



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

January 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

Recruitment continues for a new Network Engineer. We continue to screen candidates after having our last recruitment fall through.

Our Technicians, Network Engineer, and Broadband Manager have been busy working on expanding the Town's use of cameras at key Concord Public Works locations. This involves physical infrastructure as well as networking setup and configuration.

We are working with Calix, the vendor that makes customer ONTs and our switches, to prepare upgrades to all equipment. There should be a very small impact on customers during the night – see inset for more information.

Measuring speed

Customers of any Internet Service Provider – Concord Broadband included – often wonder how exactly the speed is measured on their service and how it might be guaranteed. While we can't speak for how the other folks do it, we can tell you how we calculate this.

When a class of service is created in our equipment, we configure a speed that meets or exceeds the advertised number. In every case, the programmed number is a little higher than the advertised speed to ensure that we get that speed when we test a customer's location. If the speed advertised is 500/500, we may program it to be 520/520, for example.

Since several customers share the same fiber, and each fiber has a maximum speed possible, whenever we provision a new customer we do analysis, including a 90-day look-back on bandwidth used, to make sure that new and existing customers who share that fiber get the speeds promised. Allocating more promised speed to a group who will never likely see the speeds they are paying for is against our values as an organization.

When customers call concerned about their speeds, they are often on a wireless device. Unfortunately there are a few

Upcoming Maintenance

There is no maintenance currently scheduled, but we are planning on scheduling one for February or March. We will be targeting the Town website, News and Notices email subscribers and posting updates on the website below.

The purpose of the upcoming maintenance is to upgrade the firmware on all Broadband devices, which will impact service for 5-15 minutes (between 1-4am).

You can learn more about maintenance windows here:

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

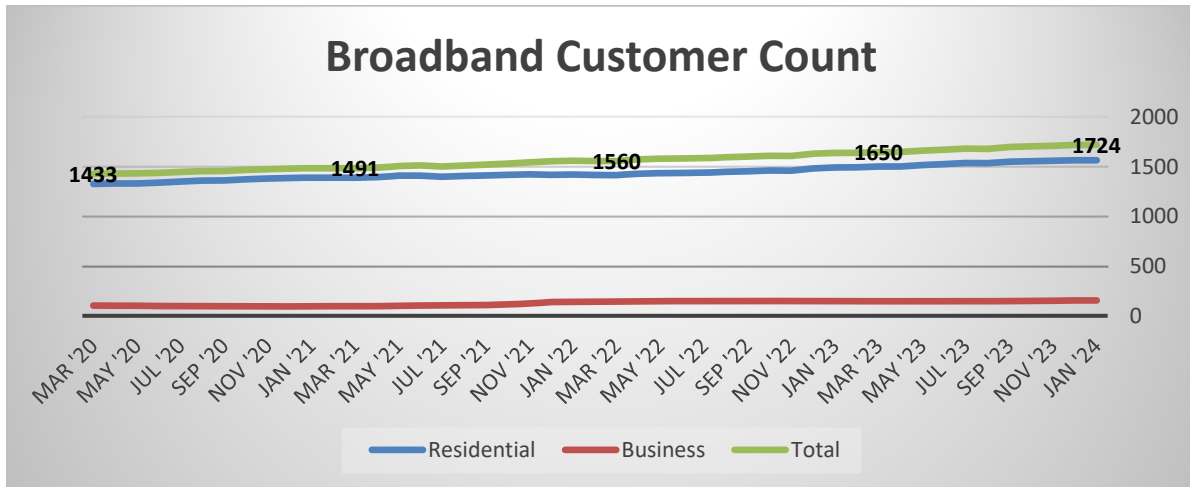
reasons why a wireless device might not get the advertised speeds, like:

- A device that has a modem incapable of providing the advertised speed
- Having the device too far from the router or access point.
- Having too many other devices pulling so much data that it is impacting the test device

