



# TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

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## August 2023 – 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

Recruitment continues for a new Network Engineer. We are reaching out to set up interviews in the coming weeks and are encouraged by the applicants we are seeing so far.

New cloud-based functionality will soon be available to Concord Broadband as we are working with our network hardware vendor to add an Operations Cloud package to our account that allows better visibility into network operations and granular details about the status of each ONT in a format that can be easily connected with other variables like power status and customer data.

We have had basic functionality in this system for a year that allowed us to see network flow, but we are upgrading to the full package to get more data that will aid in response time when we have issues and help us better plan the utilization of the network as we add more higher-speed customers.

The new service is expected to go live on 10/1/2023.

### Storm Cleanup

On September 8, 2023, a very brief but intense storm hit the Town of Concord with heavy rain and damaging high winds. After the storm passed and winds died down, over 60 trees had fallen in town, leaving thousands of customers without power and hundreds without internet.

Concord Broadband maintains an on-call Technician and Network Engineer 24/7/365, and crews stayed on site on Friday to determine the scope of the outages. We have a contract with a fiber pulling and splicing company to provide 4-hour response to any major outage, and they were alerted and quickly assembled crews to come to Concord to restore service.

Unfortunately, though crews were in Concord until almost 10pm, there was little work to do because electric line crews, public works crews and tree removal companies were still making conditions safe. Friday night showed nearly 200 customers without internet service, but over 170 appeared to be a result of power outages.

### Upcoming Maintenance

A maintenance window is scheduled for 5-6am on Friday, September 15, 2023. While we do not anticipate any impact on customers, one of our three Internet Service Providers will be replacing their circuit, resulting in down time for that circuit. Because we have two other circuits (both much faster), we should have no impact to customers. If there is a hiccup, though, we like to let everyone know that we are doing work at that time.



*Figure 1: Tree down on Monument St (Friday afternoon)*

Early Saturday morning crews arrived on scene again and began mapping out their day, focusing on the largest clusters they could. And all weekend we had to deal with additional thunderstorms that prevent bucket work as well as downed communications lines from Verizon and Comcast that slowed our response.

It was clear at this point in time that we were very lucky not having significant backbone fiber taken out by the storm. Trees that fell on Monument St, Lowell Rd, and College Dr were all caught by the primary power lines and spared the communications lines below. Once power had been restored to much of the Monument St/Lowell Rd area, hundreds of customers came back online. Ultimately only about a dozen customers had damaged or broken fiber that required repair or re-pulling.

Several pulls and 2 customers were restored on Saturday, and fortunately the weather held on Sunday long enough for us re-pull the fiber to three customers on Bayberry Rd. Customers on Annursnac Hill Rd, Strawberry Hill Rd, and College Rd all came back online once power was restored. Another customer was brought back up Sunday afternoon before heavy rains returned.

On Monday, the work at Bayberry Rd was completed, along with splices at Nashoba Rd and Alcott Rd, which were the final two customers impacted.

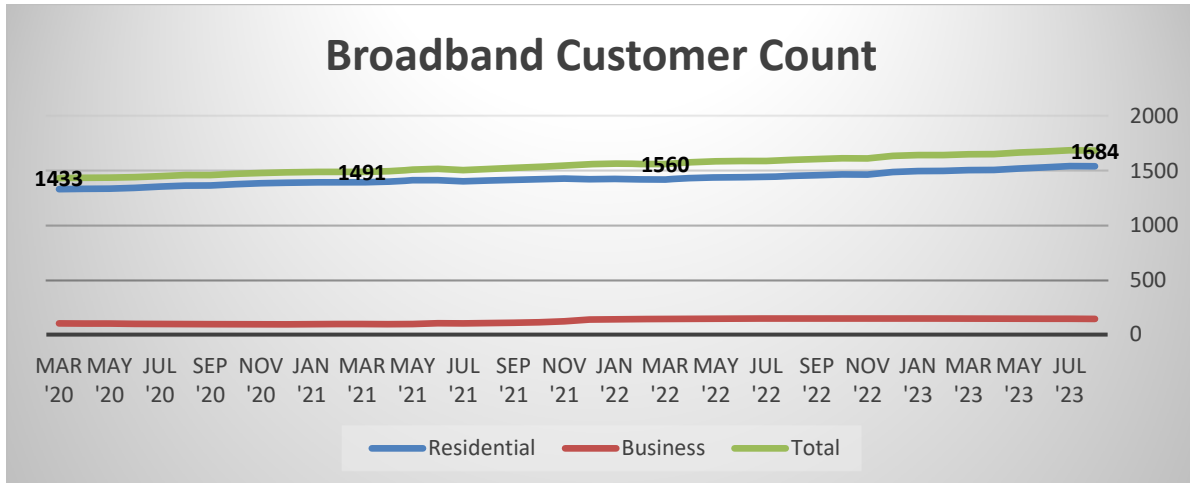
Managing the outage and communication was a team effort, with some staff talking to CMLP or other vendors, some handling direct customer phone calls, and others posting updates online and keeping internal Town stakeholders up to date.

