



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

December 2022 – 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 will be inviting the new Broadband Manager Dale Hartling to the December Light Board meeting. We are thrilled to have Dale on the team and grateful for what he's already accomplished.

We recently had a candidate accept the Network Engineer position only to back out during the pre-screening. The candidate had previously operated a higher level and indicated they found something closer to what they had been looking for.

We had a Telecom Technician departure in early November, and we have begun the recruitment process to fill that position. We have received about 9 applications for the position, and interviews are being scheduled with qualified applicants.

Concord Broadband is beginning to shift to planning winter operations, which includes running and splicing fiber, performing inventory work, planning future network expansion, and improving customer experience during the sign-up and installation period for new customers.

Data Cleanup

Concord Broadband relies on data to do business, but the setup and architecture of the software in use creates complexity and the need for accuracy. For example, the system that provides for customer billing and the system that sets customers' speeds are not the same software. And while there is an integration between the two that ensures people get the speeds they are being billed for, this integration can break any time either vendor updates their software.

Over the last 6 months, Concord Broadband staff have made a concerted effort to cleanup the data we keep, reinvigorate attempts to improve the communication between software, and find ways to automate previously manual processes. Here is a short list of the initiatives we have undertaken.

Master Address Table

The Master Address Table is a database of addresses and parcels maintained by the Assessor's office for the purpose of

2023 Budget

At the first meeting in December, the Light Board received a presentation of the Light Plant's budget, which included Broadband's budget as well. Of note, we hope to be fully staffed in 2023, and we are planning on replacing our oldest vehicle (a van that lacks a bucket) with a bucket truck that can also tow a cable reel, which will help when pulling fiber.

We want to thank the financial team at CMLP for their advice and counsel throughout this process. It was a strong collaboration, and we could not have completed the budget without their help.

tracking real estate in Concord. It is considered the system of record for addresses in Town, and as such, several software systems rely on it for the source of valid addresses. It also gets checked yearly against the state’s known table of locations for continued accuracy. Concord Broadband’s billing software validates addresses against the Master Address Table, but the software used to manage customer equipment does not have that ability. This means that attempts to compare data often end up being incomplete due to the number of mismatches. We have undertaken a systemic effort to clean up all addresses that do not match a valid address, and this allows us to more quickly create reports pivotal for operations.

Service Mismatches

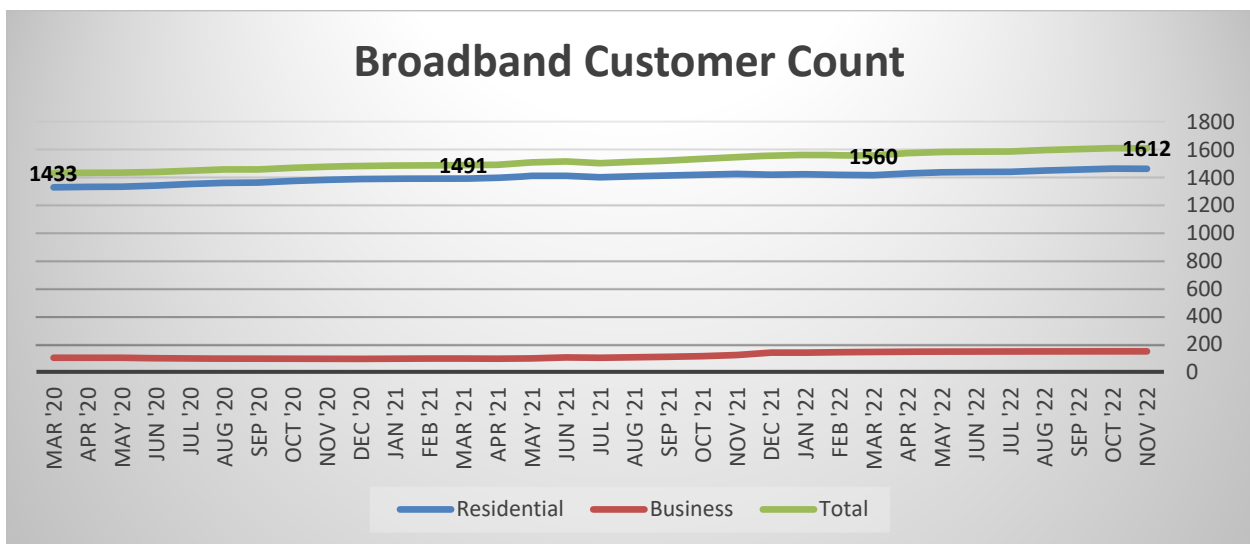
If everything is operating smoothly, a new customer can be pre-provisioned in our billing software and automatically be created in our technical management system. But the vendors who develop this software constantly make changes that occasionally break this connection. This results in errors that need to be corrected if left for too long.

