rate subsidy planned; working on Concord Housing Authority properties
<ul style="list-style-type: none"> <li>Public Safety</li> </ul>	Policy	Medium	Select Board/Town Manager	
<ul style="list-style-type: none"> <li>Education</li> </ul>	Policy	Medium	Select Board/School Dept.	
<ul style="list-style-type: none"> <li>Government Access (PEG)</li> </ul>	Policy	Medium	Select Board/PAAC	
<b>Recommended metrics for tracking (p.41)</b>				
<ul style="list-style-type: none"> <li>Parcels served</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Premises served</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Road miles served</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Subscribers</li> </ul>	Metric	High	Town Staff/Light Board	Complete; will report monthly
<ul style="list-style-type: none"> <li>Take rate</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Churn</li> </ul>	Metric	High	Town Staff/Light Board	Complete; included in monthly report
<ul style="list-style-type: none"> <li>Installations</li> </ul>	Metric	Highest	Town Staff/Light Board	Complete; will report monthly
<b>Governance (p.39)</b>				
<ul style="list-style-type: none"> <li>Track progress against completion</li> </ul>	Metric	Highest	Light Board/Town Staff	We have been cleaning up the Master Address Table and will have something new to report soon. (3/2024)
<ul style="list-style-type: none"> <li>Rate of return policy</li> </ul>	Policy	High	Light Board/Town Staff	
<ul style="list-style-type: none"> <li>Financial goals with regular reporting</li> </ul>	Policy	High	Light Board/FinCom	Working on this
<ul style="list-style-type: none"> <li>Retained earnings and reserve policy</li> </ul>	Policy	High	Light Board/FinCom	

Goal	Type	Priority	Responsible Party	Additional Info.
<b>Strategic Planning Goals (p.43)</b>				
• Marketing and growth	Metric	High	Light Board/Town Staff	
• Business return	Policy	High	Light Board/Town Staff	Working on this
<b>Budgeting Process for Fiber Expansion (p.41)</b>				
• Expand to fill existing opportunities	Planning	High	Light Board/Town Staff	
• External funding sources	Research	Medium	Light Board/Town Staff	Working on this
• ARPA Relief Funds Allocation, incl. Lost Revenue	Finance	Highest	Select Board/Town Manager	Complete
• Review/Confirm Internal Loan Findings	Finance	Highest	Financial Audit Comm/Staff	Complete
• Review and Rescind PILOF to MMN	Finance	High	Select Board/Town Manager	Complete
<b>Capital Planning Process (p.42)</b>				
• Review/Revise Debt financing schedule	Policy	Highest	Light Board/Town Staff	In progress; due to positive financial situation, anticipating being able to repay faster.
• Quantifying cost of expansion	Planning	Medium	Town Staff	Working on this
• How to fund expansion	Planning	Medium	Light Board/Town Staff	Working on this
• Revise/refine methods for computing ROI	Planning	Medium	Light Board/Town Staff	
<b>Construction and Logistics (p.42)</b>				
• Vibratory plow – direct buried fiber cables	Operations	Medium	Town Staff	Working on this
• Revise/Refine Communication conduit construction standards and guidance	Policy	Medium	Town Staff	
• Integrate Fiber construction with the Roads Program – focus on Streets without fiber that already have underground electric	Planning	High	Town Staff	Working on this