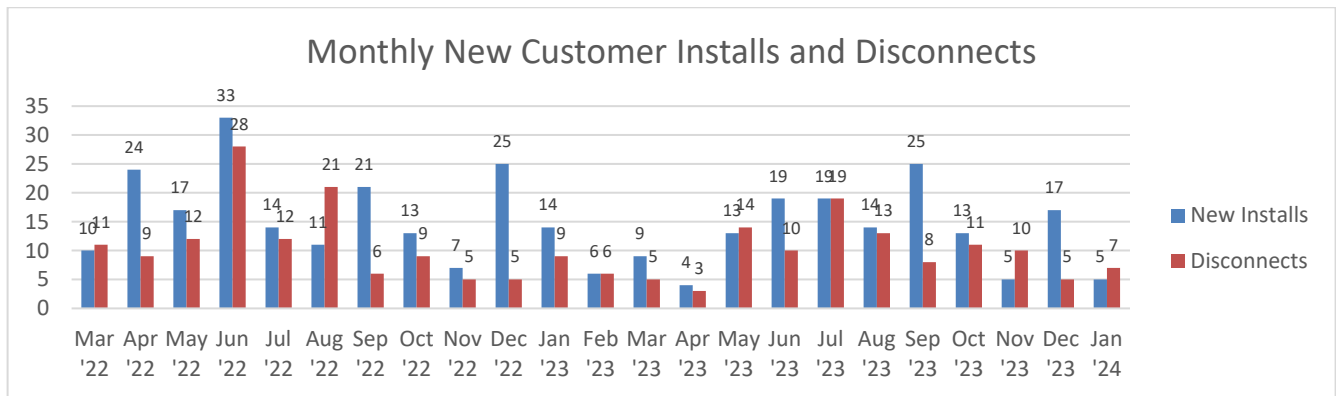
When you reach out to our call center, they will walk you through basic troubleshooting. It's always best to find a wired connection to rule out some of the issues listed above for wireless connections.

Whenever customers do not get the advertised speed, we work with them to ensure that their service is working properly and they can get the speeds they pay for.