Concord Broadband staff have taken steps to ensure that the two systems match and that the link between the two systems is operating as expected. This ensures accurate billing and customer speeds.

Documentation

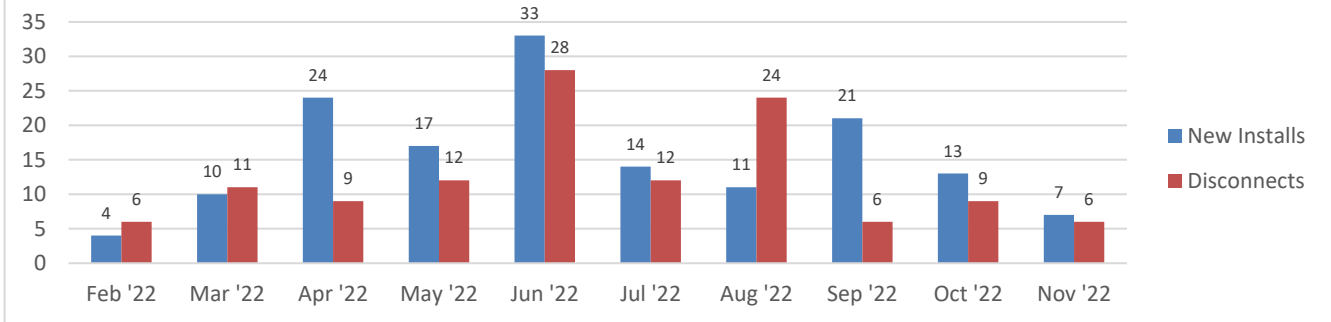
Every portion of the Concord Broadband network is thoroughly documented. But the moment a change is made, the documentation is out of date. This documentation is critical when we have new hires, engage consultants for work, need support due to a problem, or would like to work on improvements in the design. We have taken steps to ensure that all inventories and diagrams are up-to-date and reflect the current environment.

Monthly Metrics and Business Data



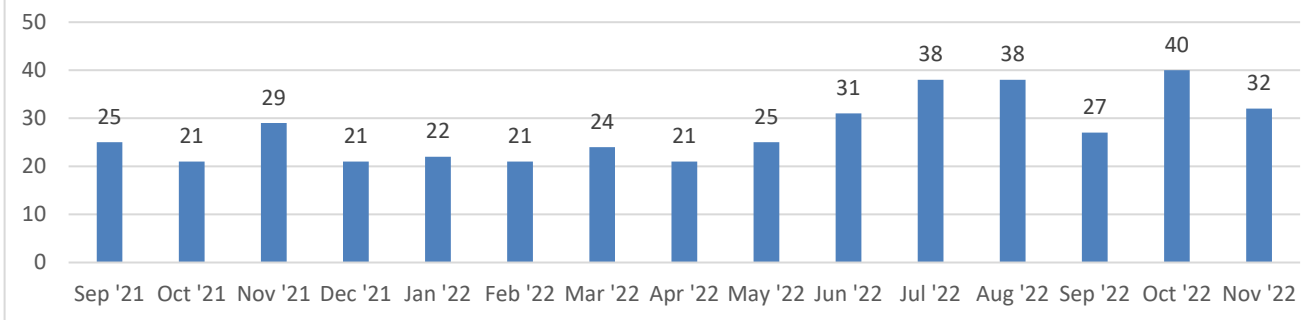
(Customer count: March 2020 – November 2022)

