



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

June 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

Our recruitment for a Telecom Director has stalled, and we went back to the drawing board on the position. After much discussion and deliberation, we decided to update the title of the role to “Broadband Manager” to better reflect the role of the position and hopefully attract a pool of candidates with more a broadband background and less of a telephone background. Even though the job description clearly outlines the broadband responsibilities inherent in the position, many qualified people do not even review it due to the title. And other times we have people who have extensive telephone management experience, and they apply merely because the title includes “Telecommunication” in it. The position with the updated title was just posted, and the title change is pending a Personnel Board vote at a meeting yet to be scheduled.

We have implemented a new appointment booking feature that is initiated immediately after a potential customer fills out an interest form on the website. This has been hugely successful, with over 95% of people submitting going on to create a booking for a walk-through by a Broadband technician. Historically this initial visit took a while to book because of phone-tag, and people didn’t always know how to reschedule or cancel their appointments. Now potential customers can do all that themselves, and best yet, this system integrates with our technicians’ calendars and automatically updates as their schedules fill up. This software is a part of the Microsoft 365 platform and came at no additional cost to the division.

Our third-party partner pulled additional fiber for Concord Broadband in June, conducting over a dozen pulls in technically difficult areas, some of which required police details. We are preparing another portfolio of customers who require this make-ready work, and we expect them to continue this work for the foreseeable future.

Network Services

Upgrades and Updates

As mentioned in the “Maintenance” inset, Concord Broadband has two new dedicated IP addressing servers running at our primary substation, and we will be cutting over to them in the month of July. This will remove reliance on the Town’s server and storage infrastructure and simplify the access path for customer equipment.

One of Concord Broadband’s ISPs has been engaged to double its speed and provide an additional second link for redundancy

Maintenance

Concord Broadband has significant maintenance planned for July 18-19 (overnight). If you visit <https://concordma.gov/broadband> and click “Broadband Maintenance” on the site, you can read more about the work being done.

Postcards have been mailed to the 55 locations that will be directly impacted by the fiber splicing, and we do not anticipate any impact on other broadband customers for this work.

We are also moving IP addressing services to a new server at a new location. Read more below!

(at no cost increase over our previous contract), but we are struggling to find adequate fibers due to the number that were destroyed at LCC 20 (Laws Brook Road) in December. See “Special Projects” below for more information on that.

We continue to plan for equipment replacement at our primary data center (the substation on Main Street). Recently, we have found a way to ensure we have redundant, enterprise-grade equipment at a significantly lower cost than our initial projections. The estimated cost is now under \$65,000 for the equipment (with a useful life of 5-7 years) compared with initial quotes coming in over \$100,000. We continue to work with vendors to get the most competitive quote possible.

