

# Public Safety Technology and Solutions: Market Analysis and USA Forecasts 2016 - 2020

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## Abstracts

Enhanced 9-1-1 is a North American telephone network (NANP) feature of the 9-1-1 emergency-calling system that automatically associates a physical address with the calling party's telephone number. A second phase of Enhanced 9-1-1 service allows a wireless device to be located geographically using various radio-location technologies from the cellular network, or by using a Global Positioning System (GPS) built into the phone itself.

Originally adopted in 1996, and with a last major revision in 2010, location determination standards were based solely on the measured performance of outdoor wireless 9-1-1 calls. Moving beyond phase II, more recent efforts from the FCC and public safety organizations are leading towards dramatically improved indoor location determination.

No single technology approach will solve the challenge of improved indoor location accuracy, but rather a mixture of solutions such as WiFi, RFID, Bluetooth, and others

Next Generation 9-1-1 (NG911) is an initiative to update 9-1-1 service infrastructure in the United States and Canada. NG911 migration is focused on transitioning the current traditional 9-1-1 environment to an operational model based on secure IP transport, Geographic Information Systems (GIS), modern network functional elements and changing responsibilities between a telecommunications service provider and a local 9-1-1 authorities. Public safety agencies look to lower operating costs through conversion to less-expensive IP-based systems and provide the public with more advanced communications options, such as text-to-911 and other multi-media communications (video, photos, etc.).

Public safety is much more than just dialing an emergency number as integrated

communications and information is critical for optimal emergency response and coordination. Accordingly, all industry constituents are looking towards 4G/LTE to provide major improvements over existing LMR communications systems for emergency responders. It is anticipated that LTE will provide the high-speed data performance necessary to support the multimedia applications on which today's public safety agencies are increasingly relying.

Emerging technologies such as Augmented Reality (AR) are expected to improve emergency response effectiveness and also protect first responders themselves. Coupled with LTE, 5G, and other broadband wireless systems, AR and other technologies will bring about an entirely new class of public safety applications and services that are heretofore inconceivable.

Leveraging Big Data Analytics and Internet of Things (IoT) technologies for public safety is also important for the future of public safety. There is an increasing demand for ubiquitous data connection for the public safety community. Data connectivity of the future will come from many sources, many of which will be machine-to-machine based, requiring little or no human interaction. There is also an opportunity to improve public safety by leveraging data analytics, especially in the area of real-time processing at the edge.

This report evaluates the current state of public safety technology and solutions and assesses emerging technologies and potential future solutions. The report also provides forecasts for public safety technology spending in the United States for 2016 through 2020. All purchases of Mind Commerce reports includes time with an expert analyst who will help you link key findings in the report to the business issues you're addressing. This needs to be used within three months of purchasing the report.

#### Report Benefits:

Forecasts for USA 2016 to 2020

Understand current public safety technologies

Identify emerging tech and solutions for public safety

Understand the use of Big Data and IoT for public safety

Learn about GIS, positioning, and location management methods

Learn about the impact of LTE on next generation public safety apps

R&D and planners in other regions will learn about USA public safety

Target Audience:

Network operators

System integrators

LMR radio suppliers

Public safety agencies

Public safety app developers

Network infrastructure providers

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