



TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

November 2025 – 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 many, many months of work on this, the changes to the Master Address Table and new Broadband Availability form are live and available to customers. It will continue to be refined in coming months.
- Work continues on the roll-out of XGS-PON. The team will be presenting options to the Board at the December 2025 meeting for pricing and tiers, with changes only happening for equipment costs and business customers. The new equipment is working and has been tested with ONTs on each PON port. Some minor issues are being investigated ahead of any migration of customers.
- The after-action report for the Denial-of-Service attack was published on the website.
- New routers will be utilized in the near future. Stay tuned for a short maintenance window during which we will make them the primary routers used by Concord Broadband.
- The Network team is working to migrate customers with static IP address on our TPX subnets.
- More work has been done at the Peabody school to extend network access for any Town departments working there.

Preparing for Our Next Leap: The XGS-PON Upgrade

We are thrilled to announce that in early 2026, we will be performing a major technological upgrade across our network to a cutting-edge standard called **XGS-PON** (10-Gigabit Symmetrical Passive Optical Network). This is a monumental step that ensures our municipal network remains future-proof and will enable us to offer residential speeds exceeding the current 1Gbps benchmark.

What is XGS-PON?

XGS-PON is the successor to our current fiber technology (often called GPON). The “XG” stands for 10 Gigabit, and the “S” stands for Symmetrical. This is the game-changer:

Upcoming Maintenance

There will be additional maintenance windows as we look to install the next generation of XGS-PON equipment. This will be advertised to all customers if it is expected to be customer-impacting work.

Learn more on our maintenance page here:

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

- **Symmetrical Speed:** Unlike many older systems where the upload speed is only a fraction of the download speed, XGS-PON offers the same blazing-fast speeds in both directions—up to 10Gbps maximum capacity on the network, which will translate into exciting new multi-gig speed tiers for residents.
- **Massive Capacity:** Think of your current fiber connection as a two-lane highway. XGS-PON is like expanding that to an eight-lane superhighway. This dramatic increase in capacity means your entire neighborhood can use the internet simultaneously for high-demand activities without congestion.

What Does This Mean for You?

While the initial phase of the upgrade is to our core network equipment (called the OLTs), the benefits you will experience are significant:

- **Future-Proof Performance:** You will soon be able to subscribe to speed tiers far exceeding 1Gbps, ensuring you are ready for tomorrow’s emerging technologies, like 8K video, advanced Virtual Reality (VR), and massive cloud storage.
- **Faster Uploads for Home Use:** The symmetrical speed will revolutionize activities like:
 - Remote Work: Uploading massive project files and conducting crystal-clear, high-resolution video calls without freezing.
 - Content Creation: Blazing-fast uploads of 4K or 8K videos to YouTube and other platforms.
 - Cloud Backups: Backing up your entire computer to the cloud in minutes, not hours.

We anticipate this project being fully completed and new multi-gig speeds available to residents starting in early 2026. As we approach the rollout date, we will provide specific information on what equipment upgrades (if any) will be needed at your home to take advantage of these exciting new speeds.

Tips to Get the Most Out of Your Broadband Service

With the speed and capacity of fiber broadband, you have the digital power to do almost anything online. But with great power comes the need for great security! A fast connection doesn’t change the basic rules of internet safety. Taking a few proactive steps can greatly reduce your risk of falling victim to malware, phishing, and data theft.

The Foundation of Online Security

- **Use Strong and Unique Passwords:** The easiest way a hacker can gain access is through a weak or reused password. Use a password manager to create and store complex, unique passwords for every account. Consider using a Passkey if an application offers it—it’s the modern, phishing-resistant standard.

- **Enable Two-Factor Authentication (2FA):** This simple step requires a second verification code (usually sent to your phone) in addition to your password. It’s the single most effective way to protect your email, banking, and social media accounts. If 2FA is an option, use it.
- **Keep Your Software Updated:** Software updates often include critical security patches that protect your devices from known vulnerabilities. Set your devices, operating system, and apps to update automatically whenever possible.

