



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

January 2023 – 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

January was a busy month at Concord Broadband. Here are a few of the projects we've been working on:

- Facilitating a discussion to install dark fiber with a pole attachment agreement for MCI
- Enhancing new customer tracking to ensure onboarding is smooth and installations are timely
- Improving billing system for more accurate pro-rated first bills and preventing billing for customers who do not end up signing up for service
- Conducting interviews for two vacant positions
- Reviewing gateway sites for the Advanced Metering System project for compatibility with the fiber network
- Taking steps to improve the inventory process
- Beginning to implement a new cloud-based file sharing system

Concord Broadband also completed a long-standing project to restore a fiber path to the high school, which had been damaged over a year ago. This took many hours of planning and execution for both staff and third-party contractors.

ONT Batteries

The ONT (Optical Network Terminal) is the piece of hardware Internet Service Providers use to turn an optical signal that travels on fiber optic cable into something that can be used by customers' devices. Historically, these ONTs included a battery that would keep the ONT running in the event of a power outage because some customers received phone service as well as internet service. At that time, cell phones were not ubiquitous, so it was deemed essential to keep the service running during emergencies.

In the last decade, manufacturers of ONTs have stopped adding these batteries, and Internet Service Providers have stopped including them for customers. The primary drivers of this change were the availability of cell phones and the waste created by lead-acid batteries that rarely went used and needed to be replaced every three years.

Should a Concord Broadband customer ever hear a beeping noise coming from their ONT, it is likely an indication that

Maintenance

On January 21, 2023 at 1am, Concord Broadband staff worked with Calix, our hardware vendor, to perform maintenance at our primary data center. Earlier in the month we had attempted to replace a piece of hardware, but during the maintenance window, our vendor could not meet all prerequisites for the operation to continue, so it was rescheduled.

While we try to avoid two maintenance windows in one month, this was an important piece of preventative maintenance.

We thank the staff who prepared for this work and were on-site from 1-3am. Fortunately the impact to customers was minimal.

the battery is no longer providing enough power to keep the device running during a power outage. Should this happen, please call our helpdesk (978-318-3199), and we will walk you through a fix and visit the premise as soon as we can to remove the battery and dispose of it properly.

Should some customers wish to purchase and maintain a battery backup solution for their ONTs, they can check with any electronics retailer for an uninterruptible power supply (UPS).

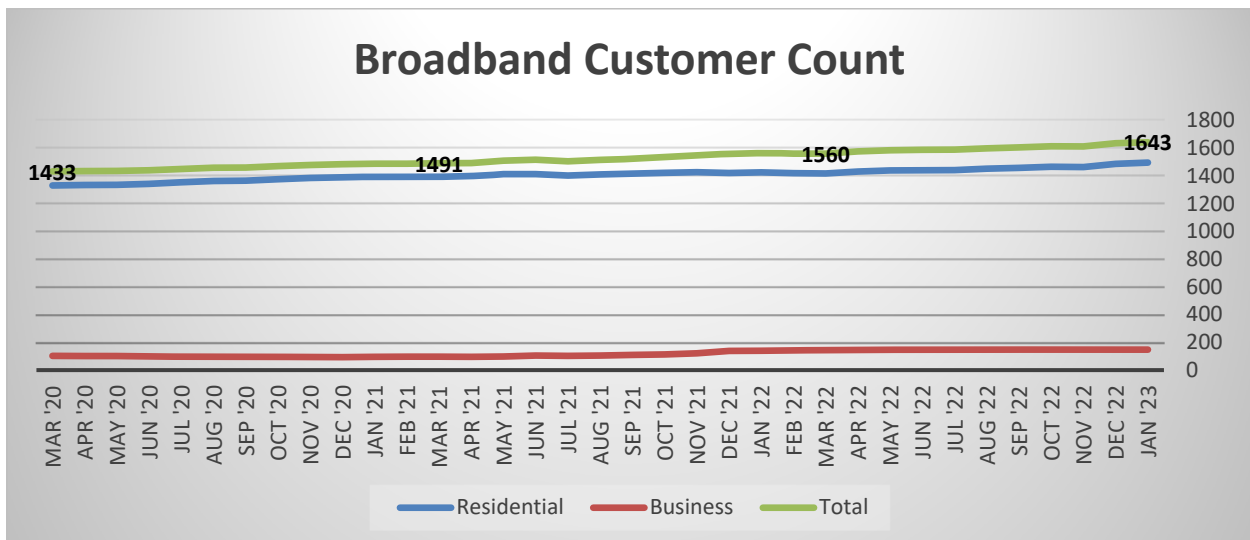
Upcoming Rate Subsidies

Concord Broadband is pleased to announce that we have begun the process of applying for the Affordable Connectivity Program (ACP). This program provides a discount of up to \$30 per month toward internet service for eligible households.

