# IOWA
# STATEWIDE COMMUNICATION
# INTEROPERABILITY PLAN

**ISICSB**

Iowa Statewide Interoperable
Communications System Board

911

## September 2024

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# TABLE OF CONTENTS

# LETTER FROM THE STATEWIDE INTEROPERABILITY COORDINATOR

Greetings,

As the Statewide Interoperability Coordinator (SWIC) for Iowa, I am pleased to present to you the 2024 Iowa Statewide Communication Interoperability Plan (SCIP). The SCIP represents the state's continued commitment to improving emergency communications interoperability and supporting the public safety practitioners throughout the state. In addition, this update meets the requirement of the current United States Department of Homeland Security grant guidelines.

Representatives from the Iowa Statewide Interoperable Communications System Board (ISICSB) collaborated to update the SCIP with actionable and measurable goals and objectives that have champions identified to ensure completion. These goals and objectives focus on governance, technology and cybersecurity, and funding. They are designed to support our state in planning for emerging technologies and navigating the ever-changing emergency communications landscape. They also incorporate the SAFECOM/National Council of SWICs (NCSWIC) State Interoperability Markers which describe Iowa's level of interoperability maturity by measuring progress against 25 markers.

As we continue to enhance interoperability, we must remain dedicated to improving our ability to communicate among disciplines and across jurisdictional boundaries. With help from public safety practitioners statewide, we will work to achieve the goals set forth in the SCIP and become a nationwide model for statewide interoperability.

Sincerely,

Haley Nichols
Iowa Statewide Interoperability Coordinator
Iowa Statewide Interoperable Communications System Board

# INTRODUCTION



The SCIP is a three-year strategic planning document that contains the following components:

- **Introduction** – Provides the context necessary to understand what the SCIP is and how it was developed. It also provides an overview of the current emergency communications landscape.
- **Vision and Mission** – Articulates Iowa's vision and mission for improving emergency and public safety communications interoperability over the next one-to-three-years.
- **Governance** – Describes the current governance mechanisms for communications interoperability within Iowa as well as successes, challenges, and priorities for improving it. The SCIP is a guiding document and does not create any authority or direction over any state or local systems or agencies.
- **Technology and Cybersecurity** – Outlines public safety technology and operations needed to maintain and enhance interoperability across the emergency communications ecosystem.
- **Funding** – Describes the funding sources and allocations that support interoperable communications capabilities within Iowa along with methods and strategies for funding sustainment and enhancement to meet long-term goals.
- **Implementation Plan** – Describes Iowa's plan to implement, maintain, and update the SCIP to enable continued evolution of and progress toward the state's interoperability goals.

The Emergency Communications Ecosystem consists of many inter-related components and functions, including communications for incident response operations, notifications and alerts and

warnings, requests for assistance and reporting, and public information exchange. The primary functions are depicted in the 2019 National Emergency Communications Plan.[1]

The Interoperability Continuum, developed by the Department of Homeland Security's SAFECOM program and shown in Figure 1, serves as a framework to address challenges and continue improving operable/interoperable and public safety communications.[2] It is designed to assist public safety agencies and policy makers with planning and implementing interoperability solutions for communications across technologies.
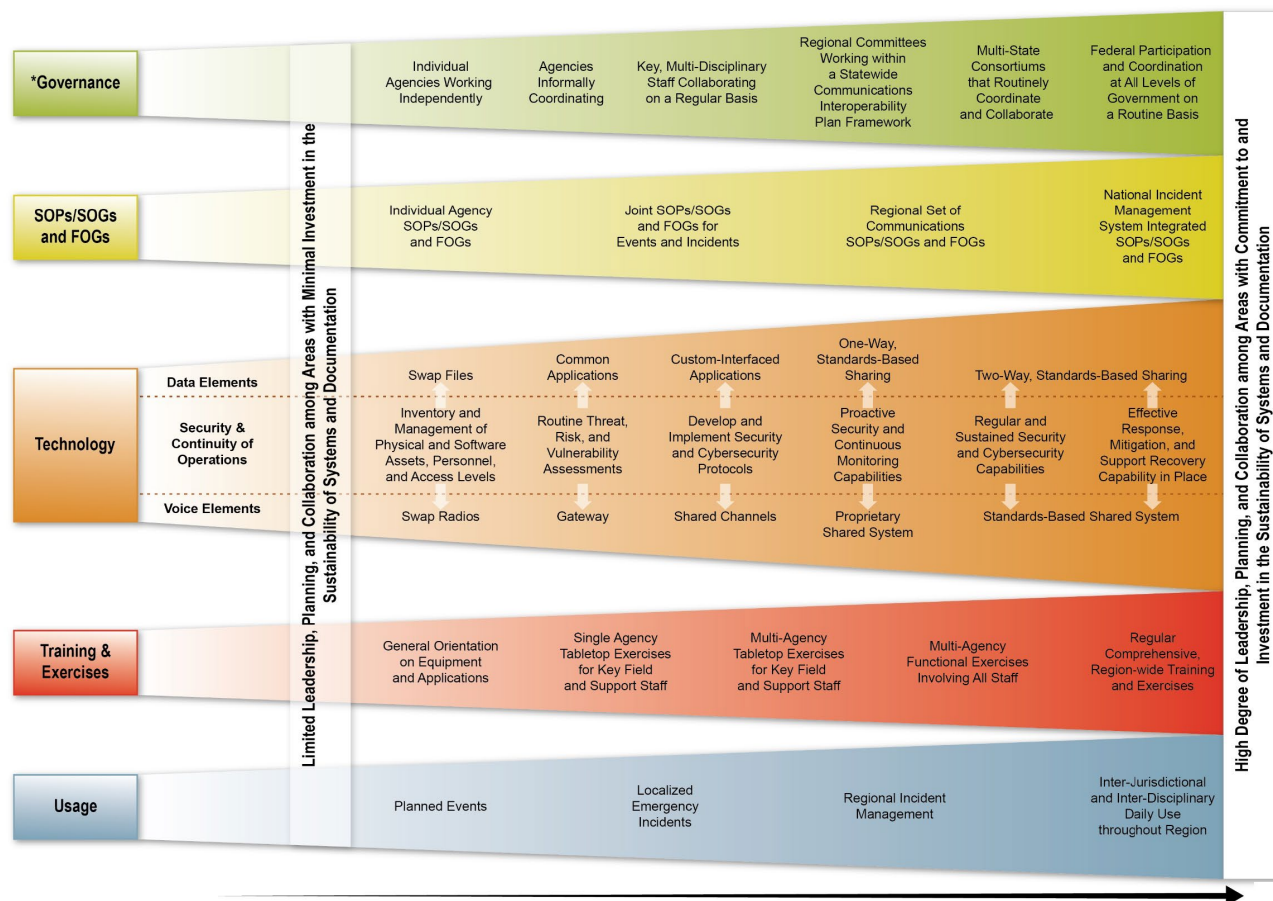