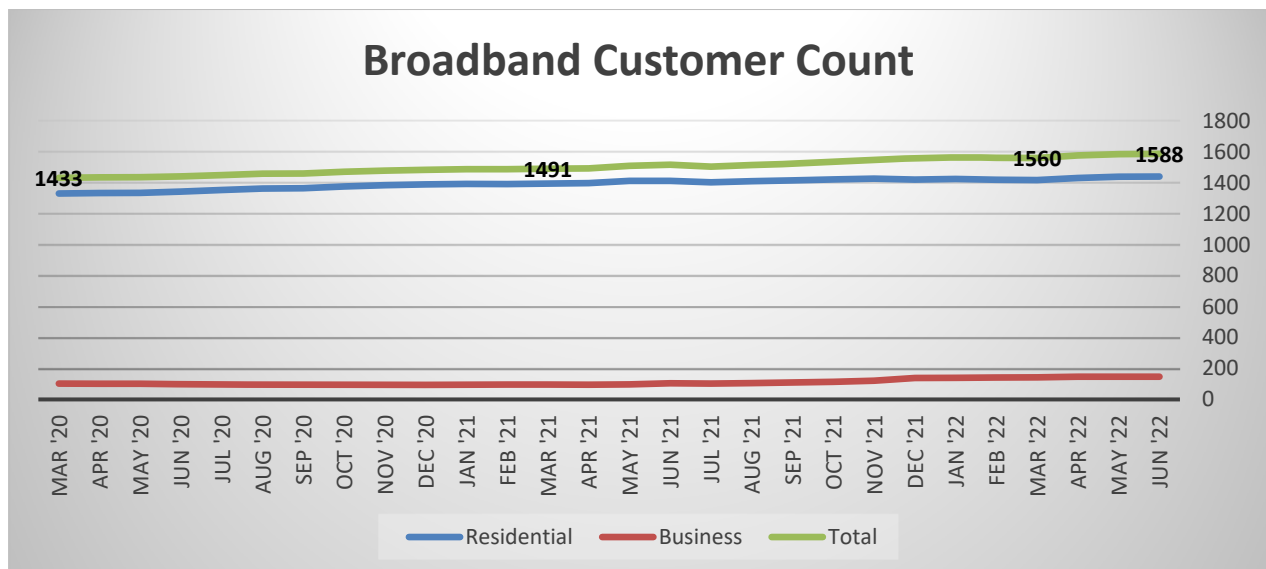
Special Projects

On December 24, 2022, a rodent chewed through several thick feeder fibers at an LCC on Laws Brook Road. We made emergency splice repairs to the fibers in use, but many dozens of unused fibers were left as is. The plan was always to return in the spring/summer to cut out and repair the damaged section of fibers.

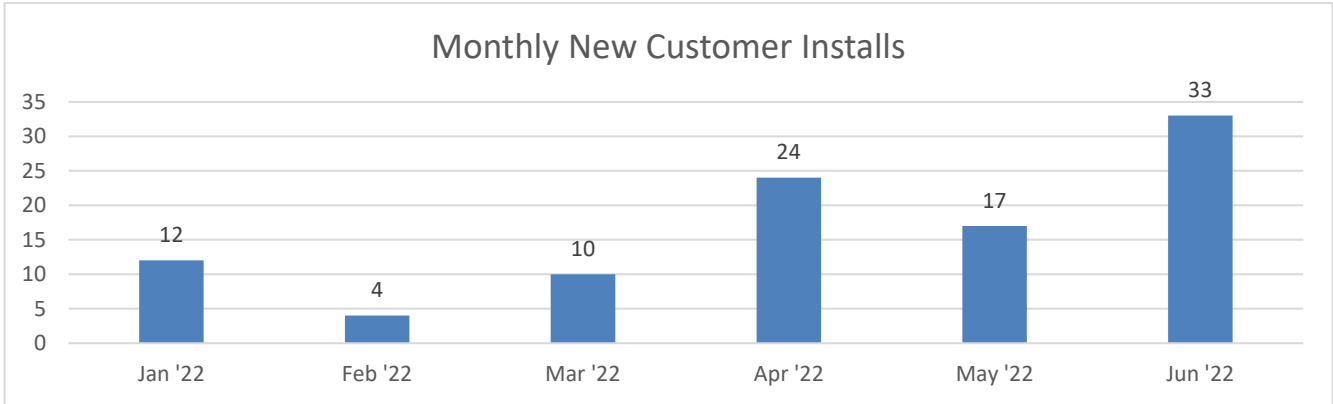
We have engaged a third-party provider to conduct this work so we can have a large team on-site to minimize customer down time. We scheduled the work for Monday and Tuesday, July 18-19, with splicing starting after 8pm each night and stopping before 6am.

The team has researched this extensively and notified the 55 down-stream customers who will be most impacted. We will be following our notification protocol toward the end of the week to notify all customers of a service window that may impact service.

