

1. Introduction

The ACLP at New York Law School is a nationally recognized research program with significant experience examining the myriad legal, regulatory, and public policy issues impacting broadband deployment and adoption across the country.¹ The ACLP appreciates the opportunity to offer comments in this proceeding and commends the Department of Public Utilities and the Department of Telecommunications and Cable (“the Departments”) for initiating this long overdue rulemaking.

As the Departments correctly recognize, access to utility poles continues to play a central role in supporting broadband expansion and facilitating market entry by competitors.² Given the critical nature of pole access to timely and cost-effective broadband deployment, the Departments are right to focus on crafting rules that will provide “greater certainty and guidance on just and reasonable terms and conditions of access to utility poles throughout the Commonwealth.”³ Unfortunately, as currently drafted, the proposed rules come up well short of that goal.

The ACLP appreciates the fine line the Departments must navigate in their pursuit of pole attachment rules that, pursuant to federal law, must consider the interests of ISPs and electric utilities and their respective customer bases.⁴ Respectfully, the proposed rules tilt too far towards appeasing the interests of electric utilities and fail to adequately account for the likely harms that the rules would have on broadband ISPs and their customers.

Put simply, the proposed rules put forward by the Departments would likely have net-negative impacts on broadband deployment in Massachusetts. If adopted, the rules would:

- *Reduce certainty for ISPs:* the rules differ sharply from neighboring reverse-preemption states and from the framework established by the Federal Communications Commission (“FCC”) currently binding on 27 states across the country. Better aligning Massachusetts’ rules with the rules in these other states is critical because most broadband subscribers in the state are served

¹ For more information on the program, please visit www.nyls.edu/aclp. For a repository of all recent ACLP analyses, please visit www.broadbandexpanded.com.

² See, e.g., Joint Investigation by the Department of Public Utilities and the Department of Telecommunications and Cable on their own motion instituting a rulemaking pursuant to G.L. c. 30A, § 2, 220 CMR 2.00, and 207 CMR 2.00, to amend 220 CMR 45.00: Pole Attachment, Duct, Conduit, and Right-of-Way Complaint and Enforcement Procedures, *Order Instituting Joint Rulemaking and Further Inquiry on Memorandum of Agreement*, at p. 11, D.P.U. 26-10/D.T.C. 26-1 (March 6, 2026), <https://www.mass.gov/doc/dpu-26-10dtc-26-1-order-instituting-joint-rulemaking-and-further-inquiry-on-memorandum-of-agreement/download> (“Order”).

³ Id. at p. 10.

⁴ 47 U.S.C. §224(c)(2)(B).

by ISPs that operate in multiple states. The benefits of such certainty and consistency would also extend to many of the largest pole owners in Massachusetts given their ownership of poles in neighboring states.

- *Disincentivize ISP investment:* creating byzantine and lengthy processes for accessing and attaching equipment to utility poles may make ISPs think twice about investments in the state. Indeed, when presented with starkly different regulatory landscapes, ISPs will likely choose to prioritize investments in states with more streamlined and balanced pole rules, increasing the likelihood that broadband customers in Massachusetts might be deprived of timely upgrades to their service offerings.
- *Undermine competition:* consumers across the state enjoy a variety of choices for high-speed internet access, many of which rely on efficient pole access to support cost-effective and timely deployment. Introducing unnecessary complexity and long timelines could blunt these gains.
- *Delay broadband expansion:* emerging broadband expansion projects underwritten by federal grant funds, including those stemming from the Broadband Equity, Access, and Deployment (“BEAD”) program, may be delayed due to ISPs having to navigate rules that are substantially different and more burdensome than other states.

In short, the utility-centric nature of the proposed rules is evident in the substantial deference by the Departments to the sluggish nature of the utility sector, which is slow to change and uncompetitive by design. The Departments pay little more than lip-service to the dynamic nature of the broadband space and instead seem willing to decelerate the velocity of innovation there to align with the much slower pace at which electric utilities move. This is not only unfair to broadband customers, who may see higher prices and fewer choices as a result, but also to the state, which might see investments go to neighboring states with more streamlined pole attachment rules.

To rectify these fundamental shortcomings, the following comments urge the Departments to align their rules with those developed by the FCC. These rules have been updated many times over the last few decades to reflect the evolving interests of both ISP and private electric utilities. Reverse-preemption states in the region and across the country have aligned their otherwise bespoke pole rules to reflect those developed by the FCC to provide ISPs and utilities with greater certainty and robust processes to settle disputes quickly and cost effectively. We respectfully urge the Departments to do the same.

