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Good morning, Chairman Hudson, Ranking Member Matsui, and distinguished members of the subcommittee.

My name is Captain Jack Varnado, and I am the President of the Association of Public-Safety Communications Officials International, or APCO International. I am also the 9-1-1 Director for the Livingston Parish Sheriff's Office in Louisiana. Thank you for inviting me to testify before you today.

I have devoted my career of over 35 years to public safety. I began my career as a volunteer firefighter and EMT, later serving in leadership roles in emergency communications and homeland security across multiple Louisiana parishes. In May 2013, I assumed the position of Captain with the Livingston Parish Sheriff's Office, in which I oversaw all emergency communications and 9-1-1 operations for seven law enforcement agencies and 11 fire departments. I am currently the 9-1-1 director for the Livingston Parish Sheriff's Office, and I am responsible for leading major advancements in our 9-1-1 systems, including overseeing the Parish's current transition to Next Generation 9-1-1.

I have been an APCO member for over 30 years, and this past July, I was honored to be sworn in as APCO's president. APCO is the world's oldest and largest organization of public safety communications professionals. Founded in 1935, APCO is a non-profit association with over 40,000 members, primarily consisting of state and local government employees who manage and operate public safety communications systems – including 9-1-1 Emergency Communications Centers (ECCs), emergency operations centers, radio networks, and information technology – for law enforcement, fire,

emergency medical, and other public safety agencies. APCO's mission is to advance public safety through advocacy, education, and the development of technical standards and best practices for 9-1-1 and emergency communications.

Our members are on the frontlines of every type of emergency request, from police, fire, and EMS calls to natural disasters and public health incidents. They handle the full spectrum of public safety communications, ensuring the right resources are available quickly and efficiently. I appreciate this subcommittee's focus on public safety communications issues, and I welcome the opportunity to share our members' expertise with you on a broad range of these issues. We are honored to be asked to testify today and are grateful to each of you for all that you do to support public safety. We are deeply appreciative to the subcommittee for taking up these important issues.

Modernizing 9-1-1 Infrastructure to Next Generation 9-1-1

To start, I want to talk about 9-1-1, because 9-1-1 is the most critical of our nation's critical infrastructure. This is largely due to the lifesaving work of our public safety telecommunicators. These professionals lay it all on the line, every day, for the good of our communities. On any given day, public safety telecommunicators may need to direct callers through CPR, childbirth, or controlling blood loss before help arrives. They may counsel callers to prevent them from harming themselves or others. They may assist during an active shooting or a natural disaster. They may gather, analyze, and report information about crimes in progress, fire and rescue incidents, or missing children. Public safety telecommunicators provide lifesaving instructions, gathering critical information, and supporting police, fire, and EMS personnel in their response efforts. Their work is lifesaving, emotionally demanding, and indispensable to every emergency response. Public safety telecommunicators perform protective work every day, and that is why we are working so hard with our congressional representatives to have them classified as a protective service occupation in the Office of Management and Budget's Standard Occupational Classification. Efforts to address this issue, including legislative proposals under

consideration, are an important step toward ensuring that 9-1-1 professionals receive the respect, acknowledgment, and resources necessary to sustain a strong and resilient emergency response system.

Our public safety telecommunicators deserve the best resources – not the outdated 9-1-1 systems currently in place. The reality is that today's 9-1-1 calls are answered using yesterday's 9-1-1 networks, built on technology that largely dates back to the 1960s and 70s. Modern cell phones can pinpoint locations, record critical details, and instantly transmit information to friends and family. Yet when a call is placed to 9-1-1, much of this valuable data is unable to be transmitted to the ECC, leaving first responders with only a voice connection. We can do better. With congressional support, we can bring our 9-1-1 centers into the 21st century and build a new "network of networks" based on modern technology. A member of the public could transmit videos, photos, and enhanced geolocation information directly to ECCs, providing public safety telecommunicators with a better understanding of incidents as they unfold. First responders could receive real-time updates, ensuring coordinated, efficient, and effective responses across jurisdictions. NG9-1-1 and broadband-enabled ECCs represent a fundamental shift from legacy analog to a digital, IP-based infrastructure. This isn't just an upgrade – it's a reimagining of how emergency services operate. This level of change is inherently transformative and will save lives.