*Figure 1: Interoperability Continuum*

# Interoperability and Emergency Communications Overview

Interoperability is the ability of emergency response providers and relevant government officials to communicate across jurisdictions, disciplines, and levels of government as needed and as authorized. Reliable, timely communications among first responders and between public safety and public service agencies are key to completing mission-critical operations effectively.

Traditional voice capabilities, such as land mobile radio (LMR) and landline 911 services have long been and continue to be critical tools for communications. However, the advancement of internet protocol-based technologies in public safety has increased the type and amount of information responders receive, the tools they communicate with, and complexity of new and interdependent

[1] 2019 National Emergency Communications Plan
[2] Interoperability Continuum Brochure

systems. Emerging technologies increase the need for coordination across public safety disciplines, communications functions, and levels of government to ensure emergency communications capabilities are interoperable, reliable, and secure.

An example of this evolution is the transition of public-safety answering points (PSAPs) to Next Generation 911 (NG911) technology that will enhance sharing of critical information in real-time using multimedia—such as pictures, video, and text — among citizens, PSAP operators, dispatch, and first responders. While potential benefits of NG911 are tremendous, implementation challenges remain. Necessary tasks to fully realize these benefits include interfacing disparate systems, developing training and standard operating procedures (SOPs) and ensuring information security.

## VISION AND MISSION

This section describes Iowa's vision and mission for improving emergency and public safety communications interoperability:

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**Vision:**

*All public safety and public service entities in and around Iowa can access and utilize interoperable communications systems.*

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**Mission:**

*Develop and provide the highest level of standardized interoperable public safety and public service communications in accordance with the Code of Iowa.*

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## GOVERNANCE

The Code of Iowa 80.28 established the ISICSB in 2007.[3] Under the Code of Iowa 80.28 and 80.29, the ISICSB's purpose is to develop, implement, and oversee policy, operations, and fiscal components of communications interoperability at the state and local level, as well as coordinate similar efforts at the federal level.[4] The ISICSB has developed policies for the coordinated use of the statewide network and oversees the development and operations of the statewide LMR system, the Iowa Statewide Interoperable Communications System (ISICS).[5] It is jointly supported administratively for funding and staffing purposes by the Iowa Department of Transportation (DOT) and the Iowa Department of Public Safety (DPS), and operationally by the DPS. The Board's seven voting members include one representative each from a municipal police department, a sheriff's office, a fire department, a law communication center manager employed by a state or local government agency, a local emergency management coordinator, an emergency medical service provider, and one at-large member. The structure of the ISICSB is at the will of the Iowa legislature.

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[3] Code of Iowa 80.28
[4] Code of Iowa 80.29
[5] Iowa Statewide Interoperable Communications System (ISICS)

The Interoperability Communications Bureau of DPS manages ISICS with DOT, supports the ISICSB with DOT, and employs the SWIC.[6] It also manages four communications centers across the state, the Mobile Command Center, and America's Missing: Broadcast Emergency Response (AMBER) Alerts. The state-managed communications centers in Iowa are Des Moines, Storm Lake, Cedar Falls, and Cedar Rapids.[7]

The Iowa Department of Homeland Security and Emergency Management (HSEMD) coordinates statewide homeland security efforts and emergency management activities across the state.[8] The department contains two divisions and six bureaus, each tasked with responsibilities regarding emergency management and homeland security.[9] The HSEMD is advised by the Iowa Homeland Security Advisory Committee (HSAC).[10]

The DOT Transportation Systems Management and Operations Program provides various service offerings referred to as "service layers" to operate transportation infrastructure in Iowa, including an Emergency Management Service Layer.[11] The Iowa DOT assists with the ownership of ISICS and management of the ISICSB.[12]

Regional Interoperability Committees (RICs) fall under the User Group Committee with varying participation across the state. RICs feed participation and information into the User Group Committee. There is currently limited involvement in the RICs. There is a desire to reinvigorate the RICs by increasing information sharing about them, adding information on the ISICS application process, seeking input from RIC representatives, and identifying and addressing any missing components or procedures. There is also a desire to formalize the RIC committee's structure and role in governing documents or bylaws.

The SCIP Workshop identified challenges in achieving interoperability among ISICS, legacy systems, and disparate systems across states, necessitating training and adoption of best practices for successful communication. Balancing local control with standardized approaches, training on system patching, and sharing best practices were highlighted hurdles. Gathering frontline feedback, educating on talkgroup usage, and enhancing multi-entity response outreach were also identified as crucial challenges. Additionally, difficulty in coordinating timely policy reviews and effectively communicating system needs to stakeholders and legislators was noted, particularly without the ability to mandate the transition from legacy systems. The desired state involves maintaining diverse representation on the ISICSB, expanding outreach, promoting seamless interoperability, sharing and implementing best practices, increasing user training and outreach, and regularly reviewing emergency communications policies and procedures with defined timelines. Additionally, there is a desire for the Operations Committee to identify a mechanism to create and share after-action reports (AARs) and incorporate lessons learned into training and exercises, which would be passed off to the Training and Outreach Committee once it has been stood up.

Iowa's emergency communications governance map is depicted in Figure 2.

