WESTERN FIRE CHIEFS ASSOCIATION

"SERVING THOSE WHO LEAD"

Congressional Hearing on "Building Resilient Networks"

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SUBCOMMITTEE ON COMMUNICATIONS, MEDIA, AND BROADBAND

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I am Jeffrey Johnson, Executive Chief for the Western Fire Chiefs Association (WFCA). I previously served as president of the International Association of Fire Chiefs (IAFC) and a chief fire officer of the Tualatin Valley Fire and Rescue Department in Beaverton, Oregon where I served as chief of the department for 15 years before retiring in 2010 after a 32-year career. The WFCA serves fire chiefs in the 11 western states, including Oregon, Washington, California, Idaho, Nevada, Utah, Montana, Arizona, Alaska, Hawaii, as well as Guam/Saipan.

I thank Chairman Ben Ray Luján and Ranking Member John Thune, as well as the other esteemed members of the subcommittee, for convening this hearing to examine ways the federal government can support "resilient, redundant, and secure broadband and telecommunications infrastructure" and review lessons learned to improve our nation's resiliency and reliability. It is an honor to join you, and I thank you for requesting guidance and input from the WFCA. The WFCA's membership includes the career and volunteer leaders of fire related emergency service organizations throughout the WFCA member states and the Western Pacific Islands.

Prevention, Preparedness and Response to the Growing Threat of Wildfires. The WFCA's membership provides critical protection of people, critical infrastructure, and the environment from the occurrence and outcomes of fires and other natural, technological, and manmade emergencies. Over the past year, our membership and their departments have answered the call to support our country's response to the COVID-19 pandemic, while simultaneously responding to yet another unprecedented fire season in 2020. The 2021 fire season is already upon us and we are preparing for another record year, with fires that have already ignited this year and dry conditions and unseasonably high temperatures across much of the Midwest and West. After consecutive years of devastating fire seasons, it has become clear that the major wildfires in the West are not one-off anomalies, but becoming a pattern and creating a new normal.

History has taught us that planning and preparedness are key to mitigating risk and bolstering our readiness to achieve the best possible outcomes. Preparedness includes evacuation planning and drills, fuel management, hardening of structures against the threat of wildfire, and increasing the response resources that are available to respond to wildland fires through codified agreements. Once a fire has started, the goal is to contain the fire to the smallest area possible and minimize the amount of damage to our communities, critical infrastructure, and natural resources, which involves the notification and evacuation of all persons who are at risk, resource requests, and dispatching and coordinating with inter- and intra-state responders. Following a fire incident, the focus shifts to recovery and learning from the events that transpired during the emergency.

Criticality of Broadband Communications for Public Safety and Emergency Response. Modern technology and broadband have provided new tools for citizens, emergency response personnel, and state and federal forestry managers, including "smart" tools using drones and unmanned aerial systems/vehicles for land management and to detect small fires before they become large forest fires using broadband connectivity. Advanced technology solutions are equipping public safety with new capabilities to communicate and coordinate during emergencies. For example, an incident commander can enhance how resources are dispatched and deployed to emergencies. The ability to access information and situational awareness is also essential because the location, mapping, weather, terrain, and predictive fire behavior intelligence can help to inform the response and coordination during the fire event.

In order for first responders to actually utilize these advanced solutions, they need to be able to count on the technology and underlying network performing in operationally critical situations. It is essential for emergency response personnel to have reliable access to broadband and the correspondingly essential resilient commercial power grid and backup power sources. Additionally, mobile wireless applications serving public safety should be built in accordance with commonly accepted standards, such as the 3GPP international wireless industry standards, to enhance their quality performance, interoperability, and reliable operation.

While I expect there will be many compelling proposals discussed during today's hearing, I also want to recognize the tremendous progress that's been made –thanks to the U.S. Congress enacting legislation to establish the Nationwide Public Safety Broadband Network– to address the communications challenges that historically hindered emergency response. Before FirstNet, field-based first responders, such as wildland firefighters, were hesitant to adopt new technology solutions because they couldn't count on it working when they needed it most. Now that we have FirstNet, first responders have priority and preemption, dedicated 700 MHz public safety spectrum that has been built out across the country (with aggressive rural coverage build benchmarks – an important priority for the WFCA), and the ability to request portable cell towers (Colts and Cows) to make sure first responders have connectivity, such as in the event infrastructure has been damaged by a fire or when a command post is staged in a remote mountainous area. I had the opportunity to appear before the Senate Commerce Committee in 2010 during a hearing to discuss the 9/11 Commission Report's recommendation to build a nationwide, public safety, wireless, interoperable, broadband network. As we approach the 20th anniversary of the 9/11 terrorist attacks, this committee and your colleagues in the House of Representatives and Senate can be proud of the successful fruit that's resulted from your legislative action. Thank you for working with the public safety community to make our vision become a reality.