As we transition to NG9-1-1, we need certain elements to be uniform nationwide. Federal legislation is essential to establishing and ensuring nationwide consistency. This includes establishing a baseline definition of what next generation 9-1-1 means. The term "NG9-1-1" has been in circulation for years, yet its meaning has often been misunderstood or oversimplified. Some equate it only with infrastructure upgrades or the deployment of IP-based networks, while others use it as a general catch-all for modernization efforts. In reality, NG9-1-1 represents a comprehensive, end-to-end transformation of emergency communications. Without clarity and a shared understanding of what NG9-1-1 means, efforts to improve 9-1-1 risk being fragmented, underinclusive, or focused on technology upgrades that fall short of what public safety truly needs. The objective is not merely to upgrade networks, but to ensure that all information flowing into and out of ECCs can be effectively utilized to inform decision-making and

support first responders. A common definition ensures the entire NG9-1-1 ecosystem, from vendors to ECCs to policymakers, is aligned around the same goals and outcomes.

We also need seamless interoperability. In this next generation world, public safety telecommunicators across jurisdictions – whether those might be county or even state jurisdictional lines – could support one another during periods of high call volume, natural disasters, or system outages. Emergency response is inherently collaborative, often requiring multiple agencies and jurisdictions to work together seamlessly. Today, many ECCs operate in isolation. Equipment, software, and networks often differ from one agency to the next, creating barriers that can delay information sharing or require costly after-the-fact solutions to facilitate communication. NG9-1-1 seeks to eliminate these barriers by establishing systems that can communicate across jurisdictions, devices, and service providers without proprietary interfaces and constraints. This lack of interoperability also prevents ECCs from helping take over communications from their neighboring jurisdictions if one ECC experiences a power or network outage.

We also need strong cybersecurity. As the central point of emergency response, 9-1-1 is a prime target for cyberattacks from domestic and foreign bad actors. Cybersecurity is one of the most critical policy challenges in the evolution of 9-1-1 systems to IP-based networks. Unlike legacy systems, which were relatively insulated because they relied on closed networks, NG9-1-1 depends on interconnected, data-rich, and often cloud-enabled systems that must be protected against cyberattacks ranging from denial-of-service attempts to ransomware. Robust cybersecurity standards, continuous monitoring, and dedicated security resources are essential for protecting both 9-1-1 infrastructure and the sensitive data it handles. NG9-1-1 can also enable the integration of advanced capabilities such as artificial intelligence (AI) to enhance public safety outcomes and strengthen system resilience. AI-enabled security tools can support continuous network monitoring, detect anomalous activity, and assist in identifying and responding to cyber threats.

And, of course, we need NG9-1-1 funding. Sustainable funding remains one of the largest barriers to nationwide NG9-1-1 implementation. Many states rely on inconsistent fee structures or annual appropriations that cannot support large-scale, multi-year technology deployments. ECCs, most of which are already operating under tight budgets, struggle to upgrade aging equipment, maintain cybersecurity protections, or adopt emerging technologies without federal support. A nationwide federal grant program would help ensure that all ECCs, regardless of size or location, have the resources needed to implement end-to-end NG9-1-1 capabilities.

We are grateful to Representatives Hudson and Carter for introducing the Next Generation 9-1-1 Act (H.R. 6505), which would modernize the nation's emergency communications infrastructure and strengthen the ability of public safety communications agencies to respond effectively in times of crisis. This bill would establish a framework for implementing uniform, nationwide, interoperable and secure NG9-1-1 – so these systems can fully realize their tremendous potential to enhance public safety and make a real difference in saving lives across America.