2. The Need for Balance: The Departments Should Not Adopt Pole Rules That Will Undermine the Dynamism of the Broadband Sector

Notwithstanding the “patchwork of processes and requirements currently in place across the Commonwealth established by...utility pole owners,” broadband is thriving in Massachusetts.⁵ Not all broadband expansion in the state has relied on poles, but, as in many other parts of the country, utility poles continue to play critical roles in supporting network deployment across every part of Massachusetts.

By every metric, broadband availability in the state is robust and continuing to improve:

- *Availability.* According to the latest FCC data, fixed broadband of at least 100/20 Mbps is available to 99.1% of units in the state.⁶ Indeed, only 3,286 broadband serviceable locations (BSL) remain without service in the state, most of which will be served in the coming years by BEAD-funded projects.⁷
- *Speed.* Nearly 99% of BSLs in the state have access to a gig connection.⁸
- *Competition.* According to the ACLP’s analysis of FCC data, over 95% of units in the state can choose from at least two terrestrial fixed providers (e.g., fiber, cable, fixed wireless) capable of delivering at least 100/20 Mbps service.⁹
- *Pricing.* Broadband prices have barely grown over the last decade. An ACLP analysis of federal Bureau of Labor Statistics data found that, “in real terms (i.e., when considering overall consumer inflation), a home internet connection has become cheaper and makes up a smaller proportion of total household expenditures than it did in the past.”¹⁰

In sum, Massachusetts broadband subscribers benefit immensely from a robustly competitive and innovative marketplace in the state. The forces shaping this market are driven primarily by consumer demand; formal regulation of these advanced services does

⁵ Order at p. 36.

⁶ FCC Broadband Map (data as of June 30, 2025).

⁷ ACLP Analysis of Massachusetts BEAD data (on file).

⁸ See Appendix.

⁹ See Appendix.

¹⁰ Broadband Prices in Context, Broadband Expanded, <https://broadbandexpanded.com/data/pricesincontext>.

not exist, reflecting a decades-long embrace of a light-touch national framework for these offerings.¹¹

By contrast, electric customers in the state pay some of the highest rates in the country for some of the dirtiest power (i.e., power generated from fossil fuels).¹² By some estimates, Massachusetts has the fifth highest electric rates in the country.¹³ And rates keep rising. According to an ACLP analysis of federal EIA data, rates charged by private investor-owned utilities (IOUs) in the state increased 32% between 2014 and 2024, while rates charged by municipal electric utilities increased 25.5% during that same period.¹⁴

To diversify its energy portfolio by introducing renewable sources, the state has adopted an aggressive set of clean energy goals, but the costs involved, most of which will be passed on to ratepayers in the form of higher rates, have caused some officials to begin rethinking those commitments.¹⁵ The Departments note that an increased push towards electrification and greater adoption of clean energy will also require the use of utility poles and broadband generally to support the seamless integration of these resources.¹⁶ It will likely take decades to achieve these goals – the state’s Clean Energy and Climate Plan targets 2050 for achieving core emissions reductions.¹⁷ However, as noted, rising costs and affordability concerns could alter these plans or push timelines even further out.¹⁸

Appreciating the profound differences in these two divergent storylines is critical when evaluating whether the Departments’ proposed pole rules sufficiently consider and balance the interests of broadband customers and utility customers.

¹¹ See, e.g., Michael Santorelli, *State Regulation of Advanced Communications Services: Learning from the Past to Understand the Present and Prepare for the Future*, 24 Colo. Tech. L. J. 15-40 (Feb. 2026), https://ctlj.colorado.edu/wp-content/uploads/2026/02/02_CDT_24_1_text_SANTORELLI.pdf.

¹² See, e.g., U.S. News & World Reports, Best States – Massachusetts, <https://www.usnews.com/news/best-states/massachusetts>.

¹³ See, e.g., Electric Rates (May 2026), EnergyBot, <https://www.energybot.com/electricity-rates/>.

¹⁴ See Appendix.

