



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

April 2024 – Broadband Updates

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 should you have any questions, concerns, or feedback.

Operations

We are happy to report that our new Network Engineer, Victor, began in April, and we are thrilled to have him. He has already had a profound effect on operations, and we are so happy for his expertise and dedication.

Town Network Upgrades

Concord Broadband staff oversee both the Broadband and Town networks. It just so happens that an overhaul of the Town's network is due. This change will see not just equipment replacements but also a topology change that will result in a faster, more resilient network.

Today's Town network relies on a fiber ring of its primary sites. This topology is a good choice when a hub-and-spoke topology is not possible due to limitations of the fiber between sites. But staff have worked hard to identify more fiber strands to allow direct connections from every site to a primary hub, plus additional fibers for redundancy. This new topology also takes into consideration the proliferation of cloud computing and the need for internet resources from most clients.

Staff have been at work on this project for many months, and we are nearing a time, hopefully in June, when we can cut over to the new network.

Circuit Upgrades

Concord Broadband has steadily seen its usage grow over the past decade. We don't release specific data on throughput, but we speak in general terms and also release our usage curve throughout the day. It probably doesn't surprise anyone that our daily peak is between 7-10pm when people are home and begin streaming video. Concord Broadband currently has an ISP that provides bandwidth to our customers, and at this point in time we wish to increase that bandwidth. Fortunately, due to falling prices of bandwidth, we are going to be able to double our speed for the same price and add a second redundant link at the same time.

This work is expected to be completed in the next few months, further adding to the resilience of the fiber-to-the-home service offered in Concord.

Upcoming Maintenance

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

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>

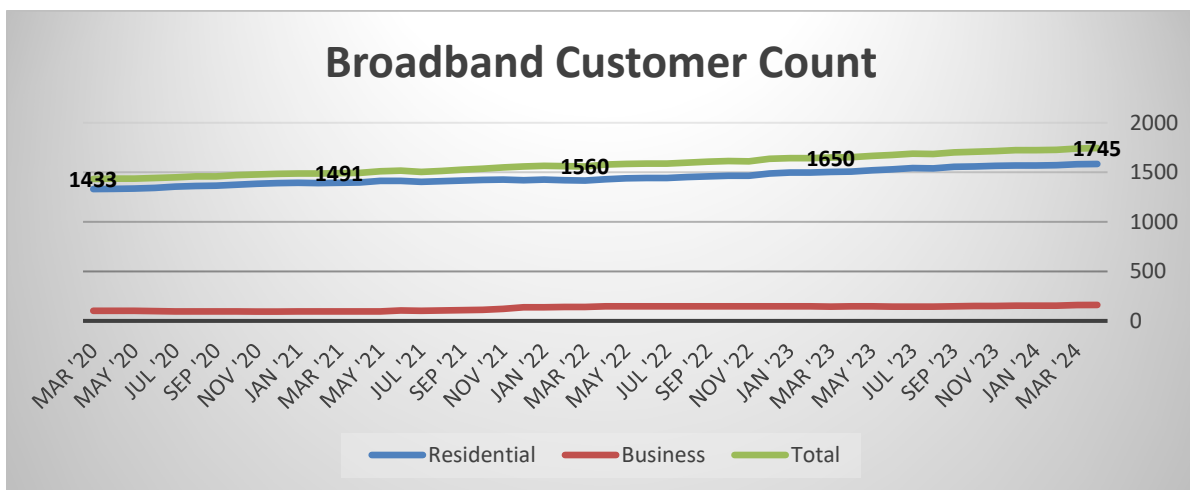
Affordable Connectivity Program

The Light Board has approved a flat \$20 per month credit for any customer that is eligible for the electric rate assistance program. We will be communicating with residents soon to let them know the effective date of their ongoing credit.