There is a regulatory hurdle that our organization must jump through before we can file a formal application: because of how the program was set up, entities that wish to offer this subsidy to its customers must either be an Eligible Telecommunications Carrier (ETC) – which is a certain class of phone provider – or receive a waiver from the FCC. Because Concord Broadband is not a registered ETC, we are seeking a waiver and will submit the application to the ACP as soon as we receive it.

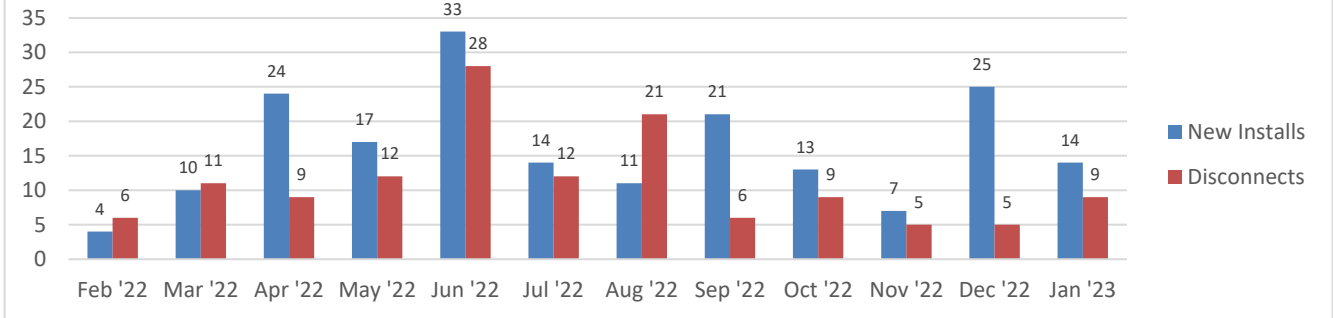
Those curious about the program and its eligibility requirements can review the website at <https://www.fcc.gov/acp>.

Monthly Metrics and Business Data



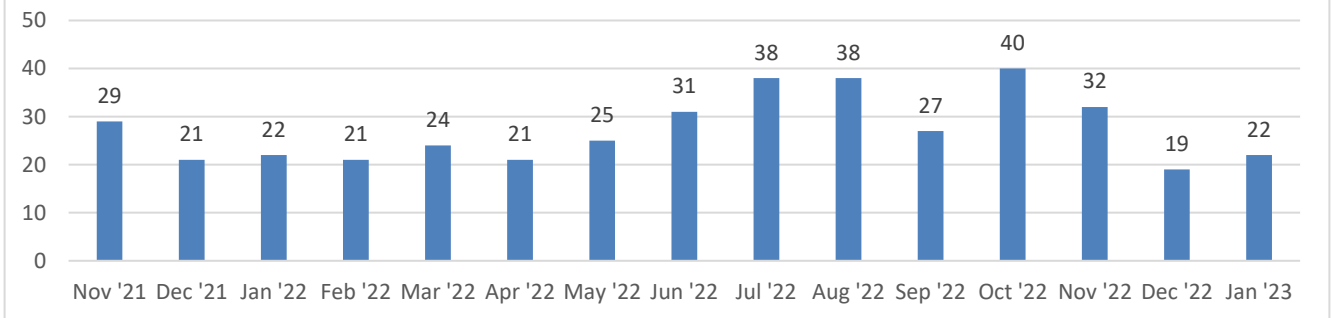
(Customer count: March 2020 – January 2023)

Monthly New Customer Installs and Disconnects



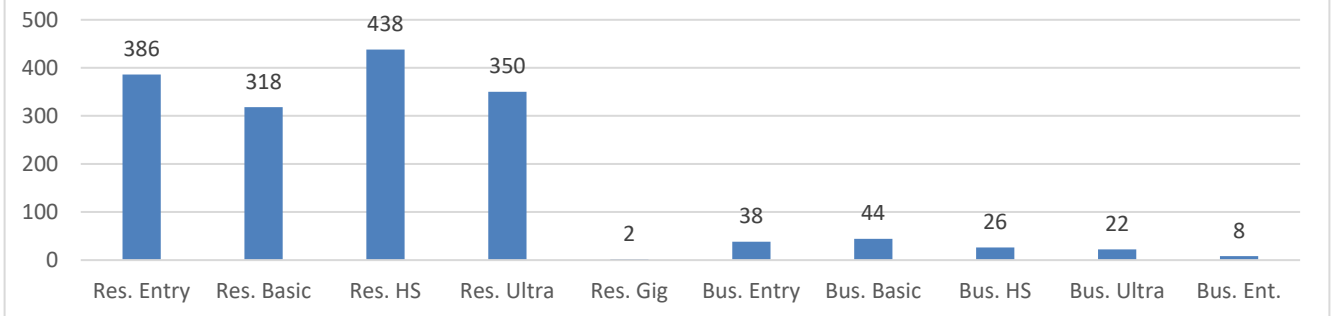
(The number of new installations and disconnects completed each month. Please note that these numbers have been updated after finding that the number of disconnects were incorrectly counted in previous months (too high). Issues with billing are sometimes resolved by disconnecting service and reconnecting it immediately, which was artificially inflating these numbers by about 10 in total in the chart above.)

