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EMERGENCY MANAGEMENT AGENCY

Testimony for the Senate Veterans Affairs & Emergency Preparedness Committee

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Pennsylvania Emergency Management Agency

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Good morning Mr. Chairman and members of the Veterans' Affairs and Emergency Preparedness Committee and Senate Committee on Communications and Technology. I am Jeff Boyle, Deputy Director for 911 at the Pennsylvania Emergency Management Agency (PEMA). Thank you for the opportunity to discuss Next Generation 911 (NG911) and its integration with the Nationwide Public Safety Broadband Network (NPSBN), also known as FirstNet.

911 is a vital part of public safety as the first point of contact in emergency situations. 911 centers, known as Public Safety Answering Points (PSAP's), processed over 9.5 million requests for emergency service from citizens and visitors to Pennsylvania in 2016. Today, our 911 system is facing technical challenges that have a direct impact on the ability of PSAPs to continue providing critical services to both the public and first responders. Consumer communications technology has outpaced improvements and capabilities in 911 and the public safety community in general. The 911 system must be enhanced to meet the public's needs and expectations, and provide equal access to emergency services for at-risk communities such as the deaf and hard of hearing. Act 12 of 2015 (Act 12) recognized the need to increase the capabilities of the 911 system and to facilitate the implementation of Next Generation 911 (NG911) in Pennsylvania.

NG911 is a necessary transition from the decades old legacy 911 system infrastructure to an internet protocol (IP) based 911 system. Communication to a PSAP today is primarily limited to a voice call with very little data, which was sufficient when calls were placed on a wireline phone inside a business or residence. Today, more than three-quarters of all 911 calls are placed on mobile devices, and the trend of communication currently includes, or will soon include, other modes of media such as livestreaming video, photos, text messages, and data from digitally connected items such as alarms, sensors, and video monitors. NG911 will support all modes of communication from the traditional wireline telephone to most recent sensor or device. NG911 also provides a more robust and interconnected infrastructure than today's legacy 911 systems that can support quick and efficient data-sharing capabilities throughout the entire 911 community. In addition, pre-planned and on-the-fly call routing functionality will allow PSAPs to share the call volume load during large scale incidents, or transfer calls if a PSAP is physically damaged or otherwise incapable of answering 911 calls. NG911 also allows for cost and operational efficiencies through regional or statewide system-sharing solutions and the retirement of expensive legacy technologies.

NG911 Progress

The Commonwealth's 911 community has been successful in advancing its 9 1-1 systems over a changing landscape since its formation. We are at the beginning of another significant period of change for our public

safety communications system. One of the great successes of Act 12 continues to be the close coordination between PEMA and the 9 1-1 community through the thirty-nine member 911 Advisory Board. Members of the Board include state agency representatives (PEMA, PSP, OA, PUC and OSFC), county representatives, first responder associations, local government associations, communications provider associations, along with members of the General Assembly. The 911 Advisory Board is supported by robust subcommittees focused on funding, technology, training, and quality assurance. PEMA, in consultation with the 911 Advisory Board, had significant accomplishments since the passage Act 12 that have set a solid foundation to implement and sustain a commonwealth-wide NG911 system.

Accomplishments include completing a physical inventory of each PSAP in 2016. A statewide 911 Plan, NG911 GIS Strategic Plan, and 911 system standards and requirements were adopted by PEMA in consultation with the 911 advisory Board. Many needed reforms have been implemented in the 911 Program to streamline business processes and to improve planning, budgeting, and oversight. A combination of increased revenue, streamlined business processes within the 911 Program, improved oversight, and incentivizing efficiencies have put Pennsylvania on the path towards a sustainable 911 Fund and Program. PEMA is currently in the process of obtaining aerial imagery of the Commonwealth to assist local efforts with developing and maintaining the GIS data sets necessary for supporting a statewide NG911 system. PEMA and the 911 Advisory Board continue to develop NG911 system requirements and a NG911 Implementation Plan.

NG911 and FirstNet

NG911 and FirstNet are two equally essential components of a comprehensive public safety communication system that are being planned and implemented in Pennsylvania and across the country. NG911 is a necessary upgrade of our legacy 911 system infrastructure to an internet-protocol platform that allows for more data-rich communication between the PSAPs and those calling 911 to request emergency services. FirstNet will provide a wireless broadband network between the PSAPs and first responder community. NG911 and FirstNet are two separate public safety systems but complementary of each other. FirstNet will serve first responders in the field while NG9-1-1 will serve them in the PSAP.

The success of NG911 and FirstNet depends on the ability of these two systems to share data. When coordinated, NG911 and FirstNet will greatly improve public safety communications by providing the seamless exchange of data between the public, our PSAPs, and first responders. In a NG911/FirstNet environment, information and data from the public and digitally connected devices will be routed to PSAPs through NG911.

Our dedicated and trained 911 personnel will review and coordinate all information and then send the data in real time through FirstNet to first responders in the field. In controlled cases, some pre-determined data may bypass the PSAP and be sent directly to the first responders – further decreasing notification time. Both systems are at a point in their planning and design in Pennsylvania where we can ensure these systems are interoperable, find efficiencies through shared resources, and coordinate on cybersecurity requirements.

PEMA has taken a collaborative approach with the 911 community on the planning, design, and forthcoming implementation of NG911. PEMA and the Pennsylvania State Police have taken a similar collaborative approach to ensure NG911 and FirstNet are coordinated efforts. PEMA and the PA State Police have been proactively meeting as part of the Public Safety Communications Council to ensure our efforts are coordinated and dedicated to making sure NG911 and FirstNet are well-integrated and secure. NG911 and FirstNet represent a significant opportunity to upgrade the public safety communications system. All stakeholders have a mutual interest in enabling the public safety community to share critical emergency information in real time. We look forward to the successful integration of these two important public safety initiatives.