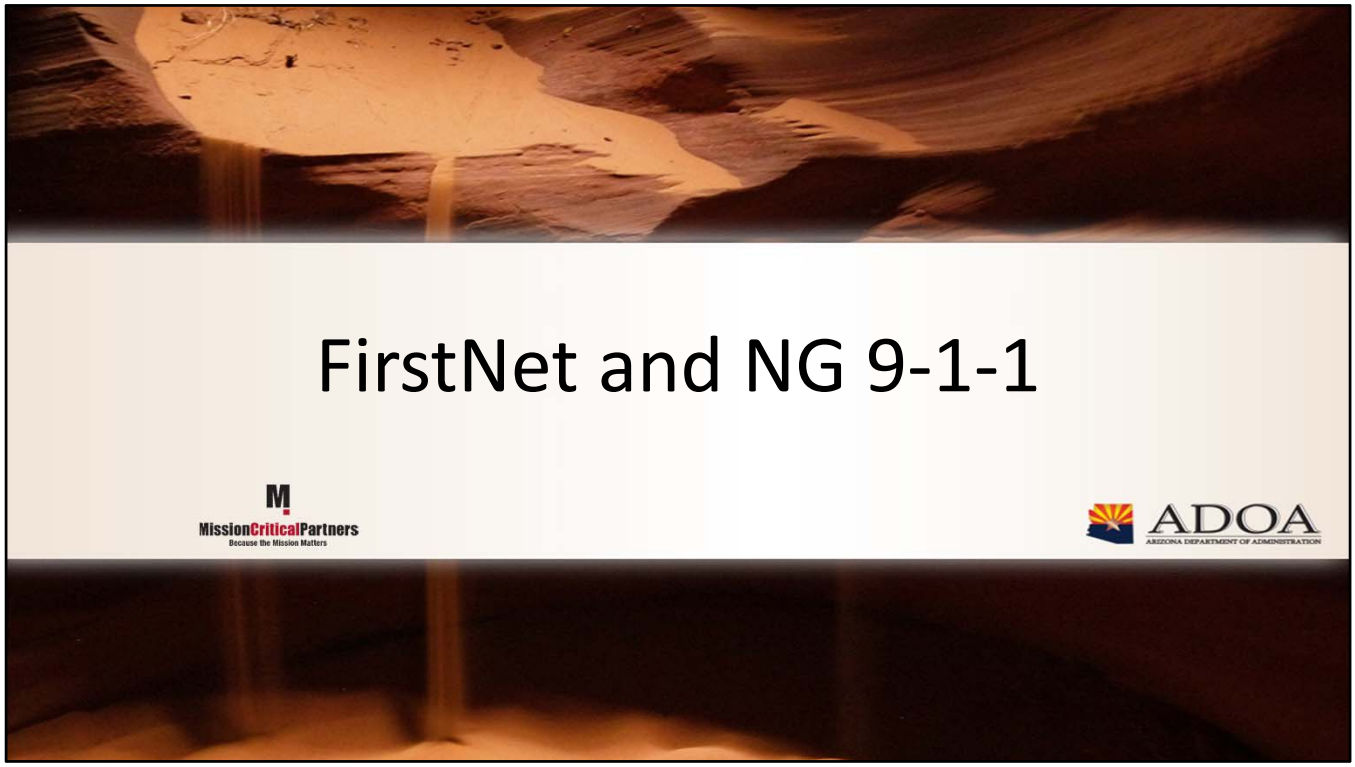
FirstNet and NG 9-1-1
MissionCriticalPartners
Because the Mission Matters
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NG 911 and FirstNet will converge at the PSAP

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In the NG911 environment, an IP network will be employed to connect the facilities of wireless and wireline carriers to those of PSAPs. PSAPs will be nodes on this network—known as an Emergency Services IP Network (ESInet)—that will connect them to wireless and wireline telephony service providers, other PSAPs, and other public safety facilities.

Implementation and adoption of NG911 and the NPSBN will provide PSAPs with the ability to receive no only text but video and images from citizens and first responders, thereby providing a tool that will improve situational awareness, in turn enhancing first responder safety and their ability to protect citizens and property. NG911 removes most of the constraints regarding the reception and transmission of text, video and images.

It is critical that any data that flows into and out of the PSAP is secure. This is particularly true of any information that might be subject to the provisions of the Health Insurance Portability and Accountability Act (HIPAA), for instance, video and images of wounds suffered by the victim of a traffic accident captured by first responders and/or citizens and transmitted to the PSAP.

- FirstNet and NG911 alignment

NG911 and FirstNet have shared goals.

- Provide accurate and complete information to first responders to enhance safety and service to the public
- Technology modernization
- National focus for broadband connectivity
- Funding and governance

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The FirstNet network supports PSAPs per national and local regulatory requirements. Although a PSAP is also considered a PSEN, a PSAP does not have a direct connection to the end-user devices. Where available, access to PSAPs will be made directly via IP through the IMS Core. For those PSAPs which have not upgraded to provide IP access, connectivity is made via the traditional circuit-switched PSTN. AT&T has designated the PSEN interface to support multiple functions, such as application and services access, PSAP and Enhanced 911 (E911) integration, and agency portals. This includes local and national databases. Several applications or services may not be available during the Initial Operational Capability (IOC) timeframe but are projected for IOC-4 to Final Operational Capability (FOC). This includes items such as data sharing, CAD, location services, and NG911 and Emergency Services IP Network (ESInet) integration.

