Written Statement
of

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# "Oversight of FirstNet and the Advancement of Public Safety Wireless Communications"

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Good morning, Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee. Thank you for the opportunity to appear before you to discuss the Federal Communications Commission's efforts to implement the Middle Class Tax Relief and Job Creation Act of 2012 (Act), to support the First Responder Network Authority (FirstNet), and to perform the FCC's ongoing mission to enhance the interoperability of public safety and emergency communications.

## INTRODUCTION

As Chairman Wheeler stated earlier this week, our communications networks are changing – and fast. We are in the midst of a multi-faceted communications revolution that is quickly advancing as the packets of Internet Protocol (IP)-based communication replace the digital stream of bits and analog frequency waves. Where technological change and public safety intersect, there are challenges and also significant opportunities. Today we are at a crossroads – a place of transition – for the responders who save lives and keep people safe, and for the public who reach out for help in emergencies. Our charge at the FCC, working with our many federal, tribal, state and local partners, and industry, is to harness technological advancements to enable the public to communicate effectively to get the help they need when they need it, while laying the foundation to empower first responders with world-leading public safety communications systems.

Traditional public safety land mobile systems continue to provide mission-critical voice capability for first responders, and will continue to do so for some time. But they cannot support the data-rich applications that are becoming more and more necessary for public safety personnel to do their jobs. That is in part why Congress passed the Act, to provide for the creation of a nationwide interoperable wireless broadband network for use by first responders and the public safety community.

My testimony will describe our efforts to support FirstNet and also our efforts to improve the public's access to 911 and emergency services using wireless technologies. I will address two specific transitions that the Commission is responsible for in the Act: (1) the transition of the 700 MHz spectrum to FirstNet, and (2) assisting the transition of the legacy 911 system to Next Generation 911 (NG911). As I will discuss briefly today, the Commission has taken significant steps to further both of these transitions. Finally, I will highlight other important 911 developments and touch on life-saving advancements in wireless emergency alerting systems.

## I. SUPPORTING THE MISSION OF FIRSTNET

In February 2012, when Congress passed the Act, it provided specific tasks for the FCC, as well as for a number of other agencies, in supporting the mission of FirstNet.

For example, one of the first tasks the Act directed the FCC to accomplish was to establish the Technical Advisory Board for First Responder Interoperability within 30 days. The Interoperability Board was given 90 days to develop minimum technical requirements to ensure a nationwide level of interoperability for the FirstNet network, and upon the Interoperability Board's submission of its recommendations to the

Commission, the Commission had 30 days to approve and transmit the recommendations to FirstNet. The Commission met each of these deadlines.

Beyond these specific and important tasks, the Commission has also worked to fulfill its statutory obligation to "take all actions necessary to facilitate the transition" of the 700 MHz public safety broadband spectrum to FirstNet.

Examples in this category include a number of regulatory actions by the Commission to facilitate FirstNet's use of its spectrum. Last year, the Commission issued a new license to FirstNet, providing the spectrum that Congress designated in the Act, to enable FirstNet to move ahead with its mission.

More recently, at its October 28, 2013 meeting, the Commission unanimously adopted a Report and Order consolidating basic technical rules for this spectrum that will help to, among other things, prevent harmful interference and promote prompt certification of equipment to be used in the band.

The spectrum that Congress designated for FirstNet included two swaths of spectrum for which there previously had been two different sets of Commission rules. This presented the need for a unified set of rules to allow equipment to be certified and to encourage competition and innovation in that market, including new entry. The Commission went through a public comment process, and FirstNet filed a letter in early August supporting the Commission's proposals. The Bureau acted quickly to open a window for comment on the FirstNet filing, by September 4th. In all, we received nearly 40 comments on the NPRM and Public Notice from a variety of stakeholders, including public safety, states and localities, vendors and carriers. The rules the Commission adopted were supported by the record and consistent with the comments provided by FirstNet and others.

We have also taken many other steps to facilitate the spectrum transition. This includes, for example, adopting a framework to evaluate whether certain early public safety broadband network deployments that were nearing completion when the legislation passed should proceed. Under that process, we have issued and renewed Special Temporary Authority (STA) for Harris County, Texas, to proceed with a public safety LTE deployment around the Port of Houston in FirstNet's licensed spectrum. This STA has now been operational for a continuous period of 450 days, and has the support of FirstNet. The most recent renewal was in August. In addition, FirstNet itself has entered into two leases: one in the Los Angeles area and one in the state of New Mexico.

We recognize that we have more to do in transitioning the spectrum and complying with the Act. For example, in some areas, there are incumbent public safety narrowband operations in the FirstNet spectrum, which predate the designation of this spectrum for broadband use. We have solicited public comments on how to address this question. The Act also provides that in the event that any state seeks to exercise the "opt-out" rights that are provided for it under the Act, the Commission is responsible for reviewing and either approving or disapproving the state's opt-out plans based on specific statutory criteria. We intend to provide states and FirstNet with clear guidance on how

that will work before states have to choose whether to opt-out under the Act.

The Commission is also considering how best to implement the T-band provisions of the Act, which require future relocation of public safety systems in the T-Band and auction of the vacated spectrum. The Bureau issued a Public Notice on this issue, received comments over the summer, and is reviewing related matters.

We will work with all stakeholders and our federal partners to ensure that these transitions occur as seamlessly and transparently as possible, and with sufficient guidance from the Commission where it is needed.

We also understand that traditional public safety land mobile radio will remain important during this transition, and we know there is a need to maintain the integrity of these systems, which support mission critical voice communications.