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[6] Interoperability Communications Bureau
[7] Communications Centers
[8] Department of Homeland Security and Emergency Management
[9] Strategy for the Iowa Department of Homeland Security and Emergency Management, 2021
[10] Charter for the Homeland Security Advisory Committee
[11] Iowa Transportation Systems Management and Operations Emergency Management Service Layer Plan, 2019
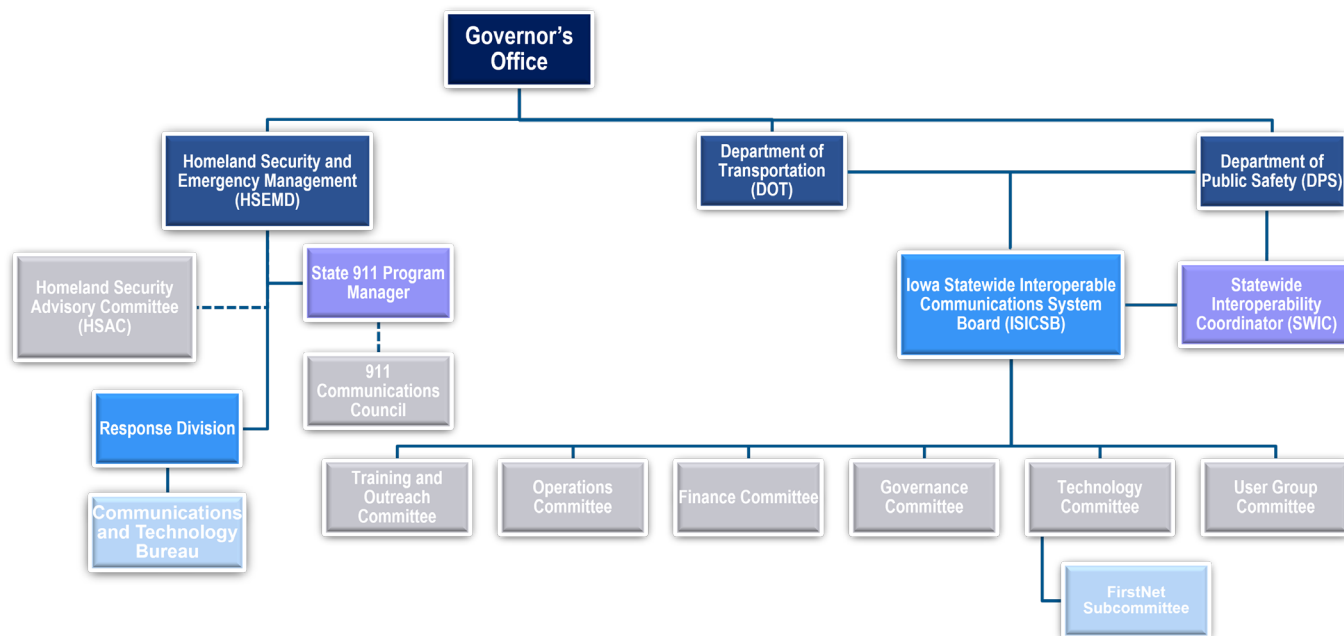[12] Iowa Statute 80.28

*Figure 2: Iowa's Emergency Communications Governance Map*

# TECHNOLOGY AND CYBERSECURITY

## Land Mobile Radio

ISICS is a 700/800-Megahertz (MHz) Project 25 (P25) Time Division Multiple Access (TDMA) Phase II standard digital statewide radio platform, providing public safety agencies and others with greater than 95 percent mobile coverage border to border. ISICS is a microwave-based backhaul resilient network designed to eliminate any single point of failure.[13] Four geographically separated, fault-tolerant cores located in the west, central, and east regions of the state operate on quad core design providing redundancy to all system features and functions. Each densely populated region of the state has simulcast prime sites to maintain simulcast coverage and capacity. The state created a 24-hour Network Operations Center to collect and manage all aspects of the ISICS network.

In addition to ISICS, Iowa has other LMR systems at the county and city levels. The P25 Technical User Group reports a total of four wide area 700/800 MHz public safety systems operating in Iowa including ISICS, Illinois' State Radio (Voice) Communications for the 21st Century (STARCOM21) system to the east, Nebraska's Omaha Regional Interoperability Network (ORION) to the west, and a regional system known as the Shared Area Radio Agreement (SARA) operated by sheriff's offices and other counties.[14] Many are connected to the state's ISICS platform or can connect via other methods, and most can use their Very High Frequency (VHF) conventional interoperability channels statewide. Adoption of ISICS across the state is increasing for both interoperability and operability.

There is an effort to acquire an additional trunking site from Motorola and equip the Central Strategic Technology Reserve (STR) with a portable trunking unit that could be taken anywhere to

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[13] ISICS Radio Platform
[14] Project 25 Technical Interest Group April 2023

expand system capacity during a major outage or tornado.[15] Both the West STR and DPS's Mobile Command Center have ISICS trunking configurations.

All public safety communication centers have, at minimum, access to interoperability talkgroups control stations or core-connected dispatch counsels. The Operations Committee coordinates people and the processes used to facilitate this interoperability. However, there are various legacy interoperability plans in need of updating.

Challenges identified by SCIP workshop participants included achieving regional and statewide interoperability in talkgroup and Computer-Aided Dispatch (CAD) systems, transitioning to the 700 MHz frequency locally, aligning agency communications, ensuring radio proficiency, securing access to radio systems, and subscriber radios transitioning to TDMA Phase II. The desired state aims to achieve this interoperability by natively programming ISICS talkgroups into all end user radios, enhancing ISICS as well as updating the various legacy interoperability plans on a regular schedule with their affected stakeholders, promoting standards adherence, encouraging best practices, increasing system/site capacity, and developing a capacity assessment system.

## 911

Iowa HSEMD administers the state's 911 Program.  This includes overseeing the state's emergency services IP network (ESInet) and the components and functions that make up the NG911 Core Services. All 99 Iowa counties receive wireline, wireless, voice over internet protocol (VoIP), and SMS text messages via the ESInet. The state has reached end state NG911 geospatial information system (GIS) data maturity and uses the GIS data for call routing and caller location.

There are 111 PSAPs in the state, including four DPS State Radio Centers. Local PSAPs are primary users of the NG911 network and answer and dispatch resources for more than 98 percent of 911 calls in Iowa. DPS PSAPs handle the remainder of those 911 calls through transfers or as a part of the policy routing function.