- What's next….

Enabling and managing it all

New data systems will deliver new and different capabilities for emergency response. Some opportunities we see include:

- Real-time video streams
- State-of-the-art surveillance systems
- Geofencing
- Video communication with first responders
- Social media alerts and monitoring
- Traffic light control systems
- Text-to-911 and video-to-911
- Facial recognition software
- ALPR systems
- Gunshot-alerting systems

PSAP FirstNet Planning

- Continue to engage PSAP mangers and technical staff during the deployment of the NPSBN and convene a technical working group to develop plans for integration with FirstNet.
- Determine essential steps to integration of FirstNet with PSAPs in conjunction with NG911 to provide basic wireless data services, interoperability with existing LMR voice radio system, and interoperability of PTT on LTE with other public safety entities.
- Develop a plan that details the necessary steps that are required to integrate a multimedia content system the purpose of which is to capture, route, display, and archive images, text and video content and to integrate with the CAD system to affiliate content with an incident record.
- Begin Planning for the impact on PSAP staff

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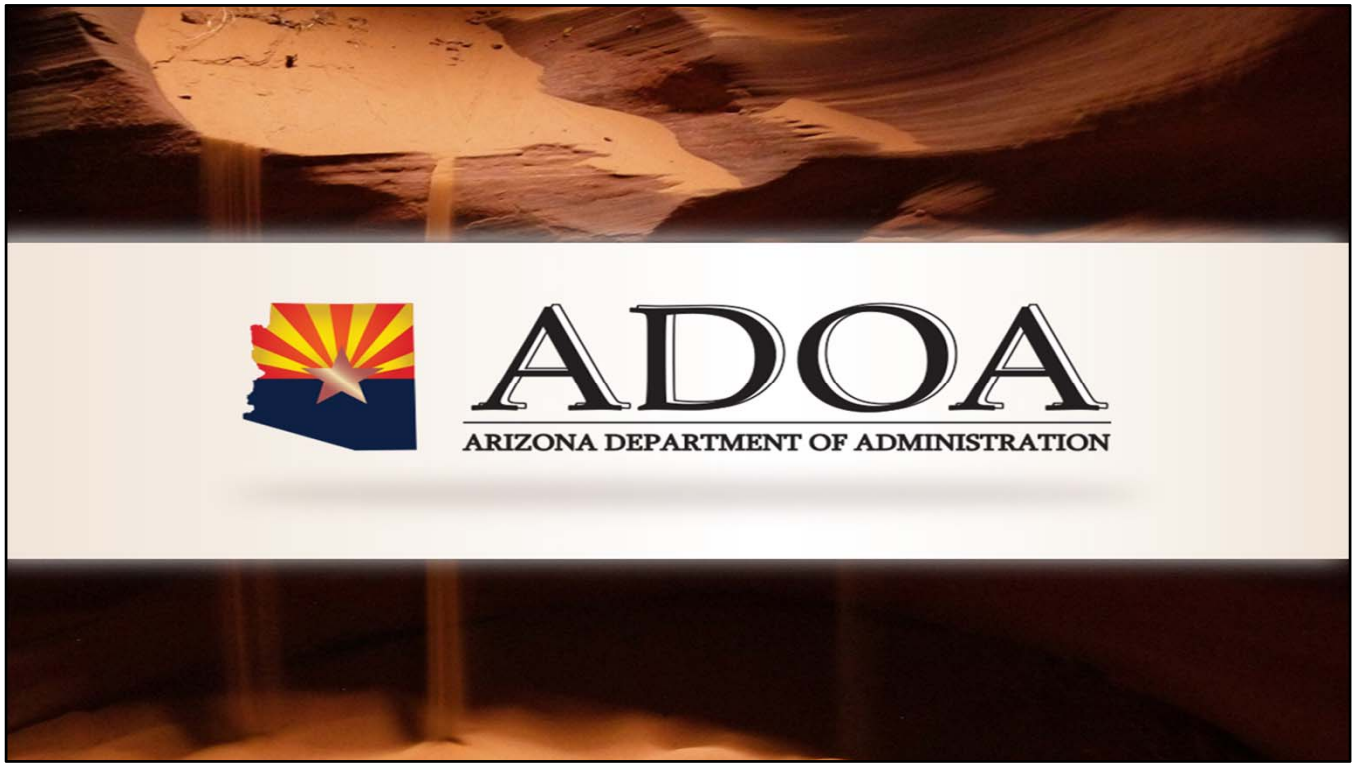
The essence of every legitimate 911 call is that people's lives and/or property are at significant risk, and that every second matters. This makes the telecommunicator's job inherently stressful. Those stresses will rise quickly and profoundly if PSAPs are not positioned well to handle the enormous amount of data that will be generated in an NPSBN/NG911 world.

This is not a matter of increasing staff, even if that is possible—which often it is not given the fiscal restraints under which many, if not most, PSAPs operate today. Even if adequate funding was available, there is no reasonable number of staff that would be capable of processing the enormous amount and new types of data that will be available in the future. Instead, PSAPs will need to make numerous major operational and policy changes.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