Ensuring Continuity of Communications During Emergencies

Public safety telecommunicators are our nation's *first* first responders. To do their jobs, they must be able to communicate – with each other, with the people in their communities who need help, and with EMTs and other public safety personnel. The public expects to be able to reach 9-1-1 in an emergency, and we want to be there for them in their time of need. As you know, this need is even greater during large-scale incidents such as hurricanes, floods, and other disasters. Our public safety communications systems must be resilient enough to withstand these challenges. I'm from Louisiana, and we have endured some of our nation's most devastating natural disasters, including Hurricane Katrina. Unfortunately, I know from experience that the same emergencies that result in widespread calls to 9-1-1 or that warrant the use of emergency alerts to warn the public of imminent threats are the same emergencies that damage cell towers and knock out traditional cellular service.

We must consider alternatives to ensure continuity of communications when terrestrial networks are down. Leveraging new technologies and services like supplemental satellite coverage from space can help fill coverage gaps during these times of need. Satellite service can provide an added layer of resiliency for 9-1-1, often remaining operational during natural disasters or other events that disrupt land-based networks. By enabling more reliable communications across a wider geographic area, satellite connectivity can help both the public and first responders maintain access to emergency services when it matters most, ultimately saving lives. Indeed, in many parts of the country, access to 9-1-1 remains limited not because of outages but simply because traditional wireless service does not reach those areas. Satellite networks offer a critical opportunity to expand coverage where terrestrial infrastructure is sparse or nonexistent. Supplementary satellite coverage can also help support our nation's emergency alerts. Wireless Emergency Alerts can deliver potentially lifesaving information even when cell sites are down. And we can't forget our analog technologies too – like amateur radio broadcasters or "hams" – who have been longstanding and critical public safety partners in times of need.

Improving Situational Awareness for Public Safety When Networks Are Down

We recognize that despite all of our best efforts and intentions, there will be network outages. When outages do occur, 9-1-1 professionals need actionable information from communications service providers to mitigate the impact on the public. Clear, visual representations of the scope and location of an outage can be significantly easier for public safety telecommunicators to utilize and act upon to mitigate the impacts of an outage than the text-based notifications they receive today. Actionable information about the nature, scope, and duration of outages affecting 9-1-1 service is essential for the local, state, and federal entities responsible for addressing these disruptions. In this regard, we appreciate the leadership of Congresswoman Matsui and Congressman Bilirakis in introducing legislation to improve situational awareness regarding network outages.

Field hearings to examine major service disruptions can yield invaluable insights into root causes of outages and the measures needed to prevent them. It is especially critical that public safety

stakeholders, including 9-1-1 professionals, are part of these discussions so that the real-world impacts on emergency response are fully understood and reflected in the solutions.

We are similarly supportive of Congresswoman Matsui and Congressman Bilirakis' efforts to ensure that the critical protections Congress enacted in 2018 to improve access to 9-1-1 are fully implemented and functioning as intended. When individuals call for help from office buildings, hotels, college campuses, or other large and complex facilities – much like the one we are in today – they often rely on multiline telephone systems that manage both internal and external calls. These systems must be able to reach 9-1-1 directly, without having to dial a prefix to obtain an outside line. We teach our children to dial "9-1-1," and that simple three-digit number should work reliably, regardless of the device or system they are dialing from. This was Congress' intent when enacting Kari's Law seven years ago, and the Kari's Law Reporting Act provisions play an important role in ensuring this capability is implemented in practice. In an emergency, seconds matter, and no one should lose precious time navigating an unnecessary additional step when trying to reach lifesaving assistance.

Conclusion

In closing, the issues discussed today are essential to strengthening public safety communications and meeting the needs of our communities. APCO remains committed to working with the subcommittee, Congress, and our partners across public safety and in the industry to advance these efforts and ensure public safety communications are reliable, up-to-date, and prepared for the needs of the future. I appreciate the opportunity to testify today, and I welcome your questions.