As of the adoption date of this SCIP, seventy-eight PSAPs currently operate using a shared, host/remote call handling system (shared services). This provides a redundant ESInet connection through FirstNet.

Challenges identified during the SCIP Workshop include the inability to view text-to-911 messages as they are being composed [real time text (RTT)], requiring responders to wait until the entire message is sent to understand the situation. RTT is a feature of a future network upgrade that will be made available to PSAPs during the timeframe this SCIP is in effect. There is a desire for all PSAPs to have redundancy and single points of failure. There is a goal to have 100+ PSAPs on shared services, which will increase the number of PSAPs having a redundant ESInet connection.

## Broadband

Iowa currently uses multiple commercial vendors along with FirstNet to support broadband use. FirstNet has completed its buildout in Iowa, and there are varying levels of FirstNet usage across the state. There is currently no mandate for the ISICSB FirstNet Broadband Subcommittee.

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[15] Policy Statement Supporting Deployment of Strategic Tactical Reserve (STR) Trailer(s)

During the SCIP Workshop, participants identified challenges, including ensuring robust statewide cellular service, particularly in remote regions, expanding involvement of more agencies in RICs' FirstNet network, ensuring network reliability for daily communication needs of first responders, procuring LTE devices and resources to supplement LMR systems, and achieving interoperability between various Push-to-Talk (PTT) applications. The goal is to enhance broadband coverage, capacity, and redundancy throughout the state, prioritizing rural or low-coverage areas.

## Alerts and Warnings

The Alert Iowa Notification System is the state's primary alert system and is run by Iowa Homeland Security and Emergency Management. Through Alert Iowa, state and local officials can utilize a single, statewide notification system providing local control of how and when to disseminate emergency and public safety messages to residents.[16] Currently, 92 out of 99 counties in Iowa utilize Alert Iowa to receive emergency alerts. The goal is to have all 99 counties utilizing Alert Iowa.

There are currently 62 Integrated Public Alert and Warning System (IPAWS) collaborative operating groups (COGs) that are active in the state. There is a goal to increase IPAWS knowledge and usage across Iowa through targeted training. Ensuring alerting authorities are aware of the capabilities and assisting with the application process as part of the Alert Iowa program onboarding will help to reach this goal.

Challenges identified during the SCIP Workshop include:

- The authority being unsure how to send alerts via IPAWS,
- The need for more training and education on its usage and best practices,
- Achieving interoperability for cross-border events, and
- Addressing varying levels of IPAWS adoption in neighboring states/jurisdictions.

## Cybersecurity

Executive Order 87 tasks the Office of the Chief Information Officer (CIO) to lead the Governor's Cyber Working Group to sustain Iowa's strong cybersecurity posture as well as drafting and delivering a State of Iowa Cybersecurity Strategy in coordination with other public safety entities.[17] Iowa's CIO released the most recent Cybersecurity Strategy in 2019. There was a recent cyber assessment done on the ISICS as well.

According to SCIP Workshop participants, there is a need for a continuous assessment of vulnerabilities across all systems as well as addressing varying encryption standards on systems outside of ISICS. The desired state involves promoting the integration of public safety systems into cybersecurity strategies, conducting ongoing assessments of vulnerabilities across all systems, and implementing robust physical and cybersecurity plans that include comprehensive vulnerability and risk assessments.

# TRAINING AND OUTREACH

Training and Outreach is another committee under the ISICSB. The ISICSB website includes training materials and is also used for outreach efforts. Additionally, there is a bi-monthly ISICSB newsletter

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[16] Alert Iowa
[17] State of Iowa Executive Order 87

with links to training and current events, SWIC updates, and FirstNet updates. When a new training offering has been created, there is an initial push via email to promote it. However, there is little active promotion of the training after the initial push. Typically, the Training and Outreach Committee waits to be contacted regarding creating and providing pieces of training.

There are regularly scheduled Communications Unit (COMU) trainings in Iowa. Typically, these courses are through technical assistance offered by the United States Department of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA) through the Interoperable Communications Technical Assistance Program (ICTAP). Other offerings regularly used relate to PSAPs and cybersecurity.

The SCIP Workshop identified various challenges, including limited regional training and the need for a better understanding of system functionality through local engagement. Additionally, there is a call for a more balanced distribution of trainers across the state, training on communication best practices, and improved resources such as online training and onboarding for ISICS users. Desired improvements involve enhanced multi-entity response through increased outreach and training, with greater access to FEMA credentialed trainers and online resources, along with clear pathways for implementing training, educating users on secure talkgroup usage, and ongoing education for ISICSB members on legislative processes.

# FUNDING

ISICSB, as well as other councils, boards, and commissions in Iowa, are not given a stand-alone budget, rather funds are distributed through DPS. Currently, the Board receives annual appropriations to fund activities including personnel expenses, training, and travel.

The ISICSB Finance Committee has developed a five-year funding plan to establish processes and procedures involving expenditures on ISICS and FirstNet, which includes the following:

- Identifies ISISCB's role regarding the sustainability and maintenance of the system,
- Identifies the $2.3 million needed for annual maintenance costs after 2023, and
- Funding of control stations and other equipment for local agencies to access ISICS.

ISICS is funded through the Rebuild Iowa Infrastructure Fund through June 30, 2026. 911 is funded through surcharges on landline and wireless phone lines, and there is an established formula for what is retained by the state.

The SCIP Workshop highlighted challenges such as inadequate local funding, lack of funds for system upgrades and growth, and uncertainties in financial sustainability. Emerging concerns include capacity planning, cybersecurity, and resource augmentation. Risks include legislative changes and complexity in system structure understanding. The desired state aims for a sustainable fiscal model, clear disaster recovery funding awareness, and long-term financial planning. It also seeks to establish engagement guidelines for legislators, enhance communication between ISICSB and departments, and maintain stakeholder representation.

# IMPLEMENTATION PLAN

Each goal and its associated objectives have a timeline with a target completion date, and one or multiple owners that will be responsible for overseeing and coordinating its completion. Accomplishing goals and objectives will require the support and cooperation from numerous individuals, groups, or agencies, and will be added as formal agenda items for review during regular governance body meetings. The Cybersecurity and Infrastructure Security Agency's (CISA) Interoperable Communications Technical Assistance Program (ICTAP) has a catalog[18] of technical assistance (TA) available to assist with the implementation of the SCIP. TA requests are to be coordinated through the SWIC.