Enhancing Network Resiliency and Reliability: Cannot Be Achieved in a Silo. Our country won't be able to tackle the pressing issue of broadband and telecommunications network resiliency in a silo. I have seen firsthand the devastation caused by massive conflagrations, such as the deadly and destructive Camp Fire in Paradise, CA in 2018. While resiliency practices, like burying fiber underground can certainly improve resiliency, the reality is that above-ground communication and power infrastructure in the path of a catastrophic fire will have difficulty withstanding the heat, wind and conditions of these massive fire events – even if built to the highest possible level of physical resiliency. As a country, we must properly invest in fire mitigation activities, land management, community readiness, and ensure there are the necessary resources to support fire suppression. We are entering a new age of wildland firefighting, and state and local budgets and the workforce in the fire service are becoming strained as wildfire season becomes increasingly long, frequent, dangerous, and destructive.

Commercial Power Grid. It is also important to recognize the need for improved power resiliency. Access to reliable commercial power isn't only important for the communications industry, but also for health care, first responders, citizens, and virtually every other facet of our economy. The recent and significant power failure events in California and Texas call into question the resiliency of the commercial power grid. As a result of the COVID-19 pandemic,

society has transitioned to "remote-everything," which further reinforces the critical need for a robust and resilient commercial power grid.

Temporary and Fixed Backup Power. The placement of backup power generators at communications facilities can help enhance resiliency and power redundancy. The need for backup power has been evident during the public safety power shutdown (PSPS) in California. The WFCA has collaborated with local lawmakers and other stakeholders in California to streamline the process for siting backup power facilities. Local and state siting rules, environmental, and other regulations governing the placement of backup power generators can make it exceedingly difficult to get this equipment installed at communication towers. This is not unique to California and is an issue that hinders backup generator placement at sites in jurisdictions across the country. The federal government could consider preemptive siting and environmental streamlining rules to make it easier for these backup power facilities to be installed.

Streamlining the Process to Deploy Broadband Infrastructure. Especially in the case of wireless networks, greater reliability can be achieved from the number of cell towers in an area. This functions as a form of redundancy. As such, Congress should consider ways to expedite the process to deploy broadband infrastructure. Streamlining the deployment of both wireline and wireless broadband will also help to narrow the digital divide, boost the capacity and speeds available for broadband users, and expand available fiber backhaul-diversity. In response to the COVID-19 pandemic, Congress approved record levels of federal stimulus that can be used to support the deployment of broadband and telecommunications infrastructure. While this is an important step forward, we should not stop there. Action should also be taken to streamline the process to make it easier, faster, and less costly to deploy wireless and wireline broadband across the federal, state, tribal, and local levels. With the passage of the American Rescue Plan Act of 2021 and current efforts underway to advance bipartisan infrastructure legislation, the time is now to move forward with broadband streamlining legislation or (at a minimum) approve a temporary window for expedited state, local, tribal, and federal review and approvals while communities across America work to harness this opportunity to expand access to broadband.

Difficulty and Delay Deploying Broadband Infrastructure on Federal Lands. The WFCA membership is regularly called upon to support fire suppression efforts on federal lands to protect people, property, and some of America's most beloved landscapes. We also respond to other emergency situations on federal lands to support and protect federal government employees, local residents, and visitors, such as when first responders support a search and rescue for a missing person in a National Park or respond to a medical issue for an injured hiker at a U.S. National Forest. There is a critical public safety need for more robust and available broadband communications on federal lands. Especially along major roadways, areas commonly used as incident command posts or other emergency staging grounds, and in recreation areas attracting large numbers of residents and visitors, the inability to have reliable and available wireless communications on federal lands is no longer a mere inconvenience, it is a serious public safety issue. Congress should take action to overhaul, expedite, and streamline the federal leasing, easement, appraisal, review, and approval processes for broadband projects on lands managed by the federal government.

