



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

August 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

After a personal medical situation, our candidate for Sr. Network Engineer backed out a few days before starting with Concord Broadband. We are fortunate to have such a strong Sr. Network Engineer working for us, but we will regroup and get the job posted soon.

Teams did a great job with new installs this month. We were able to get 16 new customers active with Concord Broadband!

IP Link Meters

Dale Hartling, our Broadband Manager, has gone through extraordinary lengths to get the IP Link meters up and running. We now have the virtual gateway server up and running and tested. We are making sure that the ONTs that provide connectivity to the virtual gateways are communicating using the same protocols as the meters are.

Network Migration

We are excited to announce the successful completion of our major network migration project. This significant undertaking involved the migration of our Town data network infrastructure across six primary sites, resulting in a more efficient, resilient, and high-performance network.

Our previous network infrastructure had limitations that hindered our ability to support the growing demands of our organization. We sought to address these challenges by implementing a new network design that would deliver significantly faster network speeds, ranging from 5 to 20 times faster than our previous system as well as enhance network reliability and redundancy to minimize downtime and disruptions.

The migration project was a complex endeavor that required careful planning and execution. Our dedicated team of six IT and Broadband staff members, led by our Senior Network Engineer, worked tirelessly to ensure a smooth transition. The process involved moving cables, modifying firewall rules, and extensive testing and response at the 17 network locations throughout town. With so many 24x7 operations, minimizing downtime was a high priority.

Upcoming Maintenance

We have identified some fibers that pulled out of a splice case at Conant and Laws Brook. We are working with a vendor to make plans to replace the whole case, which could result in a multi-shift operation to complete.

We will post more information about this and other maintenance windows here:

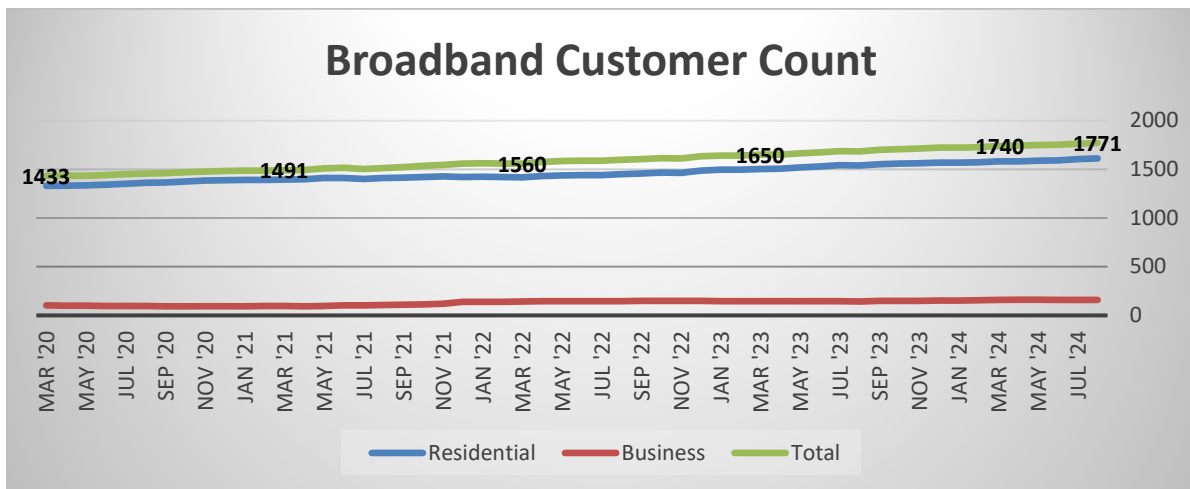
<https://concordma.gov/3144/Broadband-Maintenance>

The successful completion of the network migration has yielded remarkable results. Our employees and users are now experiencing significantly faster network speeds, enabling more efficient workflows and improved productivity. The new network design incorporates redundant components and advanced fault tolerance mechanisms, ensuring minimal downtime and business continuity. And the scalable architecture of the new network will accommodate our organization’s growth and evolving needs for years to come.