¹⁵ See, e.g., Sam Drysdale, *Sweeping Energy Bill in House Paused Amid Pushback*, Nov. 17, 2025, The New Bedford Light, <https://newbedfordlight.org/sweeping-energy-bill-in-house-paused-amid-pushback/>; Daela Taeoalii-Tipton, *MA House Boosts Affordable Clean Energy But Leaves More to Be Desired in New Bill*, Feb. 26, 2026, Union of Concerned Scientists, <https://www.ucs.org/about/news/ma-house-boosts-affordable-clean-energy-must-go-further>.

¹⁶ Order at p. 11.

¹⁷ Massachusetts Clean Energy and Climate Plan for 2050, <https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2050>.

¹⁸ See, e.g., Rising Energy Costs Force Some States to Reassess Ambitious Climate Goals, April 16, 2026, PBS News, <https://www.pbs.org/newshour/nation/rising-energy-costs-force-some-states-to-reassess-ambitious-climate-goals>.

- Broadband customers benefit from a lightly regulated marketplace that is governed by market forces. Things move quickly in this space – speeds and reliability continue to increase in response to customer demand for faster and more seamless service; intermodal competition continues to evolve; prices are kept in check as a result.
- Electric customers, on the other hand, remain at the mercy of their utilities and their ever-higher rates. Things move much more slowly in this space, especially in Massachusetts, whose utility sector lags those in many other states vis-à-vis diversifying its energy portfolio and embracing smart meters.¹⁹

In practice, the Departments’ proposed pole rules substantially defer to the slower, less innovative, and uncompetitive utility sector. This is evident in the significant differences between the timelines included in the Departments’ proposed rules, those evident in nearby reverse-preemption states, and those developed by the FCC which are applicable in 27 states, including neighboring Rhode Island (see section 3 for further discussion and analysis).

ISPs are sensitive to the costs stemming from delays and disputes arising from seeking access to poles.²⁰ These disputes increase costs and stretch timelines, sometimes to the point where ISPs choose to walk away from a project rather than shoulder these expenses.²¹ Pole access issues will play key roles in supporting BEAD projects and other expansion efforts in Massachusetts, as well as in the day-to-day operations of existing networks, where ISPs evaluate where to deploy capital to upgrade networks.²²

In short, the Departments’ proposed rules will slow down the broadband sector to match the glacial pace of activity in the electric sector. This is anathema to the dynamics evident in the broadband space and may harm broadband customers in the state. The best remedy would be to align the rules in Massachusetts with those in nearby states and those developed by the FCC (see section 4 for further discussion).

¹⁹ See, e.g., *State-by-State Scorecard on Electricity Competition*, at p. 39, R Street (May 2025), <https://www.rstreet.org/wp-content/uploads/2025/05/Final-Study-No.-324-1.pdf>.

²⁰ For a recent analysis of these costs, see Michael Santorelli and Alex Karras, *Lingering Utility Pole Issues Could Raise Costs and Delay BEAD Buildout*, May 12, 2026, Broadband Expanded, <https://broadbandexpanded.com/posts/beatpoles>.

²¹ See, e.g., *Charter Cites Pole Replacement Obstacles As It Surrenders Dozens of RDOF Bids*, April 29, 2024, Comm. Daily, <https://communicationsdaily.com/news/2024/04/29/Charter-Cites-Pole-Replacement-Obstacles-As-It-Surrenders-Dozens-of-RDOF-Bids-2404260059>.

²² See, e.g., *Comments of the ACLP at New York Law School to NTIA re Non-Deployment Uses of Leftover BEAD Funds*, Feb. 18, 2026, <https://broadbandexpanded.com/files/policy/ACLP%20-%20Comments%20to%20NTIA%20re%20BEAD%20Fundings%20-%20February%2018%202026.pdf>.

3. The Importance of Consistency and Predictability to Continued Investment in and Timely Deployment of Broadband Networks

The Departments’ proposed rules differ significantly from other reverse-preemption states in the region (i.e., Connecticut, Maine, New Hampshire, New York, and Vermont) and the FCC’s rules, which govern pole issues in Rhode Island. The following table provides a high-level summary of these differences.²³ Cells shaded in red denote aspects of the Departments’ proposed rules that differ significantly from the other rules in the table.

