

# Is NTIA's 5-Mbps Busy-Hour Proxy Balanced on a Single Sentence?

In recent debates over NTIA's 5-Mbps busy-hour surrogate, it helps to trace the agency's own paper trail...

On June 6, 2025 the NTIA's BEAD Restructuring Policy Notice (Appendix A) instructed states that unlicensed fixed-wireless proposals must “demonstrate the ability to provide at least 5 Mbps of simultaneous capacity ... to each Broadband-Serviceable Location (BSL).” (NTIA notice)

The only external evidence NTIA cites for that benchmark is a single sentence on page 17 of Preseem's Fixed-Wireless Network Report 2024 Q1—a PDF available only through a gated download form—which reads:

**“Most ISPs deliver between 3 and 4 megabits per second in the downstream direction, averaged per subscriber, across all technologies including fiber.”**

What NTIA appears to have done is treat that 3–4 Mbps figure—an average Busy-Hour Online Load (peak traffic divided by all subscribers, active or not)—as proof that “most” networks can already supply roughly that level of service per household, so simply rounding up to 5 Mbps would be a safe planning proxy.

**But BHOL describes what networks deliver, not what subscribers demand.**

Elsewhere the same Preseem data show that congestion-related network problems dominate complaint-related customer-support traffic, signaling that users want more than the delivered average.

Why that citation is a shaky foundation for a nationwide 5-Mbps rule of thumb:

Self-selection bias. Preseem's sample includes only ISPs that buy its QoE appliance.

Metric mismatch. The quoted 3–4 Mbps is Busy-Hour Online Load (traffic ÷ all subscribers). NTIA's surrogate concerns simultaneous capacity per served location—a stricter, apples-to-oranges comparison.

Single snapshot in time. Data come from Q1 2024. Traffic grows roughly 20 % per year; relying on one quarter of data risks immediate obsolescence.

Missing confidence intervals and sample counts. The report gives averages without disclosing how many ISPs, access points, or subscribers underpin each figure—making error bars invisible.

Product-induced skew. Preseem's Active Queue Management smooths peaks; networks without such shaping would show higher busy-hour loads.

Gated marketing collateral, not peer-reviewed research. Because the PDF is available only after a lead-capture form (and carries © Aterlo branding), it hasn't undergone independent review and is, by design, promotional.

**Bottom line:** After four years of BEAD rule-making and planning, dropping an abrupt "5 Mbps per location" design mandate—backed only by a single, gated marketing report—feels not just baseless but an affront to sound network-engineering principles. BEAD sub-applicants, state broadband offices, and the un- or underserved communities they aim to connect deserve a standard rooted in transparent, peer-reviewed data, not a footnote in promotional collateral.