



# EMERGENCY COMMUNICATIONS PREPAREDNESS CENTER FACT SHEET FOR EXECUTIVES: NEXT GENERATION 911 TRANSITION

## WHAT IS NEXT GENERATION 911 (NG911)?

NG911 will enhance the capabilities of today’s 911 networks allowing callers to share videos, photos, and text messages with emergency communications centers (ECCs).<sup>1</sup> NG911 is an Internet Protocol (IP)-based emergency communications ecosystem allowing public safety telecommunicators to share multimedia and other types of data with responders and other agencies and organizations to enhance situational awareness. Collaboration across public safety agencies is critical to coordinate an effective transition to these emerging capabilities.

## WHAT IS THE CURRENT ENVIRONMENT FOR FEDERAL 911 CENTERS?

Federal 911 centers exist but have little or no visibility at the national level and are often less mature in implementing NG911 than their state or local partner agencies. There are more than 5,293 primary and secondary ECCs in the United States (U.S.).<sup>2</sup> However, that does not include federally operated or maintained 911 centers. A number of federal departments and agencies own and operate 911 centers. This includes, but is not limited to, the United States Departments of Defense, Energy, Homeland Security, the Interior, and Veterans Affairs. The Department of Defense (DoD) alone has 220 ECCs in the U.S. and abroad.<sup>3</sup>



**Figure 1: A quick glance at the number of federal ECC facilities<sup>4</sup>**

## WHY SHOULD MY AGENCY TRANSITION TO NG911?

Several states and localities have made significant progress towards transitioning to NG911; however, many federal ECCs do not have the basic infrastructure in place to begin delivering these services. This constitutes a major gap in serving the public who visit government facilities every day, and in protecting federal employees, contractors, installations, and other property. During the NG911 migration, there are various next generation core services requirements, infrastructure, location, routing, and delivery cornerstones for reliable receipt and transfer of 911 calls.

<sup>1</sup> Federal 911 centers include ECCs, public safety answering points (PSAPs), public safety communications centers (PSCCs), emergency operations centers, and other public service communications centers.

<sup>2</sup> 911.gov, *National 911 Annual Report: 2021 Data*, last accessed October 6, 2023.

<sup>3</sup> Cybersecurity and Infrastructure Security Agency (CISA), Emergency Communications Preparedness Center (ECPC), *Identifying the Federal Presence in the 911 Community Report, Second Edition*, November 2021.

<sup>4</sup> IBID.

Federal ECCs will need to prepare for NG911, particularly as service providers phase out legacy technologies, such as copper lines.<sup>5</sup> It is critical that federal ECCs and responding partners collaborate in the transition to NG911 to capitalize on the full benefits of NG911 and ensure an interoperable nationwide emergency communications system. Unless coordinated action is taken, federal facilities will remain out of step with state and local partners and even each other.

## WHAT ARE THE BENEFITS?

In the current 911 environment, many ECCs do not have the same capabilities as the public, such as video calling and text messaging. ECCs often must use multiple computer applications and other over-the-top solutions to help improve the accuracy of locating 911 callers. NG911 will provide a number of benefits to ECCs and first responders to better respond to calls for service from the public. The following benefits are possible within the NG911 environment:

- Allows ECCs to receive 911 request for service through multimedia, such as videos, photos and text messages and provides callers with alternate options to activate the 911 system, prioritizing caller safety
- Enables telecommunicators to share data with field responders and other agencies and organizations, as needed to improve situational awareness
- Improves resiliency during system overloads and enables an ECC to transfer operations to an alternate ECC during unplanned events or disasters
- Delivers fast, reliable, and accurate routing to ECCs based on geospatial data
- Creates a redundant, resilient, and robust infrastructure with system scalability for the future
- Introduces opportunities to implement enhanced technology, such as remote dispatching and artificial intelligence, to supplement call handling
- Expands cost savings for network sharing and other capabilities

## WHAT ARE THE CHALLENGES?

Engaging with state and local partners to strengthen relationships is paramount to avoid siloed environments, capitalize on coordinated plans, integrate timelines of partner agency NG911 implementations, and deconflict interoperability concerns. NG911 also presents several challenges and risks that federal ECC executives may need to address to make critical decisions around next steps. The following impacts do not represent an exhaustive list, but may be experienced during NG911 transition:

- Increased interconnection broadens the attack surface and expands vectors for attacks by sophisticated criminal actors seeking to exploit physical and cyber vulnerabilities, which can threaten delivery of essential emergency services
- Increased data sharing, which may impact telecommunicators' workload, job satisfaction, retention, and wellness
- Advanced training and certifications to prepare personnel for new technologies and evolving roles and responsibilities
- Coordinated federal, state, local, tribal, and territorial deployment for the 911 community and the citizens served to fully capitalize on the benefits
- Increased funding considerations to support federal NG911 transition, as there is no dedicated surcharge or grant program to support NG911 transition across federal 911 centers

<sup>5</sup> The Federal Communications Commission [Modernizing Telecommunications Networks – What Government Officials Need to Know](#) website provides additional information about modernization efforts (e.g., voice service providers transitioning from legacy network technology, also known as time division multiplexing, to IP technology and replacing copper networks with modern technology) and related FCC rules.



## WHAT STEPS CAN EXECUTIVES TAKE TO TRANSITION TO NG911?

### CHECKLIST OF BEST PRACTICES

- ✓ Identify a lead to coordinate NG911 transition efforts and liaison with state, local, tribal, and territorial partners, such as the Statewide Interoperability Coordinator (SWIC), on modernization efforts
- ✓ Establish a comprehensive list of ECCs within the agency and recommend ECC leadership use the SAFECOM and National Council of Statewide Interoperability Coordinators (NCSWIC) [NG911 Self-Assessment Tool](#) to determine current maturity state
- ✓ Develop or update governance, standard operating procedures, Continuity of Operations (COOP), and incident response plans
- ✓ Use change management best practices throughout NG911 transition
- ✓ Discuss funding mechanisms to support the NG911 transition project, staffing, and training needs
- ✓ Review the Emergency Communications Preparedness Center (ECPC) [Considerations for Establishing Agreements for NG911](#) document for helpful tips for NG911 transition
- ✓ Review public safety telecommunicator job descriptions to ensure they accurately reflect the evolving roles and responsibilities of a NG911 workforce<sup>6</sup>
- ✓ Prioritize cybersecurity of 911 and NG911 systems
- ✓ Join and engage with the [ECPC](#) to collaborate with other federal agencies to share lessons learned, drive consistency in implementation, and ensure interoperability

## WHERE CAN EXECUTIVES FIND ADDITIONAL NG911 RESOURCES?

- [SAFECOM/NCSWIC Preparing for Technological Transformation in ECCs](#)
- [SAFECOM/NCSWIC NG911 Incident-Related Imagery Impacts 101](#)
- [National 911 Program: NG911 Roadmap: Connecting Systems Nationwide](#)
- [National 911 Program: NG911 Interstate Playbook: Chapter 4](#)
- [Association of Public-Safety Officials \(APCO\) International's Definitive Guide to NG911](#)
- [NENA NG911 Public Safety Answering Point Requirements](#)

For additional information about the ECPC, contact [ecpc@cisa.dhs.gov](mailto:ecpc@cisa.dhs.gov) or visit <http://cisa.gov/ecpc>.



<sup>6</sup> The National 911 Program's [Public Safety Telecommunicator Reclassification Toolkit](#) includes resources to assist ECCs with developing public safety telecommunicator job descriptions, establishing or expanding public safety telecommunicator training programs, and developing a communications plan.