Iowa's implementation plan is shown in the table below.

| Goals | Objectives | Owners | Completion Dates |
|---|---|---|---|
| Governance Committee | | | |
| 1. Coordinate with Iowa Statewide Interoperable Communications System Board (ISICSB) Committees to create, review, and revise system policies, procedures, and standards | 1.1 Execute the standards and review timeline | ISICSB Governance Committee | 1.1 February 2027 |
| | 1.2 Accept feedback from stakeholders and update and create policies/standards as applicable | | 1.2 Ongoing |
| 2. Maintain representation and participation on ISICSB from all disciplines and all regions of the state | 2.1 Coordinate with the Training and Outreach Committee to ensure communication with stakeholders on any changes to the ISICSB | ISICSB Governance Committee ISICSB Training and Outreach Committee | 2.1 December 2024 |
| | 2.2 Coordinate with the Training and Outreach Committee to ensure representation and participation by underrepresented regions of the state on ISICSB or Committees | | 2.2 June 2025 |
| | 2.3 Promote participation in committees and Regional Interoperability Councils (RICs) with representation from eligible Iowa Statewide Interoperable Communications System (ISICS) users, based upon the standards of the ISICS Memorandum of Agreement (MOA) | | 2.3 June 2025 |
| Technology Committee | | | |
| 1. Continue to analyze emerging technologies and its effects on the existing interoperable communications landscape | 1.1 Identify existing technologies in and around Iowa | ISICSB Governance Committee | 1.1 Ongoing |
| | 1.2 Participate with national partners to identify and learn about emerging technologies | | 1.2 July 2025 |
| | 1.3 Assess the feasibility of adopting emerging technologies in Iowa | | 1.3 July 2026 |

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[18] Emergency Communications Technical Assistance Planning Guide

| Goals | Objectives | Owners | Completion Dates |
|---|---|---|---|
| 2. Complete the rotational review and revision process of ISICS technology policies, procedures, and standards | 2.1 Continue to encourage users to use standards laid out by the ISICSB | ISICSB Technology Committee | 2.1 Ongoing |
| | 2.2 Encourage best practices (i.e., encryption, TDMA usage statewide) | | 2.2 Dec. 2024 |
| | 2.3 Ensure that policies, procedures, and standards reflect the current and emerging state of technology in Iowa | | 2.3 Dec. 2026 |
| 3. Assess system capabilities and capacity needs | 3.1 Determine capacity needs for all land mobile radio (LMR) sites | ISICSB Technology Committee | Ongoing |
| | 3.2 Determine capacity needs for data systems | | |
| 4. Enhance the cybersecurity and infrastructure security posture of Iowa's interoperable communication systems | 4.1 Identify and fill gaps determined by cyber risk assessments | ISICSB Technology Committee | 4.1 Ongoing |
| | 4.2 Develop a cybersecurity and infrastructure security incident response, recovery, and mitigation plans | | 4.3 February 2027 |
| | 4.4 Assess cyber risks of emerging technologies | | 4.5 Ongoing |
| | 4.6 Increase information sharing of cybersecurity and infrastructure security viable threats and incidents across the state | | 4.7 August 2024 |
| **FirstNet Subcommittee** | | | |
| 1. Inform public safety about, and bring attention to the latest information from FirstNet | 1.1 Provide an interactive forum with FirstNet Authority, public safety, and AT&T | ISICSB FirstNet Subcommittee | 1.1 December 2027 |
| | 1.2 Promote the use of Who's on FirstNet | | 1.2 December 2025 |
| 2. Share interactions with FirstNet on observations and experiences with the network | 2.1 Continually advocate for excellent service, system enhancement and re-investment for Iowa | ISICSB FirstNet Subcommittee | Ongoing |
| **User Group Committee** | | | |
| 1. Assess system capacity needs with emerging technologies | 1.1 Increase technical knowledge needed to evaluate systems | ISICSB User Group Committee | 1.1 June 2027 |
| | 1.2 Update user agreement to include use of LTE or radio over internet protocol (RoIP) and emerging technologies | | 1.2 June 2026 |
| 2. Increase participation in all Regional Interoperability Committees (RICs) | 2.1 Coordinate with the Training and Outreach Committee to increase information sharing about the RICs and how to join | ISICSB User Group Committee ISICSB Training and Outreach Committee | June 2025 |
| | 2.2 Outline and promote the benefits from being involved in RICs | | |
| | 2.3 Add information about the RICs on the ISICS application and seek input on preferred RIC representatives | | |
| | 2.4 Ensure participation of the Chair and Vice-Chair of each RIC in the User Group Committee | | |

| Goals | Objectives | Owners | Completion Dates |
|---|---|---|---|
| Operations Committee | | | |
| 1. Identify, review, and update legacy communications plans | 1.1 Update the various legacy interoperability plans on a regular schedule with their affected stakeholders | ISICSB Operations Committee | 1.1 Ongoing |
| | 1.2 Deliver recommendation/documentation to ISICSB and relevant stakeholders | | 1.2 Ongoing |
| | 1.3 Develop contingencies plans | | 1.3 June 2027 |
| 2. Increase the creation and sharing of After-Action Reports (AARs) | 2.1 Identify a mechanism to create and share AARs | ISICSB Operations Committee | 2.1 June 2025 |
| | 2.2 Incorporate lessons learned into training and exercises | | 2.2 June 2026 |
| 3. Evaluate and share operational best practices on available technologies | 3.1 Identify best practices on available technologies from across the state and country | ISICSB Operations Committee | 3.1 June 2026 |
| | 3.2 Evaluate the relevancy of the collected best practices | | 3.2 June 2027 |
| | 3.3 Identify a mechanism to apply best practices | | 3.3 June 2027 |
| Training and Outreach Committee | | | |
| 1. Develop and provide standard training for interoperable communications across the various state regions and covering ISICS policies, procedures, and standards | 1.1 Maintain and update guidelines defining standard training | ISICSB Training and Outreach Committee | 1.1 June 2024 |
| | 1.2 Encourage the inclusion of interoperable communications training at the state and local level | | 1.2 March 2026 |
| | 1.3 Create a complete suite of online training on the ISICSB website tied to/augmenting policies, procedures, and standards | | 1.3 January 2026 |
| | 1.4 Continue to refine training and education on usage and best practices | | 1.4 Ongoing |
| | 1.5 Create an onboarding process for new ISICS operational users | | 1.5 December 2025 |
| | 1.6 Create Train-the-Trainer opportunities to provide local entities with training resources | | 1.6 December 2025 |
| 2. Increase the number of credentialed Communications Unit (COMU) personnel and trainers | 2.1 Create a COMU awareness outreach program for recruitment and regular dissemination of information through the Training and Outreach Committee | ISICSB Training and Outreach Committee | 2.3 June 2024June 2024 |
| | 2.2 Provide information to stakeholders about current and updated COMU training processes | | 2.4 June 2024 |
| | 2.3 Increase opportunities to complete position task book | | 2.5 July 2024 |
| | 2.4 Encourage the incorporation of interoperable policies in local SOPs (ex: COMU personnel in policies) | | 2.6 January 2026 |
| | 3.1 Develop an outreach plan | | 3.1 January 2025 |
| | 3.2 Engage association partners | | 3.2 December 2025 |