Interested Customers by Month



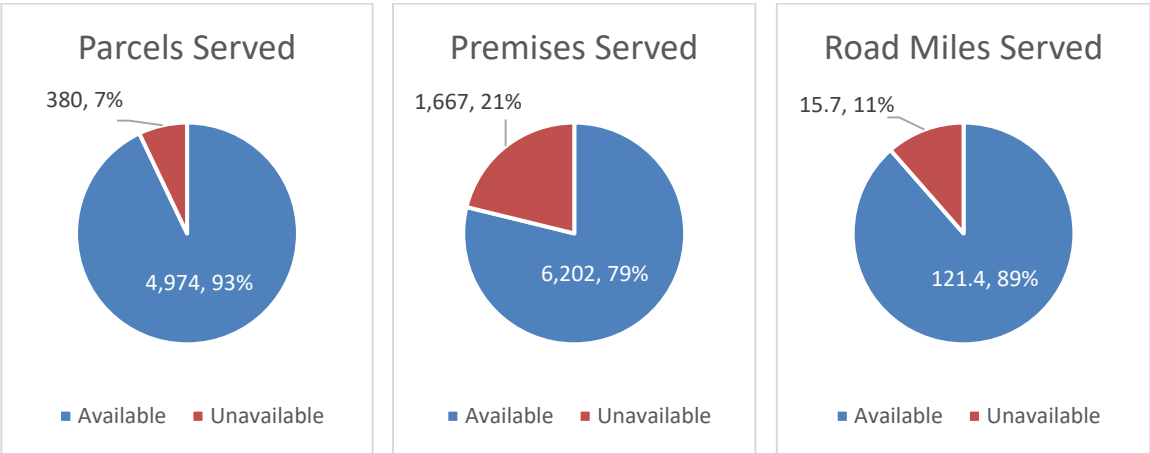
(This is the number of individuals who complete the Concord Broadband interest form on the Concord website, whether they are in the current service area or not.)

Breakdown of Customers per Service Plan



(This is the number of each customer on our different service plans as of 1/31/2023.)

Quarterly Metrics



(As of 9/30/2022; updated numbers will come in a future update)

Appendix

Fiber Broadband Completion Task Force's Draft Report Goals

Goal	Type	Priority	Responsible Party	Additional Info.
Policies (p.39)				
• Universal Access	Policy	Highest	Select Board/Town Meeting	
• Expansion outside current territory	Policy	Low	Select Board/Town Meeting	
• Support Economic Vitality, Sustainability, Equity & Inclusion	Policy	High	Select Board/Light Board/TM Economic Development	Rate subsidies in progress; update expected soon
• Affordable Housing	Policy	Medium	Select Board/Housing Groups	Rate subsidies in progress; update expected soon
• Public Safety	Policy	Medium	Select Board/Town Manager	
• Education	Policy	Medium	Select Board/School Dept.	
• Government Access (PEG)	Policy	Medium	Select Board/PAAC	
Recommended metrics for tracking (p.41)				
• Parcels served	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
• Premises served	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
• Road miles served	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
• Subscribers	Metric	High	Town Staff/Light Board	Complete; will report monthly
• Take rate	Metric	Medium	Town Staff/Light Board	Working on this; update expected soon
• Churn	Metric	High	Town Staff/Light Board	Working on this; update expected soon
• Installations	Metric	Highest	Town Staff/Light Board	Complete; will report monthly
Governance (p.39)				
• Track progress against completion	Metric	Highest	Light Board/Town Staff	Working on this; update expected soon
• Rate of return policy	Policy	High	Light Board/Town Staff	
• Financial goals with regular reporting	Policy	High	Light Board/FinCom	
• 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	
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	Working on this
• Review/Confirm Internal Loan Findings	Finance	Highest	Financial Audit Comm/Staff	Complete
• Review and Rescind PILOF to MMN	Finance	High	Select Board/Town Manager	Working on this
Capital Planning Process (p.42)				
• Review/Revise Debt financing schedule	Policy	Highest	Light Board/Town Staff	Working on this; update expected soon
• Quantifying cost of expansion	Planning	Medium	Town Staff	Working on this
• How to fund expansion	Planning	Medium	Light Board/Town Staff	
• 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