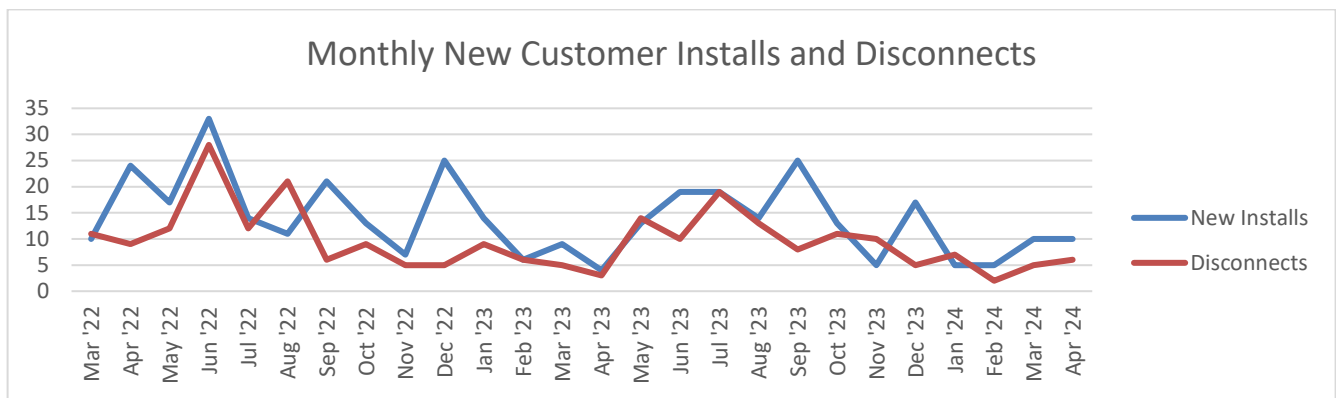
Each year, customers will reapply for the electric rate assistance rate and automatically receive the Broadband credit.

There is still no identified funding of the Affordable Connectivity Program now that it has run out of funding as of April of 2024.