We cannot thank the team enough for their dedication in getting everything restored by the end-of-day Monday. We would especially like to thank on-call Senior Technician Rob Muir, who was the one in a bucket in sometimes horrible weather splicing fiber and working with customers and contractors. Storms like this are rare, but they require a robust response, and Rob rose to the challenge over the weekend.

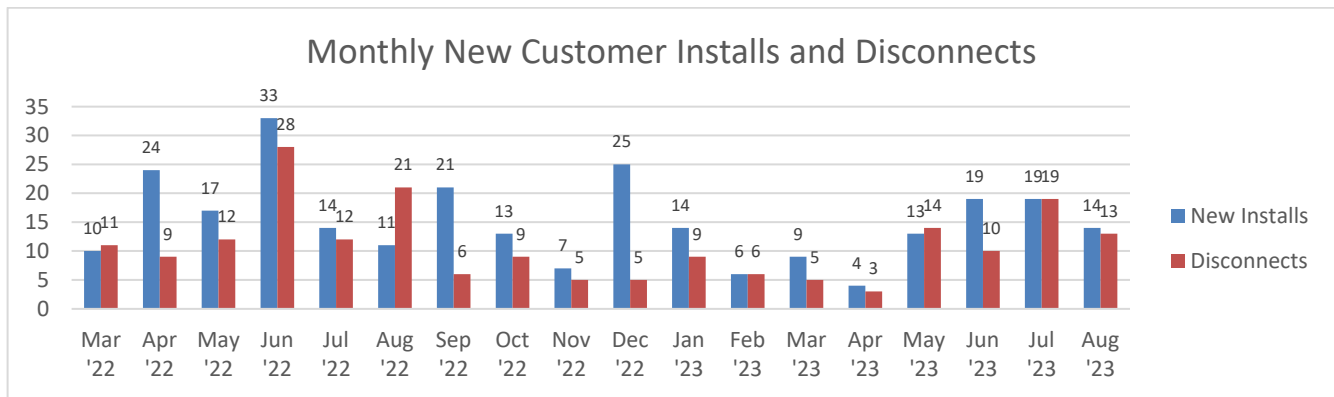
In the next week or two, we will meet with CMLP staff to review our response and see what we could do going forward to improve our response and detection of issues.

If anyone has feedback on the response or would like to speak with us, please send an email to [broadband@concordma.gov](mailto:broadband@concordma.gov) or call customer service at (978) 318-3101.