	MA	VT	NY	CT	ME	NH	FCC
Adjudicating Body	DPU + DTC (joint)	PUC	PSC	PURA	PUC	PUC	FCC
Order Tiers	5	2	Flat	3 [FCC]	3	3	3
Advance Notice	45/90 days (mid/lg)	None	None	None	None	None	None
Meet-and-Confer	Mandatory (mid/lg) (w/in 30 days for mid, 60 days for large)	None	None	None	None	None	Yes for large orders (w/in 30 days)
Parties to Meet-and-Confer	New attacher + utilities + existing attachers + all relevant local gov’t agencies	n/a	n/a	n/a	n/a	n/a	Attacher + Utility
Simple MR (<300)	30 days	60 days	45 days	30 days	30 days	60 days	60 days
Complex MR (>300)	90 days	60 days	45 days	90 days	90 days	60 days	90 days
OTMR — Large orders	Excluded	Available	Available	Available	Available	Available	Available
OTMR Survey by	Licensee	Pole owner	Pole owner	Pole owner	Licensee	Licensee	Licensee
Overlapping Notice	15 days post + 90 days to inspect	10 days advance	Per agreement	Per agreement	10 days post + 30 days to inspect	5 days pre + 10 post	15 days pre + 15 days post + 90 days to inspect

²³ This Table compares the rules included in the documents referenced in the Order on p. 34-35.

	MA	VT	NY	CT	ME	NH	FCC
Dispute Resolution	180/360-day	30-day	90-day shot clock	7-day fast track 60-day normal	7-day rapid response	Good faith negotiation followed by formal proceeding per PUC 203	180-day 60-day fast track available
Complaint-to-Rulemaking	Yes	No	No	No	No	No	No

The above table, which has been simplified for illustrative purposes, underscores just how onerous the proposed pole rules in Massachusetts will be for would-be attachers. In most instances, the requirements for attachers and the timelines for nearly every aspect of the attachment process vary significantly from those in surrounding states and those adopted by the FCC. The Departments stated that they reviewed and accounted for these other rules when devising their own rules, but there is little evidence that they sought to integrate best practices evident in these other jurisdictions.²⁴

Why does it matter that the proposed rules differ so substantially from those in neighboring states and those maintained by the FCC? Because most broadband subscribers in Massachusetts are served by ISPs that operate and spend capital in multiple states.

According to an analysis²⁵ of FCC data by the ACLP:

- 32 ISPs operate in the state and submit their service data to the FCC for mapping purposes (this count includes all wireline and fixed-wireless providers that report data to the FCC and excludes mobile and satellite providers like Starlink).
- Of these, 12 provide service only within the borders of Massachusetts. Together, these ISPs pass only 107,418 units in the state. These ISPs are mostly local entities and include at least 9 ISPs that are affiliated with a municipal electric utility.
- The other 20 ISPs in the state provide service in at least one additional state other than Massachusetts. Many, like Comcast, Charter, and Verizon, serve dozens of states across the country. Collectively, these ISPs pass 3.3 million units in the state.

²⁴ Order at p. 15.

²⁵ See Appendix.

- In sum, the 20 multi-state ISPs serving customers in Massachusetts pass nearly 99% of all units in the state.

As discussed in the previous section, onerous pole attachment rules on their own negatively impact ISPs by raising costs and lengthening deployment timelines, which can chill investment. These factors are compounded for ISPs that serve multiple states. This dynamic is especially acute in the Northeast, where many ISPs serve states that border Massachusetts. When developing project plans and considering where to invest, multi-state ISPs will likely prioritize resources in states whose poles are governed by FCC rules (Rhode Island) or informed by them, which, based on the chart above, includes border states like Connecticut, New York, and Vermont.

This is not to say that broadband capital will flee the state entirely. As noted by the Departments, broadband is already widely available and very robust in the state.²⁶ However, the introduction of onerous rules that differ so substantially from peer states in the region significantly raises the chances that multi-state ISPs expand their service territories, introduce new offerings, bolster their networks, or otherwise invest additional risk capital in states with more balanced and streamlined rules. This would be a major loss for broadband customers in the state.

Ultimately, predictability, consistency, and speed to market matter to private ISPs when determining where to deploy risk capital. Unlike electric utilities, private ISPs do not receive a guaranteed rate of return on their investments. Instead, returns in the broadband space must be earned in direct competition with ISPs fiercely jockeying for market share. The Departments' proposed rules fail to acknowledge or account for this dynamic in the broadband sector. Instead, as discussed in section 2, the Departments have crafted rules that reflect only the monopoly mechanics of the utility sector. Accordingly, the Departments must revise its proposed rules to better balance the interests of broadband customers and electric ratepayers.