| Goals | Objectives | Owners | Completion Dates |
|---|---|---|---|
| 3. Approach and educate elected officials and staff on interoperable communications needs and priorities | 3.3 Identify most pertinent information to include in high-level one-pagers for elected officials | ISICSB Training and Outreach Committee | 3.3 January 2025 |
| | 3.4 Define pathways specific to reaching legislators | | 3.4 January 2025 |
| 4. Educate the ISICSB members on how the state legislative and budget process works | 4.1 Engage ISICSB legislative liaisons | ISICSB Training and Outreach Committee | December 2025 |
| 5. Maintain relationships with key entities that support interoperability | 5.1 Be open and welcoming to new and emerging members of the field | ISICSB Training and Outreach Committee | Ongoing |
| | 5.2 Encourage the inclusion of Training and Outreach Committee Members in partner meetings (ex: regional groups; 911 Communications Council) | | |
| Finance Committee | | | |
| 1. Develop a sustainable funding plan for the ISICS | 1.1 Identify funding needs and impacts | ISICSB Finance Committee | 1.1 June 2027 |
| | 1.2 Prioritize both short-term and long-term funding goals | | 1.2 June 2027 |
| | 1.3 Create a rules of engagement playbook to receive funding from legislators | | 1.3 June 2025 |
| | 1.4 Increase communication and collaboration between the ISICSB and various Departments/Agencies to increase legislature buy-in | | 1.4 June 2025 |
| 2. Develop and maintain an appropriate process and procedure for administering all financial assets consistent with national best practices in accounting and auditing. | 2.1 Document processes and procedures to be used by the ISICSB | ISICSB Finance Committee | June 2025 |
| | 2.2 Document grant management offerings and objectives when the ISICSB is the grantor or grantee | | |
| 3. Align statewide emergency communications policies and procedures with federal grant requirements | 3.1 Identify federal grant requirements that should be included in emergency communications planning and procedures | ISICSB Finance Committee | June 2025 |

# APPENDIX A: STATE MARKERS

In 2019, CISA supported States and Territories in establishing an initial picture of interoperability nationwide by measuring progress against 25 markers. These markers describe a State or Territory's level of interoperability maturity. Below is Iowa's assessment of their progress against the markers as of February 22, 2024.

| Marker | Best Practices / Performance Markers | Initial | Defined | Optimized |
|---|---|---|---|---|
| 1 | **State-level governing body established (e.g., SIEC, SIGB).** Governance framework is in place to sustain all emergency communications | Governing body does not exist, or exists and role has not been formalized by legislative or executive actions | Governing body role established through an executive order | Governing body role established through a state law |
| 2 | **SIGB/SIEC participation.** Statewide governance body is comprised of members who represent all components of the emergency communications ecosystem. | Initial (1-2) Governance body participation includes: ☐ Communications Champion/SWIC ☐ LMR ☐ Broadband/LTE ☐ 911 ☐ Alerts, Warnings and Notifications | Defined (3-4) Governance body participation includes: ☐ Communications Champion/SWIC ☐ LMR ☐ Broadband/LTE ☐ 911 ☐ Alerts, Warnings and Notifications | Optimized (5) Governance body participation includes: ☒ Communications Champion/SWIC ☒ LMR ☒ Broadband/LTE ☒ 911 ☒ Alerts, Warnings and Notifications |
| 3 | **SWIC established.** Full-time SWIC is in place to promote broad and sustained participation in emergency communications. | SWIC does not exist | Full-time SWIC with collateral duties | Full-time SWIC established through executive order or state law |
| 4 | **SWIC Duty Percentage.** SWIC spends 100% of time on SWIC-focused job duties | SWIC spends >1, <50% of time on SWIC-focused job duties | SWIC spends >50, <90% of time on SWIC-focused job duties | SWIC spends >90% of time on SWIC-focused job duties |
| 5 | **SCIP refresh.** SCIP is a living document that continues to be executed in a timely manner. Updated SCIPs are reviewed and approved by SIGB/SIEC. | No SCIP OR SCIP older than 3 years | SCIP updated within last 2 years | SCIP updated in last 2 years and progress made on >50% of goals |
| 6 | **SCIP strategic goal percentage.** SCIP goals are primarily strategic to improve long term emergency communications ecosystem (LMR, LTE, 911, A&W) and future technology transitions (5G, IoT, UAS, etc.). (Strategic and non-strategic goals are completely different; strategy -- path from here to the destination; it is unlike tactics which you can "touch"; cannot "touch" strategy) | <50% are strategic goals in SCIP | >50%<90% are strategic goals in SCIP | >90% are strategic goals in SCIP |
| 7 | **Integrated emergency communication grant coordination.** Designed to ensure state / territory is tracking and optimizing grant proposals, and there is strategic visibility how grant money is being spent. | No explicit approach or only informal emergency communications grant coordination between localities, agencies, SAA and/or the SWIC within a state / territory | SWIC and/or SIGB provides guidance to agencies and localities for emergency communications grant funding but does not review proposals or make recommendations | SWIC and/or SIGB provides guidance to agencies and localities for emergency communications grant funding and reviews grant proposals for alignment with the SCIP. SWIC and/or SIGB provides recommendations to the SAA |

