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ONE HUNDRED FIFTHTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

March 27, 2017

To: Subcommittee on Communications and Technology Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Subcommittee Hearing on "Realizing Nationwide Next-Generation 911"

On **Wednesday, March 29, 2017, at 10:00 a.m. in room 2123 of the Rayburn House Office Building**, the Subcommittee on Communications and Technology will hold a hearing entitled "Realizing Nationwide Next-Generation 911."

I. BACKGROUND

In general, states and local governments operate the nation's 9-1-1 system. The approximately 6,800 individual 9-1-1 call centers, sometimes called public safety answering points (PSAPs), lie at the heart of the system. The 9-1-1 call takers are the first public safety officials to respond to an emergency, providing verbal instructions to those on the scene and dispatching first responders to assist, if necessary.

The first 9-1-1 call was made in 1968. Soon after, the nation began to upgrade this system to provide Enhanced 9-1-1 (E9-1-1). E9-1-1 service was a technological improvement to provide a caller's location automatically when a 9-1-1 call was made. As of 2013, 98 percent of 9-1-1 call centers could receive wireline location information and 97 percent could receive location information from at least one wireless carrier.[1] This location information is not always provided with a sufficient level of precision, however, particularly for wireless calls and calls from multi-line telephone systems. Another troubling problem is that sporadic 9-1-1 outages have been occurring with increasing frequency in recent years.

Next Generation 9-1-1 (NG 9-1-1) is the next iteration of 9-1-1 technology. The Emergency Services Internet Protocol Networks—or ESInets—that form the backbone of NG 9-1-1, are more redundant and resilient than traditional networks and can continue to operate even

[1] U.S. Government Accountability Office, *Most States Used 911 Funds for Intended Purposes, but FCC Could Improve Its Reporting on States' Use of Funds*, GAO-13-376 (Apr. 2013) (online at www.gao.gov/assets/660/653929.pdf).

if some parts of the network go down. For wireless calls, NG 9-1-1 has the potential to increase the accuracy of the location information when a 9-1-1 call is placed.

Additionally, by deploying these next generation networks, 9-1-1 call centers will be able to receive texts, images, and video. In conjunction with FirstNet's forthcoming National Public Safety Broadband Network, these features could give first responders better information before appearing on the scene of emergencies or disasters.

Comprehensive data on the current state of NG 9-1-1 deployment is unavailable. The federal 9-1-1 Implementation and Coordination Office (9-1-1 Office), nevertheless, reports that of the 46 states that responded to its 2015 inquiry, only 20 had adopted statewide plans to deploy NG 9-1-1.[2] The 9-1-1 Office is jointly run by the National Telecommunications and Information Administration and the National Highway Traffic Safety Administration.

II. FUNDING FOR NG 9-1-1

Currently, there is no official estimate as to how much funding is necessary to fully deploy NG 9-1-1. Some older studies estimate the cost to deploy NG 9-1-1 across the country to be in the billions of dollars.[3] The process of upgrading a legacy system to a next generation system is particularly expensive, because call centers are required to maintain both legacy and next generation equipment during the transition period. In 2012, Congress tasked the 9-1-1 Office with producing a cost estimate to analyze and determine detailed costs for specific NG 9-1-1 service requirements. That report is not yet complete, but anticipated by September 2017.

Some federal funding was recently made available to help states deploy NG 9-1-1, but the 9-1-1 office has not yet developed grant criteria or made any grants. In 2012, Congress authorized an allocation $115 million from spectrum auction revenues for state matching grants for NG 9-1-1 deployment. Grants under that law could only be made after other priorities in the Middle Class Tax Relief and Job Creation Act were funded.

In addition to the prospect of federal grants, states have funded some NG 9-1-1 deployments on their own using state appropriations and 9-1-1 fees assessed on consumers' telephone bills. The Federal Communications Commission (FCC) is required by law to annually publish a report on the fees collected to help pay for state 9-1-1 services. In 2015, states and territories collected over $2.6 billion in fees.[4] Thirty-six states and two territories reported spending the revenue collected from their 9-1-1 fees on upgrading their systems to NG 9-1-1.[5]

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[2] U.S. Department of Transportation, *2016 National 911 Progress Report* (Dec. 2016) (online at www.911.gov/pdf/National-911-Program-2016-ProfileDatabaseProgressReport-120516.pdf).

[3] Federal Communications Commission, *A Next Generation 911 Cost Study* (Sept. 2011) (online at apps.fcc.gov/edocs_public/attachmatch/DOC-309744A1.pdf).

[4] Federal Communications Commission, *Eighth Annual Report to Congress on State Collection and Distribution of 911 and Enhanced 911 Fees and Charges* (Dec. 2016) (online at apps.fcc.gov/edocs_public/attachmatch/DA-17-61A2.pdf).

[5] *Id.*

Some states have diverted their 9-1-1 fees, however, to pay for other, non-9-1-1 priorities. In 2015, eight states diverted more than $215 billion in 9-1-1 fees for non 9-1-1 purposes.[6] Federal law prohibits states that receive matching NG 9-1-1 grants from diverting fees.

III. FCC ACTION ON NG 9-1-1

The FCC has taken some actions to further expedite NG 9-1-1 deployment. It requires wireless carriers to deliver 9-1-1 texts to call centers capable of receiving those messages.[7] The FCC also requires wireless carriers to deploy a national emergency address database to help improve in-building dispatchable location for wireless 9-1-1 calls.[8] The FCC created the Task Force on Optimal PSAP Architecture to provide recommendations for how PSAPs can optimize security, operations, and funding as they transition to Next Generation 9-1-1. Importantly, the Task Force has focused on cybersecurity as part of this mandated work.

IV. WITNESSES

The following witnesses have been invited to testify:

Trey Forgety
Director of Governmental Affairs
National Emergency Number Association

Barry Ritter, ENP
Executive Director, Statewide 911 Board
State of Indiana

Walt Magnussen
Director, Internet2 Technology Evaluation Center
Texas A&M University

Mary A. Boyd
Vice-President, Regulatory Policy and External Affairs
West Safety Services

Steve Souder
Maryland Emergency Number (9-1-1) Systems Board
Former Director, Fairfax County 9-1-1

[6] *Id.*

[7] 47 C.F.R. § 20.18

[8] *Id.*