Apart from the tens of thousands of licensing applications and modifications that the staff routinely process, the Commission has several open rulemakings addressing land mobile systems to ensure that they operate efficiently, effectively and without harmful interference. For example, the Commission is considering amending the 700 MHz narrowband spectrum rules to revise narrowbanding deadlines, free up additional channels, and provide more assurance that equipment for use on interoperability channels is, in fact, interoperable.

## II. ENCOURAGING THE RAPID DEPLOYMENT OF NG911

Another transition the public safety community is facing can revolutionize the way the public seeks help.

Beyond the provisions addressing FirstNet, the Act directed the Commission to undertake a number of important tasks related to the transition of the nation's 911 infrastructure to Next Generation 911 (NG911). Again, I am pleased to report that the Commission has met all of its obligations in this regard, and has otherwise vigorously pursued action on this topic to aid carriers, consumers and public safety answering points (PSAPs) in advancing the transition.

At the outset, let me emphasize that the transition to NG911 is not only important in its own right, it is also tightly interwoven with the development of the network to be built by FirstNet.

In fact, NG911 and the FirstNet network must be seen as complementary components of an end-to-end broadband ecosystem, in which next generation PSAPs will serve as collection points for data that comes in from 911 callers, telematics providers like OnStar, and others, which can then be disseminated to first responders, likely using the FirstNet network. So when a PSAP receives video of an accident from a witness sending it to 911, it can send the video to the response personnel that need the information quickly and seamlessly. This is the data-rich future for which it is imperative that we lay the foundation now.

The FCC is actively pursuing steps to facilitate the transition to NG911. One of the first and most important of these is to further the development of text-to-911. Text messaging has become a part of the fabric of modern day life. In an emergency, people expect to be able to reach out for help using the same means of communications that they use every day. It turns out that they do just that. California data shows that 75% of calls to 911 are now made on wireless phones. Text-to-911 is now being implemented in some areas and it has enhanced public safety and saved lives. Other data indicates that an increasing number of wireless calls to 911 originate indoors. These developments present challenges including, for example, obtaining accurate 911 wireless caller location on these calls. This is a vital topic on which we held a major workshop earlier this week at the FCC, drawing wide participation.

In 2012, Americans sent more than 2 trillion text messages.[1] Persons with hearing and speech disabilities are among those increasingly turning to text-based applications to stay connected, leaving behind older technologies like TTY in favor of more mainstream and generally accessible formats.

It is natural, therefore, that in an emergency people will increasingly expect to be able to use text as a means of contacting 911. While making a voice 911 call remains the preferred option where possible, there are times and situations where a voice call may be impossible, inadvisable, or both. Therefore, even as we consider the longer path to NG911, we must start by addressing text messaging in the short term.

In December of last year two major public safety organizations -- the Association of Public Safety Communications Official-International (APCO) and the National Emergency Number Association (NENA) -- and the four major wireless carriers – AT&T, Verizon, Sprint Nextel and T-Mobile – signed a voluntary agreement that committed each of the four major carriers to provide text-to-911 service by May 15, 2014, to PSAPs which request such a service. The Commission subsequently adopted rules that became effective September 30, 2013, requiring carriers and certain other text providers to provide a bounce back message to consumers where text-to-911 is not yet available so they know whether their messages have been delivered to 911 authorities.

The Commission is now considering next steps in the text-to-911 proceeding with respect to nationwide implementation of text-to-911. While we do so, some carriers and PSAPs are already deploying text-to-911 in specific states and local jurisdictions. These deployments have been successful, and in a few instances, they have already enabled first responders to successfully resolve emergencies and even save lives. These deployments are also providing valuable experience that will help smooth the broader transition to text-to-911 and NG911.

Finally, I would like to highlight one of the other tasks that the Act assigned the Commission in relation to NG911 -- the task of reporting back to you on recommendations that Congress could implement to improve the legal and regulatory

[1] *See* http://www.ctia.org/advocacy/research/index.cfm/aid/10323 (last viewed Nov. 18, 2013).

framework for NG911 services. You directed the Commission to submit such a report within a year of the Act's enactment, and we did so last February.

I mention the report because it finds that Congress can play a key role in assisting the efforts of state and local jurisdictions as they begin to bring NG911 on line. One of the report's lead recommendations is that Congress should create incentives for states to become "early adopters" of NG911. This would accelerate the NG911 transition in these states while also generating valuable experience with NG911 implementation that other states can follow.

We also recommended that Congress encourage states to establish or empower state 911 boards or similar state-level governance entities to provide technical and operational expertise. The report made other recommendations as well, including recommendations designed to identify areas where Congress could assist in the elimination of legacy state regulations that may be impeding NG911 deployment while providing incentives for states to modernize their laws and regulations to accommodate NG911.

Finally, it is appropriate to mention the successful use of wireless emergency warnings to alert the public of potential emergency situations. In the Warning Alert and Response Network (WARN) Act, Congress laid the foundation for wireless phones to provide geographically targeted alert and warning information to the public, and the FCC has worked hard with the Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), industry and others, to make this a reality. This resulted in the launch of the Wireless Emergency Alert (WEA) program in the summer of 2012, which alerting authorities are now using to warn mobile users of imminent danger. Just this past weekend, mobile users in the path of tornadoes in Illinois received tornado warnings from the National Weather Service sent via WEA, and reports indicate that these warnings helped some people get to safety before tornadoes struck. WEA warnings have also helped to recover kidnapped children, evacuate areas during superstorm Sandy, and otherwise alert people to get to safety in an emergency. To date, more than 8,600 WEA alerts have been delivered since the program began.

## CONCLUSION

In sum, transition is the watchword. The Commission is dedicated to steward these changes in a responsible and transparent manner, and we will continue to work with all stakeholders to do so. I thank you for your time this morning, and the opportunity to testify before you today.