| Marker | Best Practices / Performance Markers | Initial | Defined | Optimized |
|---|---|---|---|---|
| 8 | **Communications Unit process.** Communications Unit process present in state / territory to facilitate emergency communications capabilities. Check the boxes of which Communications positions are currently covered within your process:<br>☒ COML<br>☒ COMT<br>☒ ITSL<br>☒ RADO<br>☒ INCM<br>☒ INTD<br>☒ AUXCOM<br>☒ TERT | No Communications Unit process at present | Communications Unit process planned or designed (but not implemented) | Communications Unit process implemented and active |
| 9 | **Interagency communication.** Established and applied interagency communications policies, procedures and guidelines. | Some interoperable communications SOPs/SOGs exist within the area and steps have been taken to institute these interoperability procedures among some agencies | Interoperable communications SOPs/SOGs are formalized and in use by agencies within the area. Despite minor issues, SOPs/SOGs are successfully used during responses and/or exercises | Interoperable communications SOPs/SOGs within the area are formalized and regularly reviewed. Additionally, NIMS procedures are well established among agencies and disciplines. All needed procedures are effectively utilized during responses and/or exercises. |
| 10 | **TICP (or equivalent) developed.** Tactical Interoperable Communications Plans (TICPs) established and periodically updated to include all public safety communications systems available | Regional or statewide TICP in place | Statewide or Regional TICP(s) updated within past 2-5 years | Statewide or Regional TICP(s) updated within past 2 years |
| 11 | **Field Operations Guides (FOGs) developed.** FOGs established for a state or territory and periodically updated to include all public safety communications systems available | Regional or statewide FOG in place | Statewide or Regional FOG(s) updated within past 2-5 years | Statewide or Regional FOG(s) updated within past 2 years |
| 12 | **Alerts & Warnings.** State or Territory has Implemented an effective A&W program to include Policy, Procedures and Protocol measured through the following characteristics:<br>(1) Effective documentation process to inform and control message origination and distribution<br>(2) Coordination of alerting plans and procedures with neighboring jurisdictions<br>(3) Operators and alert originators receive periodic training<br>(4) Message origination, distribution, and correction procedures in place | <49% of originating authorities have all of the four A&W characteristics | >50%<74% of originating authorities have all of the four A&W characteristics | >75%<100% of originating authorities have all of the four A&W characteristics |
| 13 | **Radio programming.** Radios programmed for National/Federal, SLTT interoperability channels and | <49% of radios are programed for interoperability and consistency | >50%<74% of radios are programed for interoperability and consistency | >75%<100% of radios are programed for interoperability and consistency |

| Marker | Best Practices / Performance Markers | Initial | Defined | Optimized |
|---|---|---|---|---|
| | channel nomenclature consistency across a state / territory. | | | |
| 14 | **Cybersecurity Assessment Awareness.** Cybersecurity assessment awareness. (Public safety communications networks are defined as covering: LMR, LTE, 911, and A&W) | Public safety communications network owners are aware of cybersecurity assessment availability and value (check yes or no for each option)<br>☐ LMR<br>☐ LTE<br>☐ 911/CAD<br>☐ A&W | Initial plus, conducted assessment, conducted risk assessment. (Check yes or no for each option)<br>☒ LMR<br>☒ LTE<br>☒ 911/CAD<br>☒ A&W | Defined plus, Availability of Cyber Incident Response Plan (check yes or no for each option)<br>☐ LMR<br>☐ LTE<br>☐ 911/CAD<br>☐ A&W |
| 15 | **NG911 implementation.** NG911 implementation underway to serve state / territory population. | Working to establish NG911 governance through state/territorial plan.<br>• Developing GIS to be able to support NG911 call routing.<br>• Planning or implementing ESInet and Next Generation Core Services (NGCS).<br>• Planning to or have updated PSAP equipment to handle basic NG911 service offerings. | More than 75% of PSAPs and Population Served have:<br>• NG911 governance established through state/territorial plan.<br>• GIS developed and able to support NG911 call routing.<br>• Planning or implementing ESInet and Next Generation Core Services (NGCS).<br>• PSAP equipment updated to handle basic NG911 service offerings. | More than 90% of PSAPs and Population Served have:<br>• NG911 governance established through state/territorial plan.<br>• GIS developed and supporting NG911 call routing.<br>• Operational Emergency Services IP Network (ESInet)/Next Generation Core Services (NGCS).<br>• PSAP equipment updated and handling basic NG911 service offerings. |
| 16 | **Data operability / interoperability.** Ability of agencies within a region to exchange data on demand, and needed, and as authorized. Examples of systems would be: CAD to CAD, Chat, GIS, Critical Incident Management Tool, Web EOC | Agencies are able to share data only by email. Systems are not touching or talking. | Systems are able to touch but with limited capabilities. One-way information sharing. | Full system to system integration. Able to fully consume and manipulate data. |
| 17 | **Future Technology/Organizational Learning.** SIEC/SIGB is tracking, evaluating, implementing future technology (checklist) | ☒ 5G<br>☐ Acoustic Signaling<br>☐ Autonomous Vehicles<br>☒ Body Cameras<br>☒ ESInets<br>☒ GIS<br>☐ Geolocation | ☐ HetNets/Mesh Networks<br>☒ LMR to LTE Integration<br>☒ MCPTT Apps<br>☒ Machine Learning/AI<br>☒ Public Alerting Software<br>☐ Sensors<br>☒ Situational Awareness Apps | ☐ Smart Cities<br>☒ The Next Narrowbanding<br>☒ UAS (Drones)<br>☐ UAV (Smart Vehicle)<br>☐ Wearables<br>☒ IoT (Cameras) |
| 18 | **Communications Exercise objectives.** Specific emergency communications objectives are incorporated into applicable exercises Federal / state / territory-wide | Regular engagement with State Training and Exercise coordinators | Promote addition of emergency communications objectives in state/county/regional level exercises (target Emergency Management community). Including providing tools, templates, etc. | Initial and Defined plus mechanism in place to incorporate and measure communications objectives into state/county/regional level exercises |
| 19 | **Trained Communications Unit responders.** Communications Unit personnel are listed in a | <49% of public safety agencies within a state / territory have access to Communications Unit personnel | >50%<74% of public safety agencies within a state / territory have access to Communications Unit personnel | >75%<100% of public safety agencies within a state / territory have access to Communications Unit |