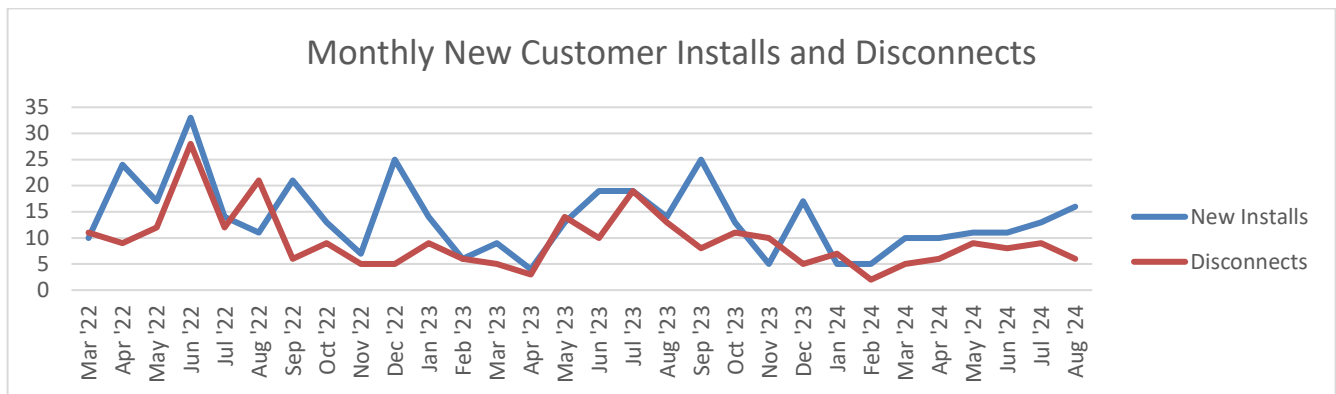
We would like to extend our sincere gratitude to the team of six staff members who played a pivotal role in the success of this project. Their expertise, dedication, and hard work were instrumental in delivering a network that will serve our organization well for many years to come.

The successful network migration marks a significant milestone for our organization. We are excited to embrace the opportunities and benefits that this new infrastructure will bring. As we continue to grow and evolve, our network will remain a cornerstone of our success.

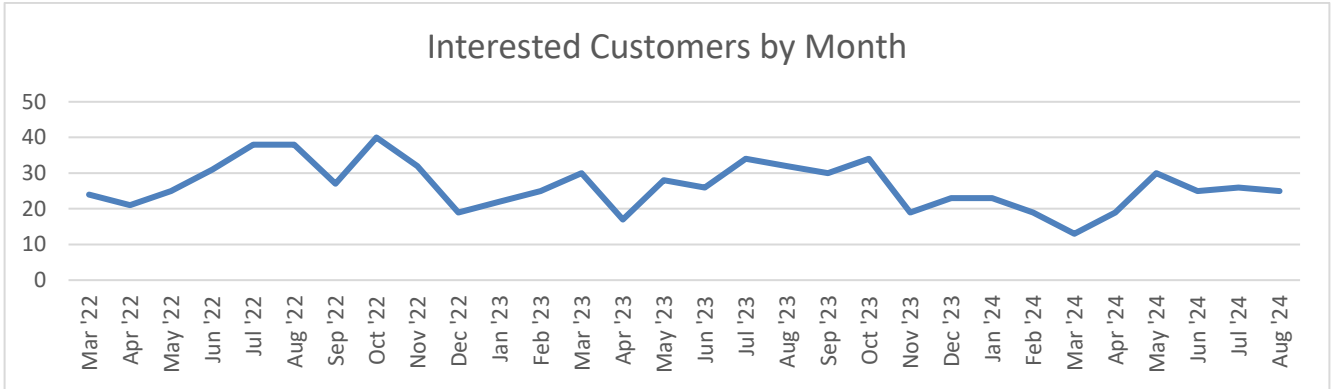
Monthly Metrics and Business Data



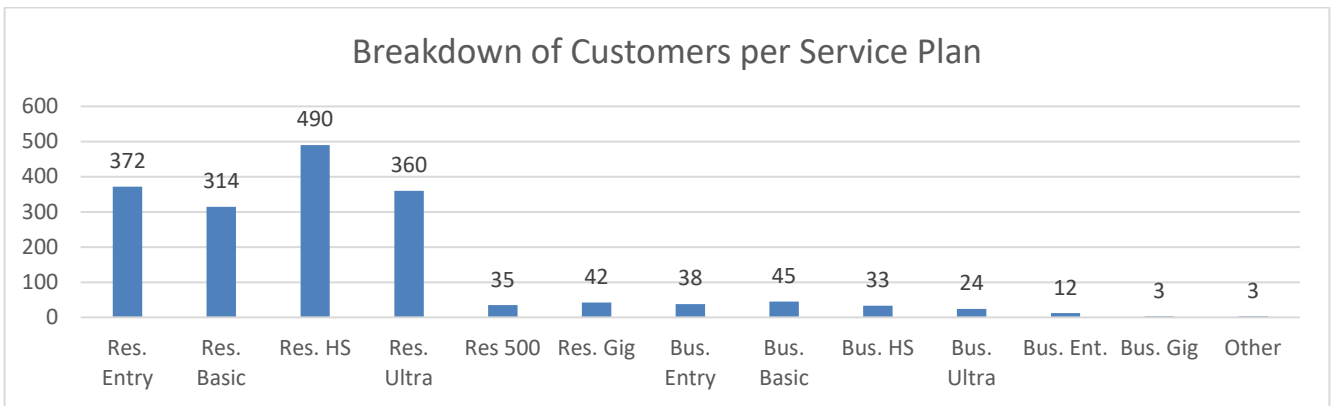
(Customer count: March 2020 – August 2024)