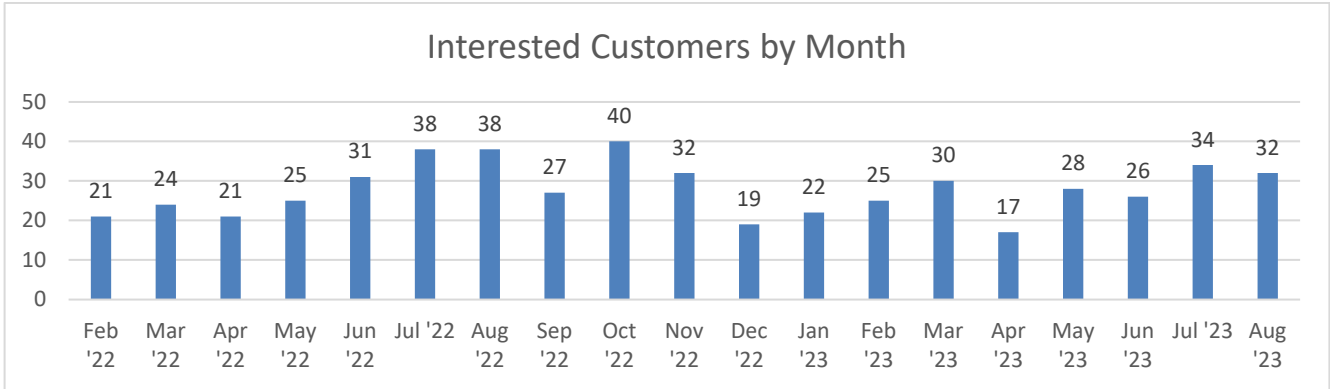
## Monthly Metrics and Business Data



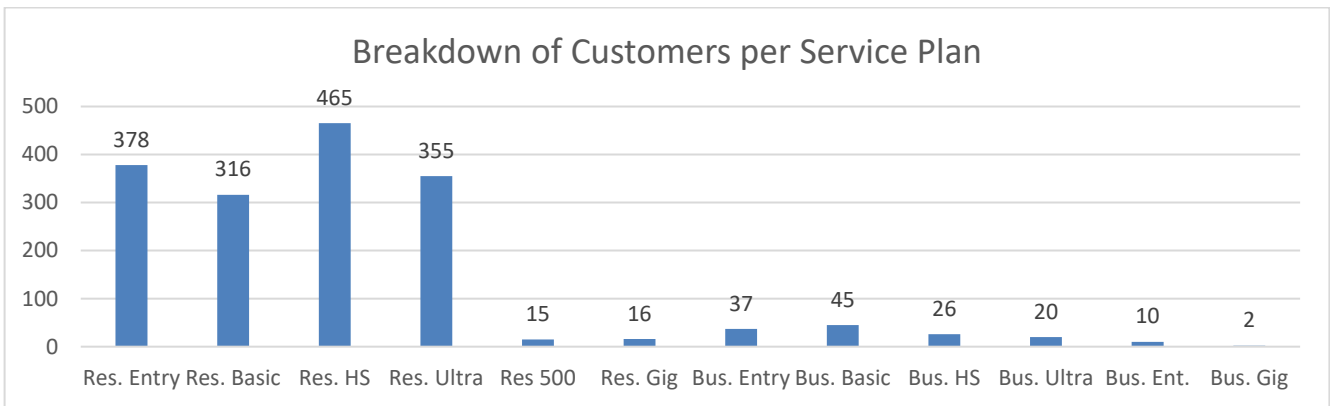
(Customer count: March 2020 – August 2023)



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

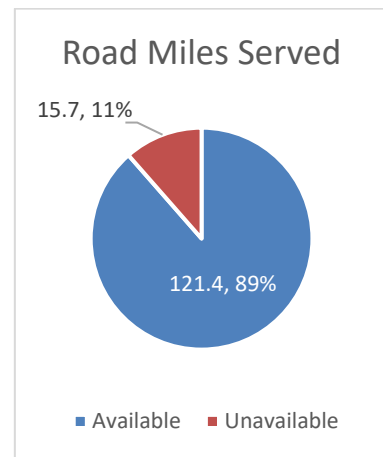
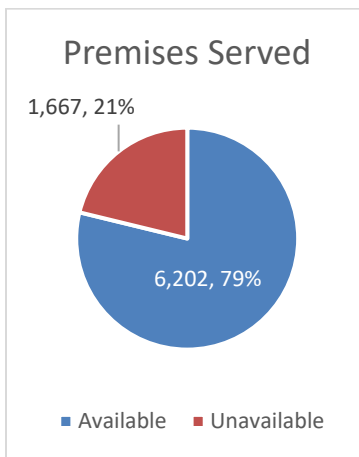
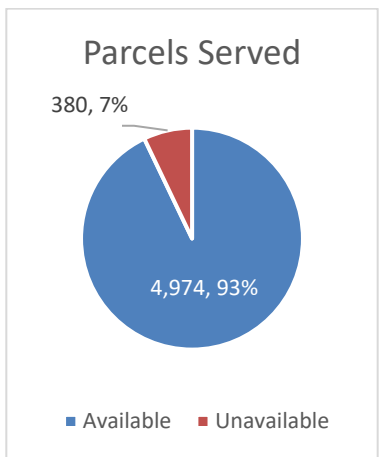


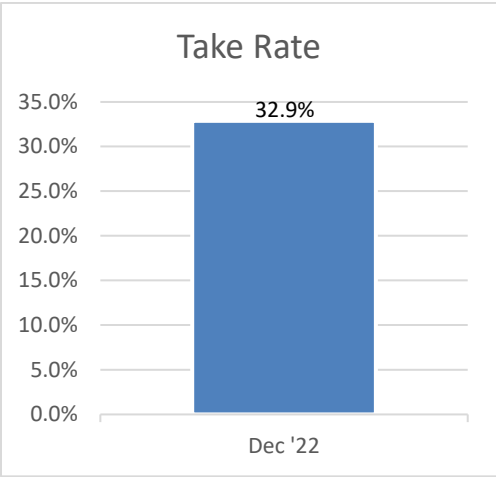
*(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)*



*(This is the number of each customer on our different service plans as of 8/31/2023.)*

## 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.
<b>Policies (p.39)</b>				
• 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 subsidy available
• Affordable Housing	Policy	Medium	Select Board/Housing Groups	Rate subsidy available
• Public Safety	Policy	Medium	Select Board/Town Manager	
• Education	Policy	Medium	Select Board/School Dept.	
• Government Access (PEG)	Policy	Medium	Select Board/PAAC	
<b>Recommended metrics for tracking (p.41)</b>				
• 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	Complete; will report quarterly
• Churn	Metric	High	Town Staff/Light Board	Complete; included in monthly report
• Installations	Metric	Highest	Town Staff/Light Board	Complete; will report monthly
<b>Governance (p.39)</b>				
• 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.
<b>Strategic Planning Goals (p.43)</b>				
• Marketing and growth	Metric	High	Light Board/Town Staff	
• Business return	Policy	High	Light Board/Town Staff	
<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	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	Complete
<b>Capital Planning Process (p.42)</b>				
• 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	
<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