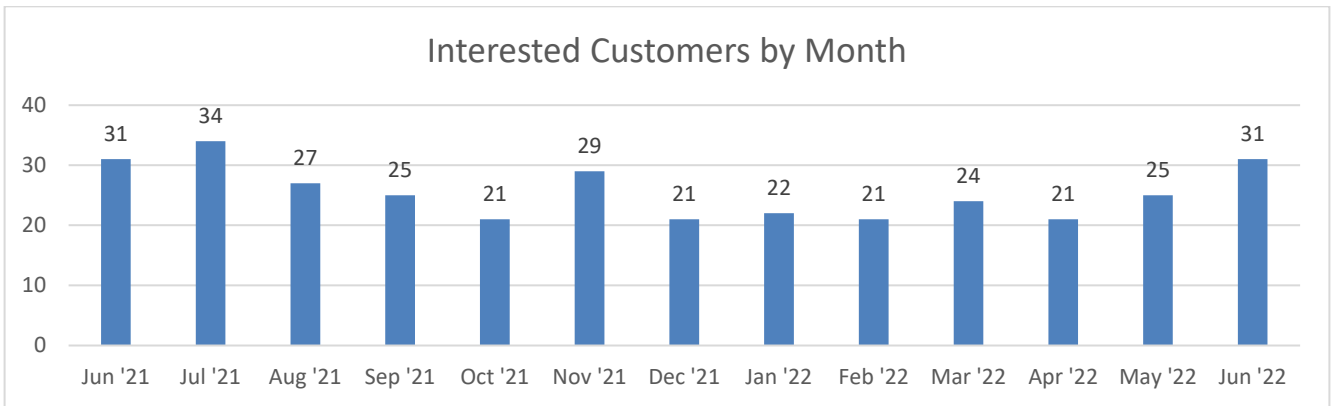
Metrics and Business Data



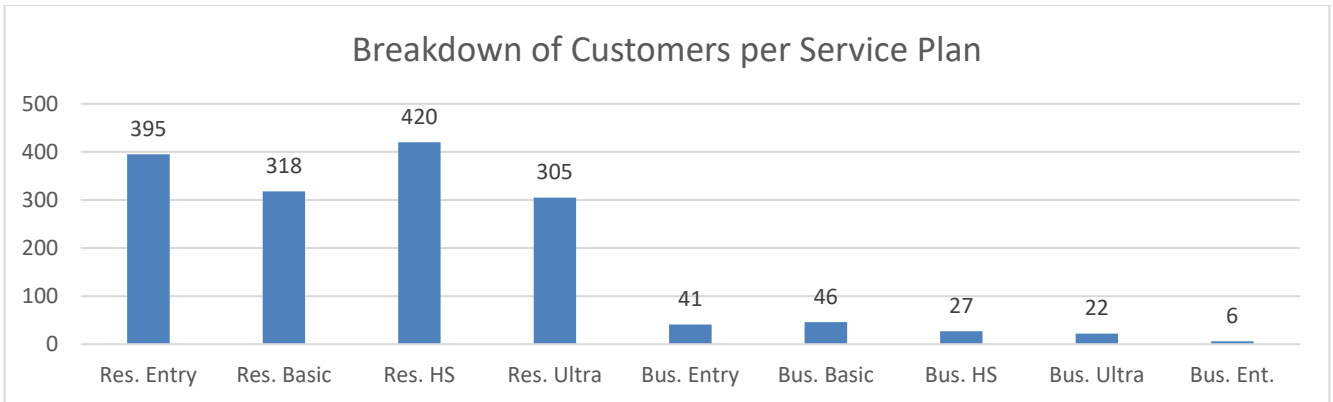
(Expanded look-back of customer count)



(The number of new installations completed)



(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.)



(This is the number of each customer on our different service plans.)

Statement of Revenues and Expenses - Broadband
3 Year Comparison, As of

	March 31, 2022	March 31, 2021	March 31, 2020
OPERATING REVENUE			
Base Revenues	369,220.11	344,144.93	317,523.25
Other Revenues	3,243.90	3,980.00	7,404.62
Total OPERATING REVENUES	372,464.01	348,124.93	324,927.87
Total REVENUES	372,464.01	348,124.93	324,927.87
OPERATING EXPENSES			
Purchased Power	54,283.17	48,987.21	45,939.93
General Operating Expenses	247,922.83	177,280.48	122,859.83
Depreciation	19,288.58	18,306.50	17,586.62
Customer Accounts	4,655.93	6,456.16	5,650.06
Distribution	42,450.75	27,014.11	48,718.22
Total OPERATING EXPENSES	368,601.26	278,044.46	240,754.66
OTHER INCOME AND EXPENSE			
Interest Income	-	-	-
Interest Expense	(5,000.01)	(4,662.50)	(5,916.33)
Intergovernmental Obligations	(4,658.49)	-	-
Loss (Gain) on Investments/Disposal of Fixed Assets	(143.83)	(248.98)	-
Other	2,253.66	3,389.79	3,529.72
Total OTHER INCOME AND EXPENSE	(7,548.67)	(1,521.69)	(2,386.61)
TOTAL EXPENSE	376,149.93	279,566.15	243,141.27
NET (INCOME) LOSS	(3,685.92)	68,558.78	81,786.60