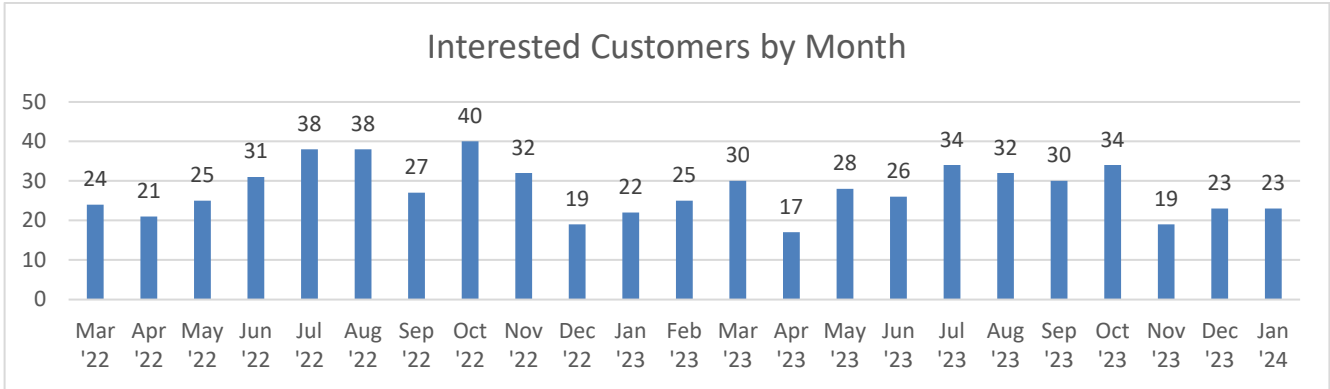
Monthly Metrics and Business Data



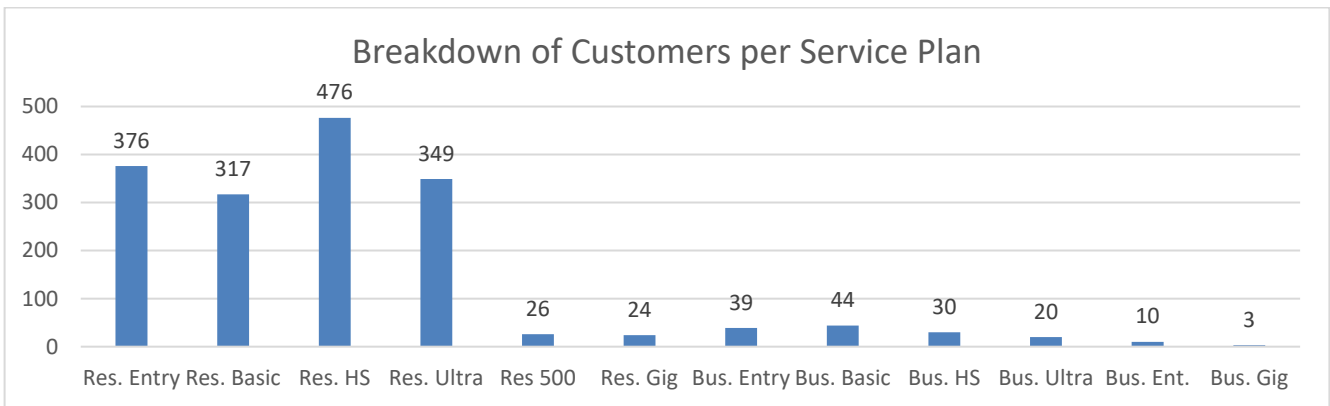
(Customer count: March 2020 – January 2024)



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

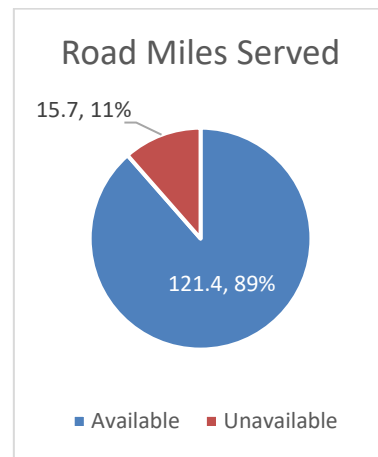
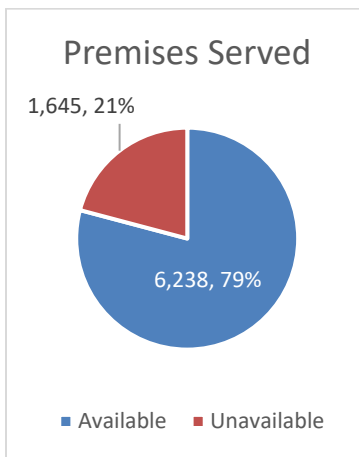
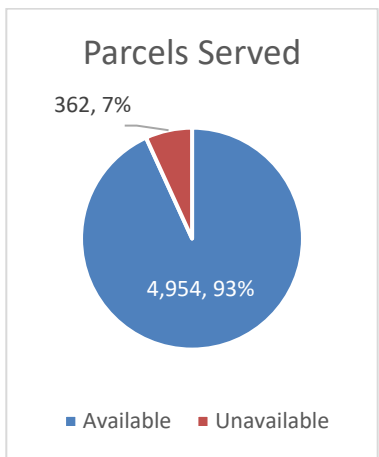


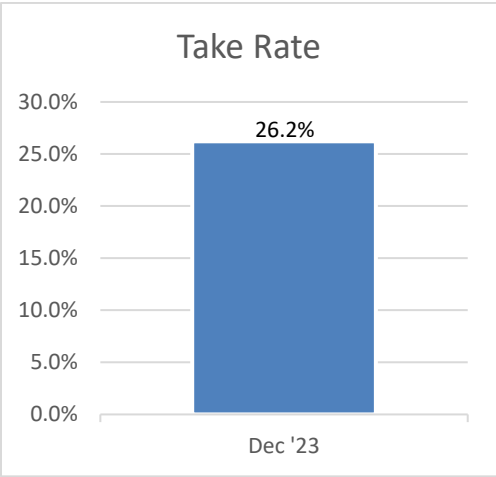
(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)



(This is the number of each customer on our different service plans as of 1/31/2024.)

Quarterly 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)				
• 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	
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	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
Governance (p.39)				
• 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. (11/2023)
• 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	ARPA funds managed through the budget process.
• 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	Working on this; do to positive financial situation, anticipating being able to repay faster than expected.
• 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

