How to Support LMR

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

Use the LMR Trio to educate public safety officials on LMR technologies and issues. Officials should know that LMR systems are like other technologies and must be regularly updated or replaced.

Provide funding and resources for technology refresh or system replacement

LMR systems require resources for ongoing maintenance, operations, and lifecycle upgrades. Officials can use the Funding Mechanisms Guide and the Value Analysis Guide for information on finding and prioritizing funding for public safety communications systems.

Support the people managing LMR systems within your state, territory, or tribe

Fully fund the Statewide Interoperability Coordinator (SWIC) in your state/territory, their staff, and others managing LMR systems. Without a designated, full-time SWIC or SWIC Program, states/territories are not eligible for certain federal grants.
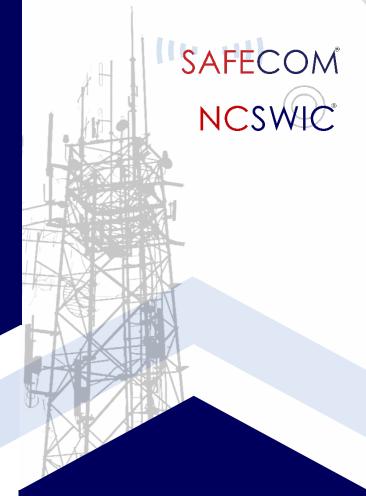
SAFECOM & NCSWIC

SAFECOM and the National Council of Statewide Interoperability Coordinators (NCSWIC) developed this brochure in coordination with the Cybersecurity and Infrastructure Security Agency (CISA). SAFECOM includes more than 70 members representing federal, state, local, and tribal emergency responders and associations, while NCSWIC encompasses SWICs and their staff from 56 states and territories. For more information, visit the SAFECOM or NCSWIC website.

Resources

For more information on how to fund and sustain public safety communications systems, visit the SAFECOM Funding Resources webpage. Stakeholders can also reference CISA's grant guidance documents and a list of grants funding emergency communications, regularly updated by CISA. Lastly, the SAFECOM Technology Resources webpage contains guidance on LMR and other technologies used by public safety.

SAFECOM
NCSWIC

Funding and Sustaining Land Mobile Radio Systems

LMR Provides Reliable Communications

Since the 1930s, public safety agencies have deployed land mobile radio (LMR) to support mission-critical communications. State, local, tribal, and territorial agencies have invested millions of dollars in LMR systems, and as a result, there is significant infrastructure in place. Its constant use has enabled responders to adapt LMR technology to a variety of scenarios, which has proved invaluable at keeping responders and the public safe.
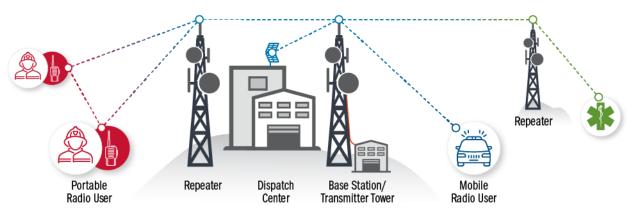
LMR technologies are a daily lifeline for emergency responders and public safety officials; their systems and equipment need continual care and maintenance to ensure effective operations. For more information about LMR systems, see the LMR Trio Part 1 document.

LMR and FirstNet

In 2012, the First Responder Network Authority (FirstNet) was established to develop and deploy a nationwide public safety broadband network. While the federal government has developed minimum interoperability standards for FirstNet, technical requirements and protocols that ensure the integration and interoperability between systems connected by the network are still under development.

As a result, many public safety agencies continue to rely on LMR as a primary means of communication. The community will likely integrate new or improved LMR capabilities, features, and services for years to come to elongate the return on sizable investments. For more information, see the LMR Trio Part 2 document and Public Safety Communications Evolution brochure.

"Need to Know" Funding Information

When funding LMR systems, officials should consult with their SWIC to ensure the project supports the Statewide Communication Interoperability Plan and National Emergency Communications Plan. To find the SWIC for your state/territory, visit the NCSWIC Contact Information webpage.

LMR systems must additionally adhere to certain technical standards. The LMR Trio Part 3 document provides information about technical standards for LMR investments, including information on Project 25 compliance.

All emergency communications projects funded through federal grants must also adhere to the SAFECOM Guidance on Emergency Communications Grants, which provides recommendations, best practices, and resources to public safety agencies. Understanding interoperable communications requires more than technology, the guidance recommends applicants to:

- Develop standard operating procedures and agreements that provide mutually-approved processes for coordination;

- Invest in training, exercises, and activities that enhance operational coordination; and

- Recognize cybersecurity risks and continually invest in mitigation measures, including activities that encourage continuity and resilience.

Basic Components of an LMR System

Portable Radio User — Repeater — Dispatch Center — Base Station/ Transmitter Tower — Mobile Radio User — Repeater