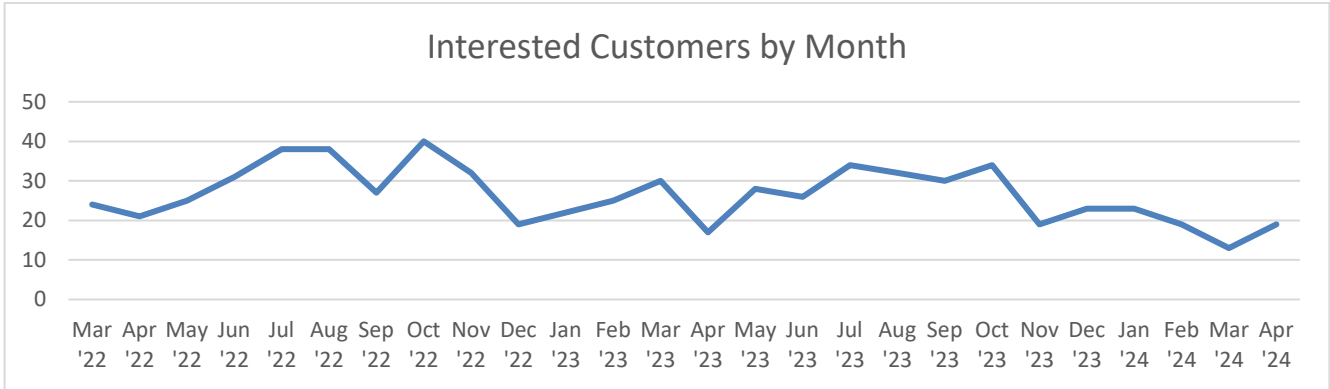
Monthly Metrics and Business Data



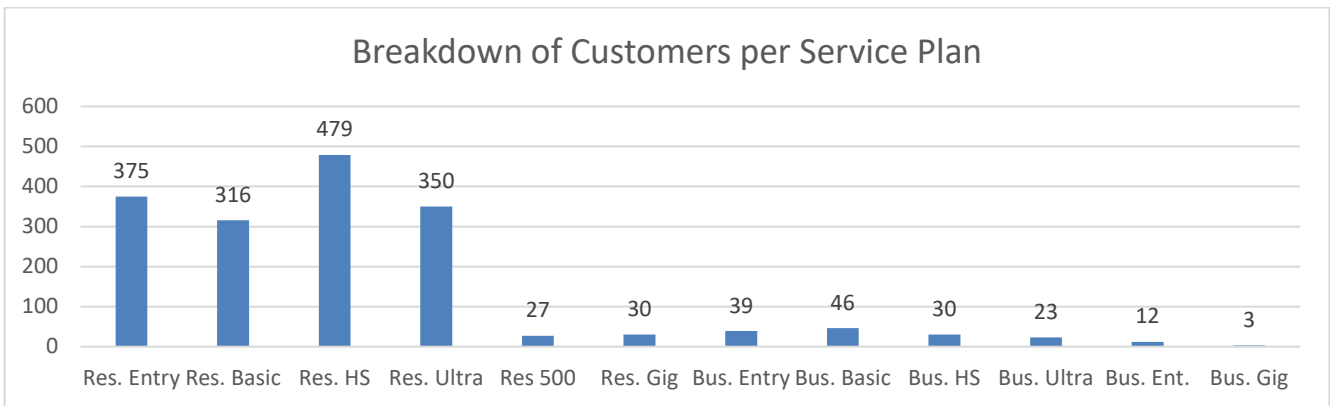
(Customer count: March 2020 – April 2024)



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

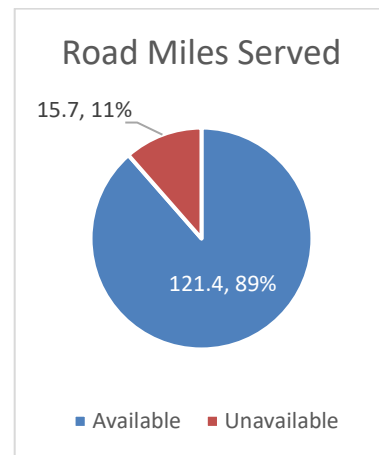
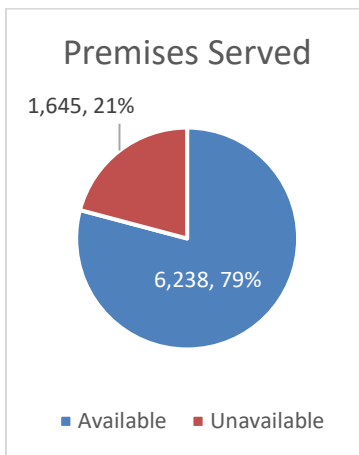
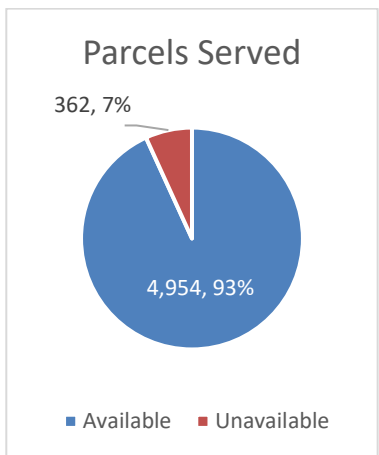


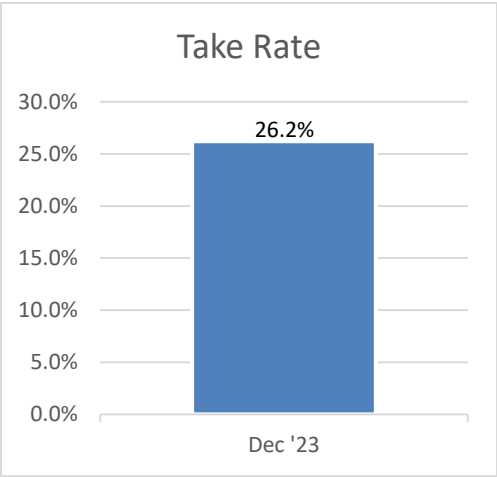
(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)



(This is the number of each customer on our different service plans as of 4/30/2024.)

Other Metrics





(As of 12/1/2023)

Appendix

Fiber Broadband Completion Task Force's Draft Report Goals

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

Goal	Type	Priority	Responsible Party	Additional Info.
Strategic Planning Goals (p.43)				
• Marketing and growth	Metric	High	Light Board/Town Staff	
• Business return	Policy	High	Light Board/Town Staff	Working on this
Budgeting Process for Fiber Expansion (p.41)				
• 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
Capital Planning Process (p.42)				
• 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	
Construction and Logistics (p.42)				
• 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