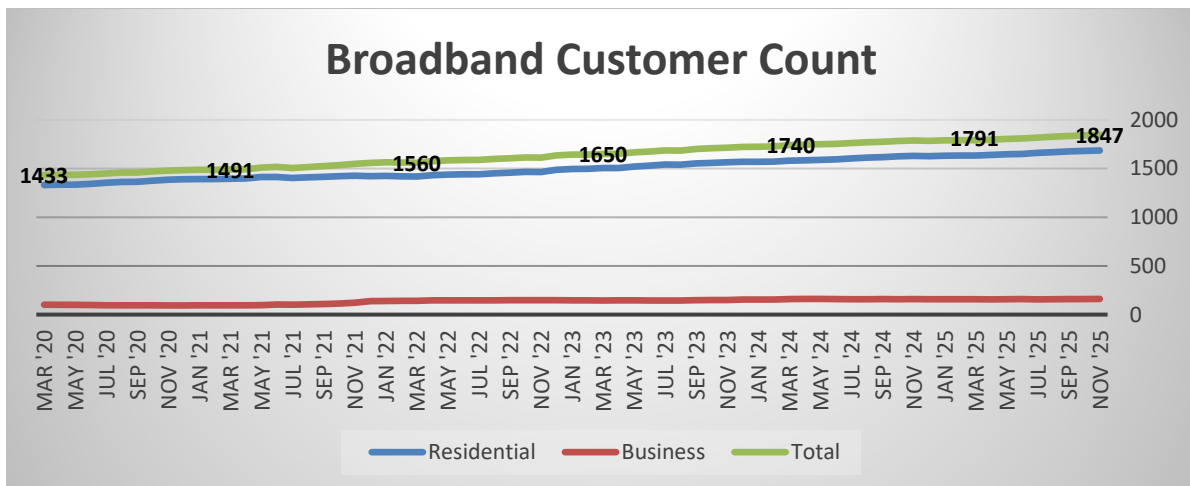
Recognizing and Avoiding Scams

Phishing scams are the most common online threat. They often use urgency, fear, or a sense of excitement to trick you into clicking a malicious link or giving up personal information.

- **Verify Before You Click:** Be suspicious of unexpected emails or texts, especially those requesting sensitive data, asking you to click an urgent link, or containing attachments from unknown senders. Always look closely at the sender’s email address—scammers often use slight misspellings to trick you.
- **Secure Browsing:** Only enter sensitive information (like credit card numbers) on websites that use HTTPS (look for the small padlock icon in your browser’s address bar).

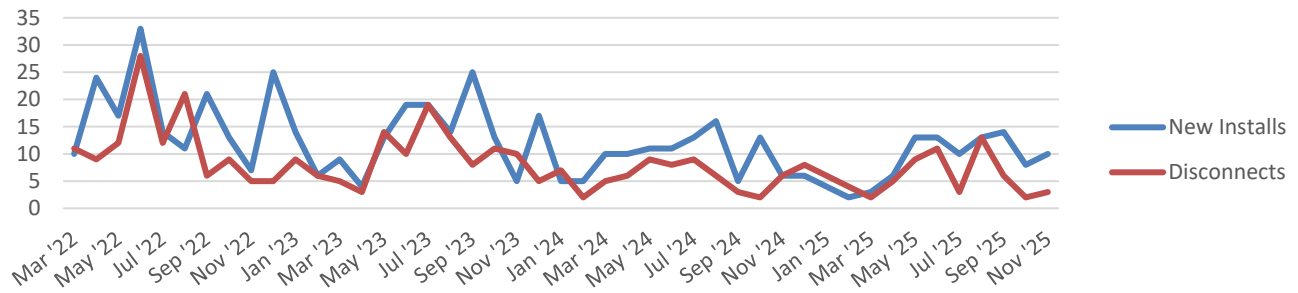
Your Concord Broadband fiber connection provides a secure foundation, but securing your digital life is a partnership. By following these essential security habits, you ensure a safe and productive experience for everyone in your household.

Monthly Metrics and Business Data



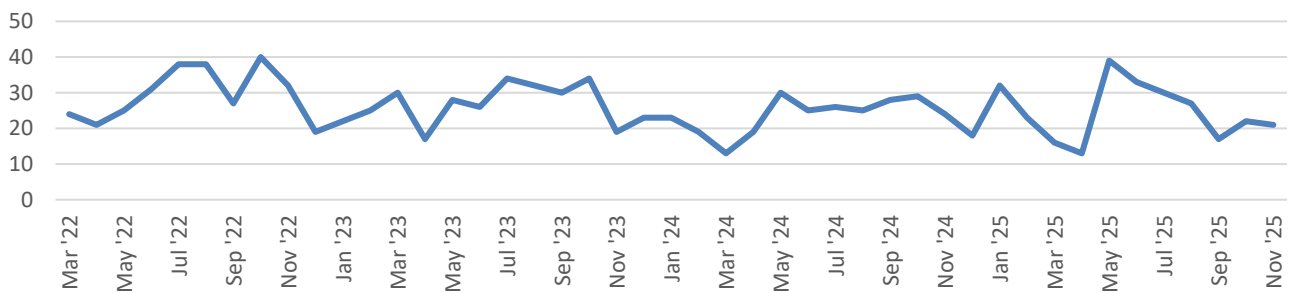
(Customer count: March 2020 – Present)