The federal government maintains a significant presence in rural areas and across the western United States. As Congress and the Biden-Harris Administration endeavor to close the digital divide and bolster network resiliency, I am concerned this mission could be hampered unless there is a fundamental change in how many federal agencies approach their responsibility to review and approve broadband infrastructure projects. Aesthetic, historical, and cultural considerations on federal lands should not wholly outweigh or supersede concerns about the life and safety of first responders and the public visiting, working, and living on or near federal lands. The ability to communicate should be recognized as critically important, and I'm hopeful the federal government can find ways to make it easier for this critical infrastructure to be deployed.

Cybersecurity and the Evolving Threat Landscape. Cybersecurity is another important pillar that must be included in our nation's efforts to enhance our resiliency. Particularly given the recent high-profile ransomware attacks impacting the meat processing and energy sectors, the growing cyber threat landscape underscores the need for the federal government to ensure the security of government infrastructure and systems. Additionally, Congress could consider proposals to help federal, state, tribal, local, and territorial governments modernize and update their security capabilities, including providing support for education and training to expand the available cybersecurity workforce. Voluntary cybersecurity grant funding could also be considered for other critical infrastructure sectors, including the communications industry.

Next Generation 9-1-1: An Important National Priority. When discussing resiliency, reliability, and redundancy for the communications sector, we must not overlook the critical need to reform and invest in Next Generation (NG) 9-1-1. Federal funding for NG 9-1-1 implementation will equip public safety answering points (PSAPs) and emergency communications centers (ECCs) with the ability to modernize their operations. This will bolster redundancy by allowing a 911 center to load-share with other PSAPs/ECCs. It will also allow PSAPs/ECCs to receive rich internet protocol (IP)-based data and information in the form of video, photos, and multimedia from the public, and then send this critical and life-saving information directly to field-based first responders, including those using FirstNet. Transitioning our country's existing patchwork of 9-1-1 jurisdictions (many still using legacy systems) to NG 9-1-1 is critical for our nation's communications resiliency. As bipartisan infrastructure legislation is considered by Congress, I urge this committee and your colleagues in the House and Senate to include the NG 9-1-1 reform and funding bill. We must ensure 9-1-1 centers – regardless of state or jurisdiction – can receive IP-based data and information, which will better inform emergency response, reduce response times, and improve outcomes.

Public Safety Communications Priorities at the FCC. Finally, on behalf of the public safety community, I would like to take this opportunity to commend the Acting Chairwoman of the Federal Communications Commission and express my appreciation for her leadership and steadfast commitment to public safety communications. Acting Chairwoman Jessica Rosenworcel has been a longstanding champion for first responders. On behalf of the WFCA, we are hopeful the Biden-Harris Administration will nominate her to serve as Chair. Should this happen, I urge this committee to advance her nomination.

Throughout her career, Ms. Rosenworcel has meaningfully contributed to bipartisan legislative and regulatory efforts to modernize emergency communications for first responders in America. For example, as a senior congressional aid for this committee, Ms. Rosenworcel helped to author the bipartisan legislation that created the federal First Responder Network Authority and set aside 20 MHz of Band 14 spectrum for public safety's use. In her role as Acting Chairwoman, she has continued to listen to the needs of public safety and recently helped lead bipartisan action to stay[1] the reallocation of 4.9 GHz spectrum, which would have taken away this vital spectrum resource from public safety. The public safety community now has the opportunity to work with the FCC and other stakeholders to help shape the future use of the 4.9 GHz spectrum. With changes in broadband technology, public safety's communications resilience can be strengthened by preserving the spectrum for public safety's use, including facilitating the introduction of new 5G capabilities into the public safety communications ecosystem and meeting the urgent need for dedicated nationwide 5G spectrum for the public safety community.

Thank you. Thank you for inviting me to testify. I appreciate your efforts to bolster our nation's communications resiliency, reliability, security, and redundancy. On behalf of the WFCA, thank you for allowing us to share public safety's views on these topics. I am available to respond to any questions you may have.

[1] https://www.fcc.gov/document/fcc-adopts-49-ghz-stay-order