Public Knowledge

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Legislative Clerk
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Hearing: "Strengthening American Leadership in Wireless Technology"
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Questions for the Record

Rep. Castor:

Mr. Lewis, in an environment where natural disasters fueled by the climate crisis are happening from coast to coast, why is it so important to invest in network resiliency?

With each passing year, broadband becomes more essential to our economy, healthcare system, and daily communications. At the same time, natural disasters fueled by climate change are growing more frequent and severe. These conditions demand investments in resilient communications networks that can ensure public safety, economic stability, and connectivity when it matters most.

Network resiliency isn't just about hardening infrastructure — it's about ensuring redundancy and flexibility in broadband and wireless service delivery. That's why advancing spectrum policy that supports enhanced spectrum sharing, unlicensed spectrum, and open-access infrastructure is so critical. More importantly, we must make sustained, proactive investments in network resilience rather than waiting until disaster strikes.

Unlicensed spectrum plays a key role in disaster response because it enables decentralized, adaptable, and community-driven solutions. Wi-Fi, CBRS, and other shared spectrum tools provide critical backup when traditional networks fail—allowing first responders, businesses, and residents to stay connected. History has shown that when cellular networks go down, Wi-Fi and community broadband networks often remain operational, filling in crucial gaps. For example, during the recent Southern California wildfires, Spectrum opened more than 35,000 free Wi-Fi access points in public parks, marinas, city streets, and other public areas to ensure ongoing connectivity.[1] Expanding access to unlicensed and shared spectrum strengthens network resilience and fosters innovation, enabling rapid deployment of emergency networks through solutions like mesh networks, private 5G, and satellite backhaul.

Resilience also means fostering redundant, *competitive* networks where no single provider or technology dominates the market, thus creating a single point of failure. By prioritizing competition, shared access, and diverse deployment models, we can build a broadband infrastructure that withstands disasters while

[1] "Spectrum Opens Wi-Fi Hotspots Across Los Angeles to Aid Wildfire Survivors." *CNET*, 11 Nov. 2018, https://www.cnet.com/tech/mobile/spectrum-opens-wi-fi-hotspots-across-los-angeles-to-aid-wildfire-survivors/.

ensuring that all communities — rural and urban alike — stay connected.

However, resiliency planning must go beyond disaster response. Network hardening is a long-term process, and even without full-blown outages, degraded broadband performance can disrupt critical functions. A forward-looking approach to network resilience could include establishing a dedicated Universal Service Fund (USF) program for network resilience and restoration, or committing a portion of spectrum auction revenues to these efforts. Public Knowledge has long advocated for stronger policies — such as on-site backup power requirements, mandatory emergency sharing and roaming agreements, and improved data collection — to enhance network resilience. Now is the time to act, before the economic and human costs of inaction become even greater.