Monthly New Customer Installs and Disconnects



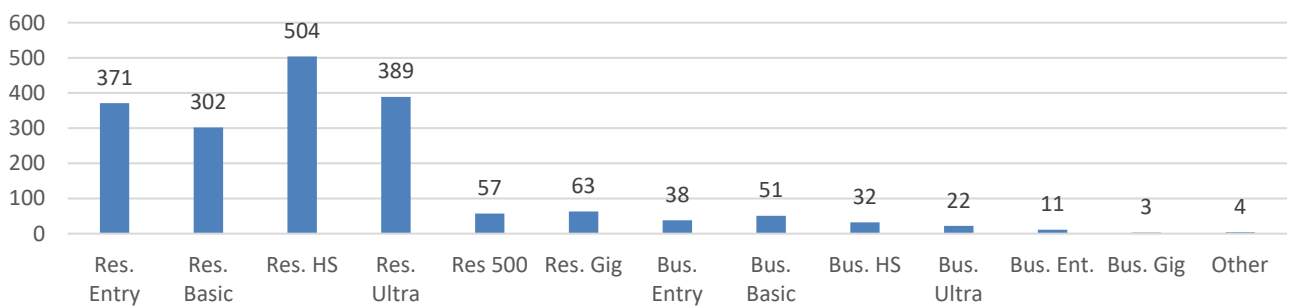
(The number of new installations and disconnects completed each month.)

Interested Customers by Month



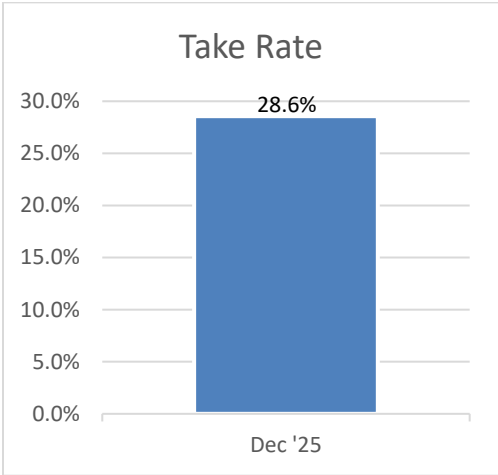
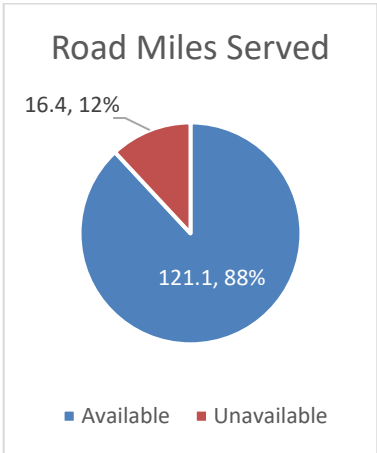
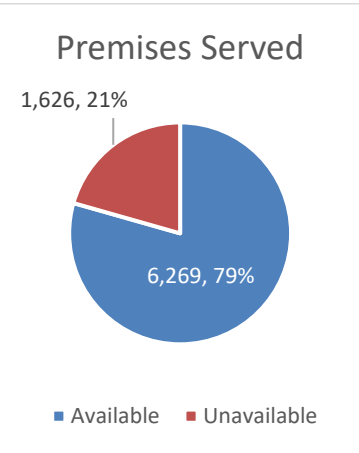
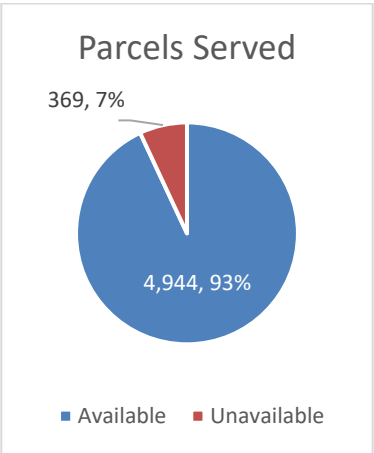
(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)

Breakdown of Customers per Service Plan



(This is the number of each customer on our different service plans as of 11/30/2025.)

Other Metrics



(As of 2/15/2025)

Appendix

Fiber Broadband Completion Task Force's 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