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

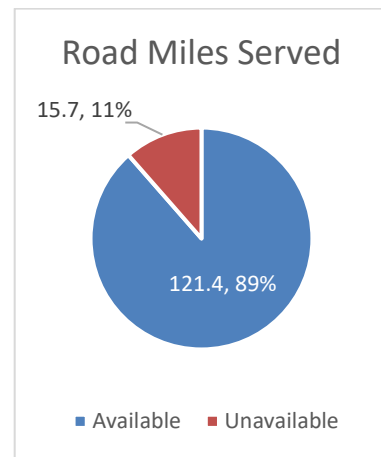
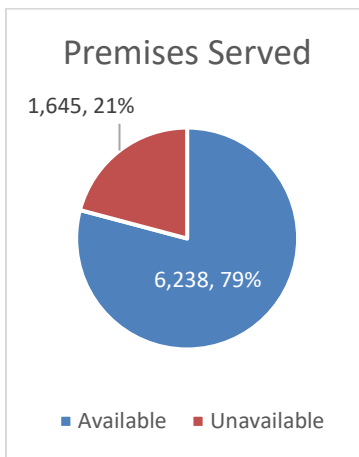
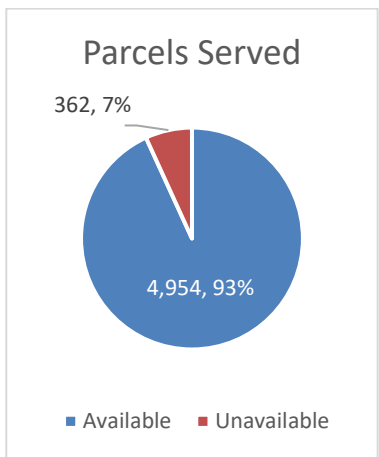


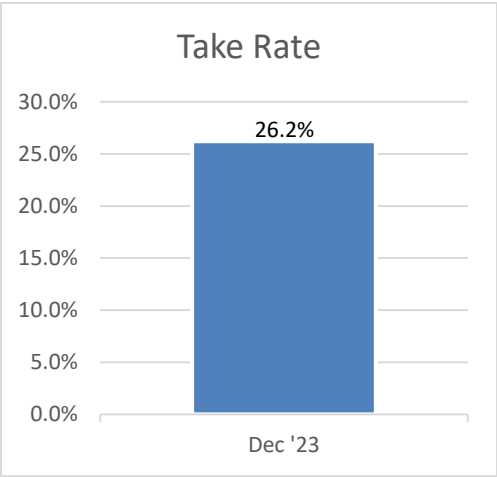
(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)



(This is the number of each customer on our different service plans as of 8/31/2024.)

Other Metrics





(As of 12/1/2023)

Appendix

Fiber Broadband Completion Task Force's Draft Report Goals

Goal	Type	Priority	Responsible Party	Additional Info.
Policies (p.39)				
• Universal Access	Policy	Highest	Select Board/Town Meeting	
• Expansion outside current territory	Policy	Low	Select Board/Town Meeting	Conversations happening
• Support Economic Vitality, Sustainability, Equity & Inclusion	Policy	High	Select Board/Light Board/TM Economic Development	Rate subsidy planned
• Affordable Housing	Policy	Medium	Select Board/Housing Groups	Rate subsidy planned; working on Concord Housing Authority properties
• 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	Working on this
• Rate of return policy	Policy	High	Light Board/Town Staff	Working on this
• Financial goals with regular reporting	Policy	High	Light Board/FinCom	Working on this
• Retained earnings and reserve policy	Policy	High	Light Board/FinCom	Working on this

Goal	Type	Priority	Responsible Party	Additional Info.
Strategic Planning Goals (p.43)				
• Marketing and growth	Metric	High	Light Board/Town Staff	Working on this
• 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	Working on this
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	Working on this
• Integrate Fiber construction with the Roads Program – focus on Streets without fiber that already have underground electric	Planning	High	Town Staff	Working on this