Marketing

We have begun an analysis of the service plans offered by Concord Broadband to ensure that the tiers, speeds, and costs are competitive and in line with what other ISPs can provide. We generally receive feedback that people would pay more if faster speeds were offered, and since we do have additional bandwidth available, we will likely seek to offer additional tiers at faster speeds where feasible.

Concord Broadband staff met this month to discuss the additional types of metrics we wanted to capture and how best to do that. We are focusing on the following in the near-term:

- Churn: This metric tells us what percentage of customers we lose in a given time period. Churn can be separated into two categories: customers who leave their residence/business and customers who choose an alternative service for any number of reasons (speed offering, price, bad experience, etc.)

We have begun working with our billing software vendor to create these two buckets of churn so we can better track this moving forward. There is nothing we can do about the people who move to another location outside of our service area, but it's very important, from a business point of view, to track the percentage of people who leave because they choose an alternative service offering.

- Service Plans: This metric shows how many customers are on each service plan offered by Concord Broadband. This provides a useful metric to gauge future marketing campaigns to encourage people to adopt faster service plans.
- Take Rate: There are three types of service locations in Concord: those where fiber broadband is currently unavailable, those where fiber broadband is currently available with no barriers to access, and those where fiber broadband is currently available but where some barriers to access exist. It is important to distinguish between these since you expect a much lower take rate for this third group, and it's important to track them separately while we work on eliminating those barriers (which often is customer-provided conduit from the service location to the nearest point of entry).
- Geographical metrics like Road miles served, parcels served, and premises served.

Fiber Broadband Completion Task Force Report

We have assembled a chart in the appendix to provide a summary of these recommendations and will highlight them at monthly Light Board meetings when relevant.

This month, our staff have been working on the metrics and have the following proposed intervals:

Metric	Interval
Class of service: which type/tier/speed people have	Monthly
Completely new installs (never had service before)	Monthly
Installations	Monthly
Net change in customers	Monthly

Subscribers	Monthly
Take Rate	Monthly
Total active customers	Monthly
Interest form submissions	Monthly
Churn	Quarterly
Parcels served	Quarterly
Premises served	Quarterly
Profit/Loss	Quarterly
Progress against completion	Quarterly
Road miles served	Quarterly

Those in **bold** are contained in this month’s update. More coming soon! We will provide some monthly data in charts, but quarterly data will also include all metrics in a table format.

Future Projects and Things to Note

- We are working with CMLP finance and Town finance staff to come up with a detailed accounting of broadband services provided to the Town to ensure that Broadband is adequately compensated for the services it receives.
- We are preparing to reissue the RPF for Helpdesk services for Concord Broadband. We will keep the public and Light Board informed about the progress of that.
- We love data at Concord Broadband! Unfortunately, data sometimes gets messy. We’re always looking for ways to improve the data we keep, and this month was no different. We have conducted audits of the various systems we use to manage the technical customer connections and billing/account management systems and have been reconciling that to ensure no discrepancies exist. We have also worked with the Town’s GIS Analyst to ensure that all addresses have a perfect match with the Master Address Table. All this ensures we have a strong foundation when we need to do analysis, look up customers, or perform troubleshooting.

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	
• Affordable Housing	Policy	Medium	Select Board/Housing Groups	
• 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	Working on this
• Premises served	Metric	Medium	Town Staff/Light Board	Working on this
• Road miles served	Metric	Medium	Town Staff/Light Board	Working on this
• Subscribers	Metric	High	Town Staff/Light Board	Working on this
• 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	Working on this
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	
• Review/Confirm Internal Loan Findings	Finance	Highest	Financial Audit Comm/Staff	
• Review and Rescind PILOF to MMN	Finance	High	Select Board/Town Manager	
Capital Planning Process (p.42)				
• Review/Revise Debt financing schedule	Policy	Highest	Light Board/Town Staff	
• 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	
• 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	