



Funding and Maintaining Public Safety Radio Systems

SAFECOM

NCSWIC

Public Safety Radios Provide Reliable Communications During Emergency Response Operations

Since the 1930s, public safety agencies (e.g., police, fire, and emergency medical services) have purchased and deployed Land Mobile Radio (LMR) systems to enable responders to talk to one another, dispatch centers, and Incident Command during emergency response operations. The technology proved to be the most reliable in the challenging public safety environment.

State and local agencies invested millions of dollars in LMR systems (e.g., communication towers, radio equipment, devices). As a result, there is significant infrastructure in place to support LMR and mission critical communications. First responders are trained and experienced in LMR technologies and protocols. Its constant use has enabled responders to adapt the technology to a variety of scenarios, which has proved invaluable at keeping responders and the public safe.

Over the years, public safety users have shared guidance, best practices, and lessons learned from using LMR technologies with the public safety community, increasing the reliability and resiliency of this technology in all situations.

LMR technologies are a daily lifeline for police, fire, and EMS personnel. LMR is essential to response and needs continual care and maintenance to ensure it is operating effectively. For more information about LMR systems, see the [Land Mobile Radio 101 document](#).

New Technologies Can Enhance, But Cannot Replace Current Communications Capabilities

In 2012, the federal government passed legislation that allocated funding for the First Responder Network Authority (FirstNet) - an independent authority established to develop and deploy a nationwide public safety broadband network (NPSBN). FirstNet will provide a single platform for public safety responders and officials at all levels of government, to communicate, using commercial broadband standards (i.e., Long-Term Evolution [LTE]) and technologies.

Public safety agencies are excited about the capabilities FirstNet will offer (e.g., faster data transmission, increased interoperability, enhanced video), but recognize that not all capabilities will be available at once.

Initially, FirstNet will provide advanced data capabilities for all users, at all levels of government, **but will NOT offer everyday mission critical voice capabilities for users.**

“FirstNet can’t predict the arrival of mission critical voice in part because the standards are still under development.”

As a result, FirstNet has advised public safety agencies to continue to fund and maintain LMR systems, until mission-critical voice capabilities are functional under FirstNet.

For more information on this topic, see the [Land Mobile Radio for Decision Makers](#) document. Also, see FirstNet’s [statements](#) on the need to sustain LMR systems for mission critical voice.

“Need to Know” When Funding Public Safety Radio Systems

When funding LMR systems, State, local, Tribal, and Territorial officials should consult with their SWIC to ensure the project supports the [statewide plan](#) to improve interoperability. To find the SWIC for your state, visit the [NCSWIC Contact Information page](#).

LMR systems must adhere to certain technical standards. The [LMR for Project Managers](#) document provides additional information about technical standards for LMR investments. This paper provides an overview of the Project 25 (P25) suite of standards used to ensure that equipment purchased is standards-based and interoperable, regardless of vendor.

All public safety communications projects funded through federal grants must adhere to the [SAFECOM Guidance on Emergency Communications Grants](#). The SAFECOM Grant Guidance provides guidance on planning and coordinating public safety communications projects, grants best practices, and technical standards that help ensure projects are compatible and interoperable.

Lastly, grants managers should review [Improving Grant Management: SAFECOM Recommendations for Public Safety Agencies](#), which encourages grantees to tie grants’ objectives to risk assessments, develop strong measures of success, and strengthen internal controls on use of grant funds. This guidance helps ensure grants are effective and impactful.

How to Support Public Safety

1. Inform decision-makers and elected officials about LMR systems and capabilities.

Leverage the [LMR Trio](#) documents to educate state and local officials about LMR technologies and issues. Officials should know LMR systems are like other technologies—they need to be updated and/or replaced often.

2. Provide funding and resources for technology refresh and/or replacement of radio systems.

LMR systems require resources for ongoing maintenance, operations, and life cycle upgrades. In 2015, SAFECOM and NCSWIC collected examples of how state and local governments are funding improvements to LMR systems. Stakeholders can leverage the [Funding Mechanisms for Public Safety Communications Systems](#) document which provides specific examples of funding methods used by states, territories, and localities to support public safety communications projects, and upgrades to LMR systems. Stakeholders can also leverage the [Emergency Communications Financial Assistance Programs](#)—the annual list of grants funding emergency communications, produced by DHS each year.

3. Support the people managing LMR systems.

Fully fund the [Statewide Interoperability Coordinator \(SWIC\) in your state](#), and agencies managing LMR systems.

Resources

This document was developed by the SAFECOM/NCSWIC Funding and Sustainment Committee, with support from the Department of Homeland Security (DHS) Office of Emergency Communications (OEC). It reflects the expertise and knowledge of SAFECOM and NCSWIC public safety members, and OEC’s continual engagement with public safety stakeholders to collect and share lessons learned in funding and sustaining public safety communications systems.

For more information on LMR and the other documents presented in this brochure, please see: <http://www.dhs.gov/safecom/funding>

SAFECOM and the NCSWIC are public safety advisory groups, supported by the Department of Homeland Security (DHS) Office of Emergency Communications (OEC), dedicated to improving emergency communications and interoperability.



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