| Marker | Best Practices / Performance Markers | Initial | Defined | Optimized |
|---|---|---|---|---|
| | tracking database (e.g., NQS One Responder, CASM, etc.) and available for assignment/response. | who are listed in a tracking database and available for assignment/response | who are listed in a tracking database and available for assignment/response | personnel who are listed in a tracking database and available for assignment/response |
| 20 | **Communications Usage Best Practices/Lessons Learned.** Capability exists within jurisdiction to share best practices/lessons learned (positive and/or negative) across all lanes of the Interoperability Continuum related to all components of the emergency communications ecosystem | Best practices/lessons learned intake mechanism established. Create Communications AAR template to collect best practices | Initial plus review mechanism established | Defined plus distribution mechanism established |
| 21 | **Wireless Priority Service (WPS) subscription.** WPS penetration across state / territory compared to maximum potential | <9% subscription rate of potentially eligible participants who signed up WPS across a state / territory | >10%<49% subscription rate of potentially eligible participants who signed up for WPS a state / territory | >50%<100% subscription rate of potentially eligible participants who signed up for WPS across a state / territory |
| 22 | **Outreach.** Outreach mechanisms in place to share information across state | SWIC electronic communication (e.g., SWIC email, newsletter, social media, etc.) distributed to relevant stakeholders on regular basis | Initial plus web presence containing information about emergency communications interoperability, SCIP, trainings, etc. | Defined plus in-person/webinar conference/meeting attendance strategy and resources to execute |
| 23 | **Sustainment assessment.** Identify interoperable component system sustainment needs;(e.g., communications infrastructure, equipment, programs, management) that need sustainment funding. (Component systems are emergency communications elements that are necessary to enable communications, whether owned or leased - state systems only) | < 49% of component systems assessed to identify sustainment needs | >50%<74% of component systems assessed to identify sustainment needs | >75%<100% of component systems assessed to identify sustainment needs |
| 24 | **Risk identification.** Identify risks for emergency communications components. (Component systems are emergency communications elements that are necessary to enable communications, whether owned or leased. Risk Identification and planning is in line with having a communications COOP Plan) | < 49% of component systems have risks assessed through a standard template for all technology components | >50%<74% of component systems have risks assessed through a standard template for all technology components | >75%<100% of component systems have risks assessed through a standard template for all technology components |
| 25 | **Cross Border / Interstate (State to State) Emergency Communications.** Established capabilities to enable emergency communications across all components of the ecosystem. | Initial: Little to no established: ☐ Governance ☐ SOPs/MOUs ☐ Technology ☐ Training/Exercises ☐ Usage | Defined: Documented/established across some lanes of the Continuum: ☒ Governance ☒ SOPs/MOUs ☒ Technology ☒ Training/Exercises ☒ Usage | Optimized: Documented/established across all lanes of the Continuum: ☐ Governance ☐ SOPs/MOUs ☐ Technology ☐ Training/Exercises ☐ Usage |

# APPENDIX B: ACRONYMS

| Acronym | Definition |
|---|---|
| AAR | After-Action Report |
| AMBER | America's Missing: Broadcast Emergency Response |
| AUXCOMM/AUXC | Auxiliary Emergency Communications |
| A&W | Alerts and Warnings |
| CAD | Computer-Aided Dispatch |
| CASM | Communication Assets Survey and Mapping |
| CIO | Chief Information Officer |
| CISA | Cybersecurity and Infrastructure Security Agency |
| COML | Communications Unit Leader |
| COMT | Communications Unit Technician |
| COMU | Communications Unit Program |
| COOP | Continuity of Operations Plan |
| DHS | Department of Homeland Security |
| DOT | Department of Transportation |
| DPS | Department of Public Safety |
| E911 | Enhanced 911 |
| ESInet | Emergency Services Internal Protocol Network |
| FOG | Field Operations Guide |
| FY | Fiscal Year |
| GIS | Geospatial Information System |
| HSAC | Homeland Security Advisory Committee |
| HSEMD | Department of Homeland Security and Emergency Management |
| ICTAP | Interoperable Communications Technical Assistance Program |
| IDOT | Iowa Department of Transportation |
| INCM | Incident Communications Center Manager |
| INTD | Incident Tactical Dispatcher |
| IP | Internet Protocol |
| IPAWS | Integrated Public Alert and Warning System |
| ISICS | Iowa Statewide Interoperable Communications System |
| ISICSB | Iowa Statewide Interoperable Communications System Board |
| ITSL | Information Technology Service Unit Leader |
| LMR | Land Mobile Radio |
| LTE | Long Term Evolution |
| MHz | Megahertz |
| MOA | Memorandum of Agreement |
| NCSWIC | National Council of Statewide Interoperability Coordinator |

| Acronym | Definition |
|---|---|
| NECP | National Emergency Communications Plan |
| NENA | National Emergency Number Association |
| NG911 | Next Generation 911 |
| ORION | Omaha Regional Interoperability Network |
| P25 | Project 25 |
| PACE | Primary, Alternate, Contingency, and Emergency |
| PSAP | Public Safety Answering Point |
| PTT | Push-to-Talk |
| RADO | Radio Operator |
| RIC | Regional Interoperability Committees |
| RoIP | Radio Over Internet Protocol |
| SARA | State Authorization Reciprocity Agreement |
| SCIP | Statewide Communication Interoperability Plan |
| SOP | Standard Operating Procedure |
| STARCOM21 | State Radio (Voice) Communications for the 21st Century |
| STR | Strategic Technology Reserve |
| SWIC | Statewide Interoperability Coordinator |
| TA | Technical Assistance |
| TDMA | Time Division Multiple Access |
| TERT | Telecommunications Emergency Response Team |
| TICP | Tactical Interoperable Communications Plan |
| VHF | Very High Frequency |
| WPS | Wireless Priority Service |