Monthly New Customer Installs and Disconnects



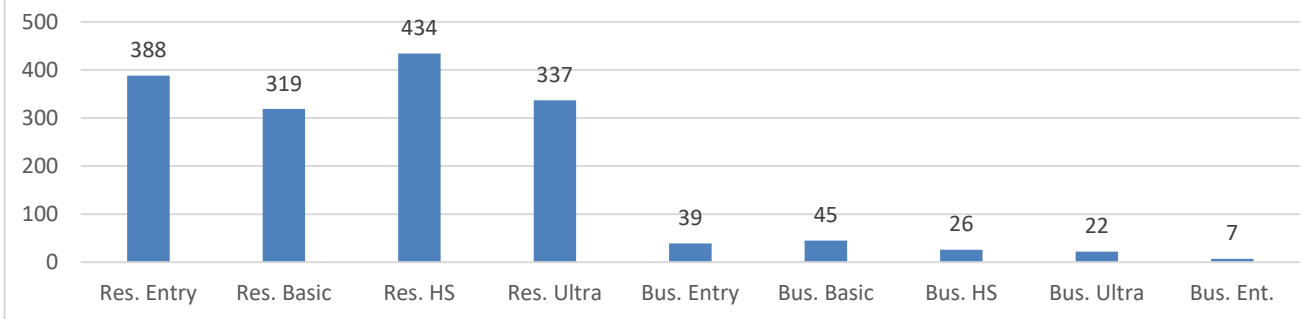
(The number of new installations and disconnects completed each month)

Interested Customers by Month



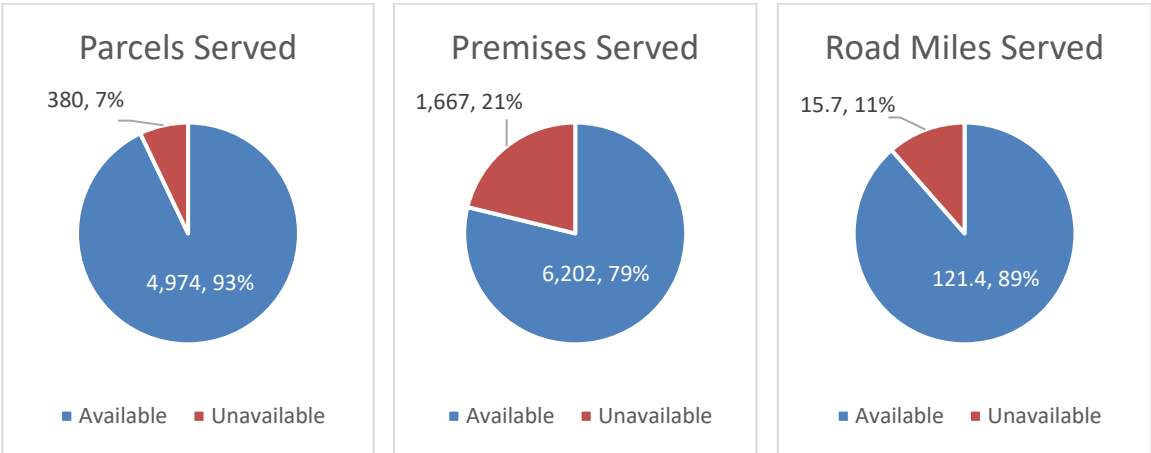
(This is the number of individuals who complete the Concord Broadband interest form on the Concord website, whether they are in the current service area or not.)

Breakdown of Customers per Service Plan



(This is the number of each customer on our different service plans as of 11/30/2022.)

Quarterly Metrics



(As of 9/30/2022)

Rate/Speed Adjustments

In November, the Light Board unanimously approved a recommended change to the speeds and tiers we offer. Many customers will be getting an increase in speed with no additional cost, which is great. Further, we now have two faster residential speeds and one faster business speed available. Not all speeds may immediately be available to all customers, so please call our customer service team (978-318-3101) or submit an inquiry on our website. You can also request a speed increase by sending an email to broadband@concordma.gov. Please include your address in the request.

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
• Affordable Housing	Policy	Medium	Select Board/Housing Groups	Rate subsidies in progress
• 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
• Churn	Metric	High	Town Staff/Light Board	Working on this
• 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	
• 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	Working on this; preliminary discussion at the FAAC meeting
• 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
• Quantifying cost of expansion	Planning	Medium	Town Staff	
• 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