Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-3641
Minority (202) 225-2927

May 21, 2024

Mr. Gary Shapiro
CEO
Consumer Technology Association
1919 South Eads Street
Arlington, VA 22202

Dear Mr. Shapiro:

Thank you for appearing before the Subcommittee on Innovation, Data, and Commerce on April 30, 2024, to testify at the hearing entitled "Preserving Americans' Access to AM Radio."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Tuesday, June 4, 2024. Your responses should be mailed to Jessica Herron, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed to Jessica.Herron@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Gus M. Bilirakis
Chair
Subcommittee on Innovation, Data, and Commerce

cc: Jan Schakowsky, Ranking Member, Subcommittee on Innovation, Data, and Commerce

Attachment

<u>**Attachment—Additional Questions for the Record**</u>

<u>**The Honorable Russ Fulcher**</u>

1. Where do you see broadband rollout and any improvements to, at least, provide more alternatives and be able to get more people access in different ways to emergency alert information?

   Wireless service providers enable the dissemination of multimedia content, including text, images, and video, which can provide more detailed and comprehensible information compared to the audio-only format of AM radio. This capability is crucial during emergencies when visual aids, such as maps showing evacuation routes or images of safe shelters, can significantly enhance public understanding and emergency response. Internet-enabled and wireless emergency alerts can be delivered through various channels like email, social media, and apps, ensuring that the information reaches Americans on multiple platforms and devices, increasing the likelihood that all American receive critical alerts.

   More, wireless emergency alerts significantly enhance the speed, reach and effectiveness of emergency alert dissemination. Unlike AM radio, wireless connectivity enables federal and local emergency officials to collect and analyze data related to wireless emergency alerts, such as the number of people that received an alert, how they received the alert, how quickly it was received, and whether a person took the recommended actions. This data can be used to improve the effectiveness of emergency alert systems over time by identifying strengths and weaknesses of the existing system. AM radio (a one-way communications service), on the other hand, does not allow for tracking of this data, so cannot be leveraged to update alerting procedures continuously and meaningfully.

   Additionally, wireless connectivity allows for more targeted and personalized alerts. Systems like geotargeting can send specific warnings to individuals in affected areas, ensuring that the information is relevant and actionable. This precision is often not possible with AM radio, which broadcasts to a wide area and may include listeners who are not impacted by the emergency. Wireless emergency alerts can also cater to individuals' specific needs, such as providing instructions for those with disabilities or non-English speakers, making the emergency response more inclusive and effective.

   The resiliency of wireless networks during natural disasters is a key factor in their effectiveness for emergency communications. Modern wireless infrastructure is designed with multiple redundancies and fail-safes to withstand and quickly recover from disruptions caused by natural disasters. Advances in satellite broadband technology provide additional layers of resilience, offering reliable internet access even if terrestrial networks are compromised. Local and federal governments, in partnership with wireless providers, should intentionally and continually harden and enhance the robustness of these networks.

   Importantly, AM radio stations alone do not comprise a resilient emergency network. While there are thousands of radio stations across the country, only 76 are Primary Entry Point (PEP) sources for national emergency alerts.[1] A national alert is sent from the government

---

[1] According to FEMA, there are 76 PEP stations nationwide. *Report: August 11, 2021 Nationwide EAS Test*, Public Safety and Homeland Security Bureau, Federal Communications Commission, December 2021

directly to PEP stations, and the 76 stations rebroadcast it. Other stations, known as Local Primary Stations, in each PEP station's broadcast area receive the signal from the PEP and retransmit it. Still more stations monitor the Local Primary (LP) stations and, after receiving an alert from the Local Primary, rebroadcast it to listeners. The multiple steps needed to rebroadcast alerts from federal officials via AM radio create many opportunities for transmission failure, a regular occurrence with AM radio. The FCC report following a nationwide test of the emergency alert system conducted August 11, 2021, found 531 stations reported themselves as being National Primary stations in the Emergency Alert System, when in fact there are only 76 such stations.[2] Tests in previous years similarly found that hundreds of stations did not understand their roles. As an example, during the nationwide system test in 2021 the test message failed to reach local radio listeners throughout the Detroit metropolitan area due to equipment failure at PEP station WJR-AM Detroit.[3]

The key to effective alerting is redundancy. A Congressional mandate would put AM radio on a pedestal over the other IPAWS communications channels and is antithetical to FEMA's intentional investments in alerting redundancies. FEMA and other federal officials use the Integrated Public Alert & Warning System (IPAWS) as the national system to update the public during emergencies. IPAWS provides authenticated emergency information to the public through multiple platforms including digital and analog AM radio, digital and analog FM radio, internet-based radio, satellite radio and over cellular networks.[4]

2. How can you address the reliability concern I see in the more rural areas? Tell me about the progress made on the streaming side, as well as the challenges you still face when it comes to getting to the level of reliability being offered by AM radio? I am reminded of the loss of cellular or other connectivity if in the middle of an area where there is a wildfire in a rural area.

    The reliability of IPAWS in rural areas is critical, as these regions often face unique challenges such as limited infrastructure and greater distances between emergency services and residents. Streaming and internet-based services can be beneficial in rural areas where AM radio signals might be weak or unreliable due to distance from broadcast towers or interference from natural obstacles like mountains and dense forests. Even compared to FM radio, the AM signal does not go further in daytime and typically only goes further on cloudless nights (to be technical, when the signals are able to bounce off the ionosphere).

    Streaming services leverage the internet to provide access to a wide range of radio stations and emergency broadcast channels, ensuring that users can receive alerts regardless of their location. For example, TuneIn Radio offers free access to 100,000 radio stations and 5.7 million podcasts at no cost. A hybrid approach that combines AM radio with the versatility and reach of wireless connectivity and streaming services provides the most comprehensive and reliable emergency alert system for rural America, ensuring that the public receives timely and accurate information regardless of the circumstances.

    As one example, during the devastating Maui wildfires, Apple SOS played a crucial role in saving five people trapped in a car. The individuals, surrounded by rapidly advancing flames

[2] Id. p. 9.
[3] "Michigan National EAS Test Summary," Michigan Association of Broadcasters, August 20, 2021.
[4] IPAWS Process Map Playbook (February 2023)

and cut off from traditional communication networks, used the SOS feature on their iPhones to send a request for help. Leveraging satellite technology, the SOS feature bypassed damaged terrestrial networks and relayed their exact location to emergency responders. This timely intervention allowed rescue teams to locate and extract the trapped individuals quickly, demonstrating the life-saving potential of advanced technology in critical situations if conventional communication methods fail.[5]

The U.S. Government Accountability Office (GAO) has acknowledged the importance of leveraging modern technologies for emergency alerts and investing in innovative solutions that provide broader reach and increased accuracy.[6] FEMA itself has acknowledged that "the public is moving away from radio and broadcast/cable television as the primary channels for news and information."[7] In fact, a CTA study following an October 2023 test of the emergency alert system found that just 1% of American adults received the alert through AM radio.[8]

[5] Family Escapes Maui Fires Using Apple's Emergency SOS
[6] GAO Report on Emergency Alerting (February 2020)
[7] FEMA IPAWS Strategic Plan FY 22-26
[8] CTA U.S. Adult Emergency Alert Survey 2023