ngFWA Network Deployments' Qualifications As Priority Broadband Projects

In accord with the NTIA's concise redefinition of a qualifying Priority Broadband Project in their June '25 BEAD update — highlighting performance-level and functional requirements without stipulating network technology — following are metrics for networks built on Tarana's ngFWA platform that meet or (more often) exceed these redefined requirements:

<table>
<tr><th>Requirements</th><th>ngFWA Compliance</th></tr>
<tr><td>≥ 100/20 Mbps DL/UL service speeds</td><td>Commercial ngFWA networks in operation today support service profiles including:<table><tr><th>Downlink (Mbps)</th><th>Uplink (Mbps)</th></tr><tr><td>1,000</td><td>200</td></tr><tr><td>750</td><td>150</td></tr><tr><td>500</td><td>100</td></tr><tr><td>400</td><td>80</td></tr><tr><td>200</td><td>40</td></tr><tr><td>100</td><td>20</td></tr></table>The current weighted average of DL/UL speeds delivered over ngFWA networks operated by ~200 ISPs in 47 US states is 390/94 Mbps. Note this includes near and non-line-of-sight links in both licensed and unlicensed spectrum. (Source [a])</td></tr>
<tr><td>≤ 100 ms latency</td><td>The round-trip latency in the last mile for commercial ngFWA access networks today averages ~10 ms [a]</td></tr>
<tr><td>Scaling to meet evolving connectivity needs of households & businesses</td><td>To meet this requirement, the network must scale both in service speed (e.g. 100/20 scaling up with applications) and in total access network capacity to support simultaneous usage. Tarana ngFWA delivers 10x the required service speeds in deployed networks today. Regarding total access network capacity, consumption trends over the past 3 years reported by OpenVault [b] indicate that last-mile broadband network bandwidth demand evolution has settled into a consistent ~9% annual growth pattern. At that rate, even a high-density Tarana ngFWA sector deployed today can support capacity needs for well more than a decade of YoY growth [c]. Should bandwidth growth exceed these rates, Tarana ngFWA offers sector upgrades without affecting home installations that can support any foreseeable growth.</td></tr>
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Support for deployment of . . .	
5G	This verbiage was carried over from the fiber-centric original NOFO (pp 14) with the intent to ensure that fiber network infrastructure considered the need for mobile network evolution. In this regard ngFWA excels. The tower infrastructure development and upgrades (especially high-bandwidth backhaul) required for ngFWA service will be financial and logistical enablers for parallel build-out of high-value 5G mobile service into digital divide territory that 5G has yet to reach. Additionally, offloading existing fixed wireless broadband subs from licensed cellular infrastructure frees up precious mobile spectrum capacity for improved services.
Successor wireless technology	High-capacity towers and tower infrastructure are the foundation of advanced terrestrial wireless technologies. ngFWA networks by their nature *are* a successor wireless technology, so they are intrinsically supportive of this goal.
Other advanced services	Beyond the baseline of fast, affordable consumer and enterprise broadband, ngFWA networks' ample high capacity, long reach, low latency, and relative immunity to the challenges of interference, obstructions, and motion in wide-area outdoor communication channels will enhance the operational viability and economics of a wide range of additional applications — especially those dependent on pervasive, reliable, high-bandwidth connectivity — including remote healthcare, immersive learning, smart utilities/grid, smart cities, AI, IoT, environmental monitoring, etc.

Sources:

[a] Metrics for 200 commercial ngFWA networks in the US monitored continuously and in full form through the Tarana Cloud Suite network management platform.

[b] OpenVault Broadband Indicators quarterly reports on US broadband access network bandwidth consumption from 2023 through 2025. See https://openvault.com/resources/ovbi.

[c] From the BEAD Restructuring Policy Notice citing required 5Mbps average usage at peak-hour with a dense 150-subscriber sector and 9% annual growth.