Deploying FirstNet Cellular Network

Anchorage Fire Department

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Anchorage Fire Department

Mission Statement:

To serve our community, before, during, and after an emergency.

Operational Overview - Batallion Chief Jim Dennis

FirstNet – History

- 9/11 Terrorist Attacks
- March 2010 FCC follows the 911 Commission's recommendation to create a nationwide public safety network.
- February 2012 The FirstNet Authority was authorized to develop and oversee the dedicated nationwide network for first responders.
- March 2017 AT&T awarded contract to provide the capabilities for FirstNet to be built.
- December 2017 All U.S. states & territories opt in.
- Spring 2018 Municipality of Anchorage awards AT&T FirstNet communications contract for Public Safety Agencies

FirstNet Goals

The FirstNet Mission is to deploy, operate, maintain, and improve the first high-speed, nationwide wireless broadband network dedicated to public safety.

FirstNet Infrastructure

The First Responder Network Authority is the government organization responsible for achieving the goals. Band 14 is the high quality spectrum that has been dedicated by the government specifically for FirstNet. This network is being built out in a public/private partnership with AT&T. It provides good coverage in rural and urban areas, penetrates buildings and walls easily and covers larger geographic areas with less infrastructure. Band 14 also enables high-power equipment with the ability to radiate 6X what is allowed on an LTE system.

FirstNet Advantages

- Additional coverage for underserved areas
- Additional capacity for urban areas
- Secure, interoperable network for interagency public safety communication
- Priority and preemption on existing AT&T cellular networks
- Competitive nationwide pricing
- Devices and applications built for Public Safety
- Mobile satellite backhaul capabilities
- Mobile Device Management
- Strong Partner Relationships (AirWatch, Cradlepoint)
- Consolidated purchasing and maintenance agreements with partners

AFD Deployment of FirstNet

2018 - MOA Contract Award

2018 – MDM AirWatch deployment

2019 – FirstNet cellular phones configured and deployed to AFD personnel and apparatus

2019 - FirstNet migration for apparatus data

2019 – Cradlepoint modem deployment

COMPLETE!

AFD Dispatch Process

• Our goal is meet the needs of our community by responding in the shortest amount of time with the most appropriate resources, while maintaining operational awareness of the needs of the Municipality overall.

How do we achieve this goal?

Station and device alerting when a incident is assigned

AVL tracking and status of apparatus

Separate triage software applications for fire and medical emergencies

CAD system that evaluates road speeds, vehicle and staff capabilities, vehicle location to determine closest unit

CAD system that is configured with response plans for different types of incidents and emergencies

Computers in the apparatus that receive incident and mapping data

Training goals and programs for all AFD staff

Continuous process evaluation and improvement

Implementing technology

Incident and Mapping Data



AFD FirstNet Infrastructure

AFD apparatus are equipped with Cradlepoint modems that provide FirstNet cellular connectivity and GPS data.

FirstNet cellular connectivity provides bidirectional communication between apparatus computers and AFD Dispatch. It also provides MOA network access in the apparatus, as well as an individual wireless networks in each apparatus. Initial incident data is passed to the apparatus computers. Updates are sent as required. Apparatus computers provide current and unit status details back to dispatch.

AFD Success with FirstNet Implementation

- Increased uptime with improved cellular connectivity
- Decreased call outs for apparatus computers
- Improved modem configuration management and remote access
- New management of mobile devices (iPhones, iPADs, etc) and standardization of deployed applications

• Questions?