4. Conclusion: The Departments Should Align Their Proposed Rules to the FCC's Pole Attachment Framework

How can the Departments better balance these interests? They should actively seek to align their rules with those developed by the FCC and those in neighboring states, many of which have adapted the FCC's rules to reflect local considerations. Indeed, in some cases, neighboring states have improved upon key aspects of the FCC's rules.

The Departments have failed to offer a compelling justification for proposing rules that differ so substantially from those in force in most states in the region and the 27 states covered by the FCC's rules. This dissonance is evident most clearly in the Departments' proposals for

²⁶ Order at p. 38-39.

resolving disputes between attachers and pole owners, which will inevitably arise. The Departments have detailed a formal dispute resolution process that could take up to a year or longer if the Departments wish to elevate a dispute to a formal rulemaking if the issue might be precedential value.²⁷ Federal law permits 360-day dispute resolution processes, but the FCC has recently embraced faster timelines, notably by launching a Rapid Broadband Assessment Team to turbocharge reviews and assessments of pole disputes.²⁸ Many of these disputes are resolved in 60 days. Several states in the region, notably Connecticut and Maine, have deployed similar rapid response teams, allowing them to resolve certain disputes in as little as 7 days. Vermont’s dispute resolution processes can be resolved in 30 days.

If the FCC, which is a significant bureaucracy many times the size of the Departments, can implement streamlined dispute resolution, and when peer states like Connecticut and Maine have gone even further to hasten these processes, then it is incumbent upon the Departments to either do the same or explain why it has chosen not to adopt efficient, road-tested best practices.

Ultimately, the more streamlined and practical rules and timelines adopted by the FCC and adapted to reflect more parochial interests in neighboring states signal urgency and an institutional understanding of the myriad downsides of maintaining lengthy, costly pole processes. There is also an implicit understanding evident in these approaches that deferring to utility interests, which the Departments appear to have done in their proposed rules, is not necessary to uphold core notions of safety and security vis-à-vis the electric grid. Instead, by deploying rapid response teams to address pole disputes, the FCC and states like Connecticut and Maine have shown that moving more quickly does not undermine grid safety or reliability.

For these reasons, we respectfully urge the Departments to revise their proposed pole attachment rules to align with those developed by the FCC and to reflect best practices evident in other reverse-preemption states in the region. Doing so will create rules that better balance the interests of broadband customers and electric ratepayers.

²⁷ Order at p. 62.

²⁸ FCC, RBAT, <https://www.fcc.gov/enforcement/rapid-broadband-assessment-team-rbat-review-and-assessment>.

Appendix: Data Analyses for Massachusetts

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Electric rates

MA pole-owning utilities, 2014–2024. IOU = combined Bundled + Delivery (long-form). Muni = long-form Bundled + short-form 861S. No coops in MA.

Table 1. Total all-sector rate (\$/kWh).

Year	IOU	Muni
2014	\$0.1113	\$0.1327
2015	\$0.1147	\$0.1352
2016	\$0.1077	\$0.1363
2017	\$0.1119	\$0.1354
2018	\$0.1185	\$0.1401
2019	\$0.1188	\$0.1413
2020	\$0.1166	\$0.1402
2021	\$0.122	\$0.1413
2022	\$0.1353	\$0.1557
2023	\$0.1442	\$0.1672
2024	\$0.147	\$0.1665
Δ 2014→2024	32.1%	25.5%

- **IOU:** \$0.1113 → \$0.147 (32.1%)
- **Muni:** \$0.1327 → \$0.1665 (25.5%)

Method

Source: EIA-861. Rate = revenue / sales by ownership × year, expressed in \$/kWh.

IOU rate sums Bundled + Delivery service types, necessary in MA’s deregulated market, where many IOU customers are billed by the IOU only for delivery while energy comes from a competitive supplier. Muni rate combines long-form Bundled rows with short-form 861S filings so coverage spans all 40 MA munis (smaller munis migrated to short-form filing over the decade).

The rate measures revenue **collected by the utility** per kWh delivered. It excludes the energy charge competitive-supply customers pay to their supplier, that’s a separate accounting.

Broadband availability

ISPs in MA: MA-focused vs multi-state

Wireline only (Copper (10), Cable (40), Fiber (50)). BDC snapshot: 2025-06-30. Unit weighting from Fabric v7. MA-focused = $\geq 90\%$ of provider's nationwide wireline footprint is in MA.

