Chairwoman Capito, Ranking Member Tester and distinguished members of the subcommittee, thank you for allowing me to submit this testimony on behalf of America’s public media service — 1,500 public television and radio stations reaching nearly 99 percent of the American people living in rural, small town and urban communities across the country.

The Corporation for Public Broadcasting (CPB) requests $20 million in FY 2021 for a new grant program, the Next Generation Resilient Warning System (NGRWS), within the U.S. Department of Homeland Security’s FEMA Federal Assistance account. Specifically, NGRWS would allow for public broadcasting entities, as defined in 47 USC 397(11), to procure, construct and improve transmission and other public safety related equipment, software and services, including NextGen TV, datacasting and MetaPub. This new competitive grant program would utilize public broadcasting’s infrastructure to enable the expansion of alert, warning and interoperable communications and the incorporation of emerging technology in those activities, resulting in enhanced public safety capabilities that serve all Americans.

Public media is committed to and known for delivering essential and trusted content to all Americans who rely on this information to help understand and respond effectively to natural and manmade crisis. Most recently, stations are delivering vital information and services to their local communities to address the COVID-19 global pandemic, such as news and information through local journalism; educational resources for parents, teachers and schools that are closed; online tools and websites tracking the virus; podcasts with local medical professionals; and health-focused, public media journalism collaborations.

In addition to vital content, local stations provide life-saving emergency alert and communications services to their communities and to the first responders and public safety officials that protect them. These often unnoticed but critical services deliver warnings in times of emergency, direct people to safety, and relay messages from official federal, state and local leaders. Further, only public media’s infrastructure can deliver these services nationwide, especially to underserved Americans who lack reliable access to other forms of communication when it matters most.

Nationally, the public television interconnection system serves as a distribution point for PBS WARN, an essential part of FEMA’s nationwide Integrated Public Alert and Warning System (IPAAWS), which manages the Wireless Emergency Alert (WEA) system. The WEA system relies upon public broadcasters to ensure delivery of messages that include imminent threats to life and safety, AMBER Alerts, and Presidential Alerts during a national emergency. PBS, working with public television stations, is leveraging stations’ existing infrastructure to provide situational awareness tools to emergency management officials. However, more can be done in software development to create products that meet the needs of emergency managers throughout the country, including: allowing alerts to be selected based on type, location, originator, and other options; building a look-back function for increased situational awareness;
and establishing light-up/alarm features to notify that an alert has been issued in the Emergency Operations Center’s geographic area. These improvements will serve as a starting point for stations to expand their public safety footprint, and the NGRWS grant program could leverage this existing infrastructure to enhance and expand public safety services.

The public radio interconnection system, Public Radio Satellite System® (PRSS), managed by NPR, receives a national Emergency Alert Service (EAS) feed directly from FEMA and distributes Presidential emergency alerts to NPR-member stations. PRSS is also a named resource in at least 20 states’ emergency plans, and many of the public radio stations in these twenty states serve as a Primary Entry Point (PEP) station. The PRSS national network of nearly 400 interconnected public radio stations act as a support for secure, reliable communications during emergencies without relying on the Internet, which may become unreliable.

At the state and local level, many stations serve as their states’ primary EAS hub for weather and AMBER Alerts. For example, Alabama Public Television's (APT) microwave system serves as the backbone of Alabama's EAS, distributing national, state and local emergency broadcast signals to all radio and television broadcasters throughout the state. APT is also the hub for Alabama's AMBER Alert to track missing children. In Montana, MontanaPBS provides the Governor’s Office, the Montana National Guard and the Department of Emergency Services access to their infrastructure to implement a statewide public safety information and communications network, reaching 95 percent of the state population.

In times of natural and human-made disasters, enabled public radio stations use MetaPub technology to deliver graphic alerts and messages such as weather forecasts and shelter information. For example, California stations successfully tested the use of MetaPub alerting during the Great California Shakeout earthquake drill in 2016 and demonstrated how stations can provide emergency communications to affected audiences. During evacuations in Mississippi, the Mississippi Emergency Management Agency works with Mississippi Public Broadcasting (MPB) to broadcast evacuation and traffic information on all MPB radio stations.

Utilizing their broadcast infrastructure and dedicated to serving their community, stations are increasingly partnering with local first responders and emergency management officials to offer datacasting technology. Through datacasting, television broadcast spectrum is used to securely transmit essential, encrypted information to first responders in the field in real-time. Datacasting does not have the capacity constraints of traditional mobile or broadband delivery. Its applications include equipping police cars with the ability to receive school blueprints when a crisis arises, providing access to 24/7 camera feeds for public safety challenges, and connecting public safety agencies in real-time.

Initially tested in partnership with the U.S. Department of Homeland Security, datacasting technology has been utilized during numerous events in the last several years, including the NCAA Final Four, the Super Bowl and Hurricane Harvey. In 2018, KVIE public television in Sacramento, CA worked with the California Office of Emergency Services (Cal OES) to test public television’s datacasting capability to deliver early earthquake warnings faster. The station delivered an early earthquake warning in under three seconds compared to the previous warning standard of 30 seconds. Lastly, in Tennessee, public television stations
(WKNO, Memphis; WLJT, Lexington; WNPT, Nashville; WCTE, Cookeville; East Tennessee PBS, Knoxville; and WTCI, Chattanooga) recently joined with the Tennessee Department of Safety and Homeland Security to form the first statewide datacasting network.

In June 2018, the FCC’s CSRIC Working Group 2 issued a final report on “Comprehensive Re-imaging of Emergency Alerting.” Section 6.4 states, “PBS and local public television stations play a crucial role in protecting communities by using datacasting to deliver essential information to individuals and first responders. These benefits are all made possible by public broadcasting stations’ unique reach, reliability, and role across America, and are especially vital in rural and underserved areas.”

While public media stations are dedicated to serving the needs of their communities, their ability to provide these life-saving public safety services relies on technical infrastructure that is often aging past its end-of-life. In 2017, CPB commissioned a comprehensive System Technology Assessment to better understand public media stations’ technology needs. The station response rate was unprecedented (73 percent of radio and 92 percent of television licensees), cataloging more than 60,000 pieces of equipment throughout the system. The assessment found that if equipment and funding needs evolve as projected, the system will face more than a $300 million shortfall by 2020. Without resources to maintain, replace, and enhance broadcast transmission infrastructure on schedule, TV and radio licensees of all sizes and types could face operating challenges nationwide, disrupting the essential public safety service these stations provide.

Consistent with the recommendations in the Modernizing the Nation’s Public Alert and Warning System report from the FEMA National Advisory Council, February 15, 2019, the Next Generation Resilient Warning System would enable the expansion and enhance the reliability of the alert, warning and interoperable communications activities that public broadcasting stations are committed to, while providing first responders and public safety officials with access to new communication resources.

With your support, public media entities can continue to serve the American people with reliable and resilient public safety infrastructure. Ms. Chairwoman and members of the subcommittee, thank you for allowing me, on behalf of America’s public media system, to submit this testimony. I appreciate your consideration of our funding request.