Table 2. MA wireline ISPs by state-scope bucket (BDC 2025-06-30).

Bucket	# ISPs	# Passings	# Unique MA locations	# Units served
MA-focused	12	76,013	75,928	107,418
Multi-state	20	3,355,450	1,919,097	3,341,947
Total	32	3,431,463	—	—

- **98.2%** of all MA BSLs served by ≥ 1 multi-state ISP (1,919,097 of 1,954,368 Fabric BSLs)
- **98.7%** of all MA units served by ≥ 1 multi-state ISP (3,341,947 of 3,385,023, Fabric-weighted)

Table 3. The 12 MA-focused wireline ISPs.

Provider	MA locations	% of footprint in MA
Whip City Fiber	25,767	100%
CROSSROADS FIBER	15,001	100%
SELCO	11,020	100%
South Hadley Electric Light Department	7,680	100%
Norwood Broadband	6,440	100%
Concord Light Broadband	4,820	100%
Fiber Connect LLC	3,257	100%
Richmond Telephone	860	100%
Taunton Municipal Lighting Plant	855	100%
OpenCape	238	99.6%
HGE.NET	63	100%
Greenfield Community Energy & Technology (GCET)	12	100%

Gigabit availability

Wireline residential only. "Gig" defined as $\geq 900/20$ Mbps. Thresholds are set as such because not every "gigabit" plan reports 1000 mbps download speeds in BDC (e.g., Verizon FiOS reports 940), and upload speeds vary widely.

Table 4. Locations and units with ≥ 1 gig offering ($\geq 900/20$ Mbps), by BDC snapshot.

Snapshot	Locations	% of all BSLs	Units	% of all units
2022-06-30	1,834,779	93.9%	3,016,743	89.1%
2022-12-31	1,874,069	95.9%	3,173,127	93.7%
2023-06-30	1,894,412	96.9%	3,247,015	95.9%
2023-12-31	1,900,911	97.3%	3,260,389	96.3%
2024-06-30	1,905,346	97.5%	3,276,884	96.8%
2024-12-31	1,912,743	97.9%	3,289,868	97.2%
2025-06-30	1,931,182	98.8%	3,344,033	98.8%

- **Gig:** 2022-06-30 93.9% of BSLs / 89.1% of units → 2025-06-30 98.8% / 98.8%.

Competition trend

Tech: Copper, Cable, Fiber + Licensed/LBR/Unlicensed FWA. Excludes satellite (GSO/NGSO) and “Other”. Locations restricted to Fabric v7 MA BSLs (1,954,368 BSLs / 3,385,023 units) for a stable cross-snapshot denominator.

Table 5. Locations and units with ≥ 2 wireline+FWA providers, by BDC snapshot.

Snapshot	Locations ≥ 2	% of all BSLs	Units ≥ 2	% of all units
2022-06-30	1,854,170	94.9%	3,071,643	90.7%
2022-12-31	1,777,072	90.9%	2,991,728	88.4%
2023-06-30	1,849,731	94.6%	3,177,652	93.9%
2023-12-31	1,769,590	90.5%	3,055,220	90.3%
2024-06-30	1,715,948	87.8%	3,011,945	89%
2024-12-31	1,763,226	90.2%	3,109,298	91.9%
2025-06-30	1,829,836	93.6%	3,229,166	95.4%

- **2022-06-30:** 94.9% of BSLs / 90.7% of units with ≥ 2 providers
- **2025-06-30 (latest):** 93.6% of BSLs / 95.4% of units
- **Unserved** in 2025-06-30: 3,286 BSLs / 3,580 units (0.2% of all MA BSLs) have no wireline or FWA service. Some may have satellite or mobile.

Method

Sources: FCC Broadband Data Collection (latest snapshot for the ISP table, all 7 viable snapshots for the competition trend) plus FCC Fabric v7 for unit_count.

Wireline = Copper + Cable + Fiber. The competition trend additionally includes FWA (licensed, LBR, unlicensed). Satellite (GSO/NGSO) is excluded throughout.

A **passing** = one unique (provider, location) pair. **MA-focused** = $\geq 90\%$ of the provider’s nationwide wireline location footprint is in MA; **multi-state** otherwise. Units are summed via Fabric unit_count, so MDUs contribute their full unit count.