Oklahoma

Statewide Communication Interoperability Plan (SCIP)

January 2014

EXECUTIVE SUMMARY

The Oklahoma Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three to five years) strategic planning tool to help Oklahoma prioritize resources, strengthen governance, identify future investments, and address interoperability gaps.

The purpose of the Oklahoma SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Serve as a guidance tool and reference document, particularly for rural areas in the State, to articulate the efforts Oklahoma is undertaking with regard to interoperable and emergency communications and what communications resources may be available for use across the State

The following are Oklahoma's Vision and Mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

Vision: All public safety entities in the state of Oklahoma will possess the knowledge, resources and technology to effectively communicate as authorized through voice and data, on demand and in real-time, to ensure life safety, incident stabilization, and property conservation.

Mission: The mission of the SCIP is to support the highest level of interoperable communications for all public safety entities throughout the state of Oklahoma by fostering an effective organizational structure to oversee that proper planning, training and resources are provided to responders at all levels.

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1. INTRODUCTION

The Oklahoma Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three to five years) strategic planning tool to help Oklahoma prioritize resources, strengthen governance, identify future investments, and address interoperability gaps. This document contains the following planning components:

- Introduction – Provides the context necessary to understand what the SCIP is and how it was developed.
- Purpose – Explains the purpose/function(s) of the SCIP in Oklahoma.
- State's Interoperable and Emergency Communications Overview – Provides an overview of the State's current and future emergency communications environment and defines ownership of the SCIP.
- Vision and Mission – Articulates the State's three- to five-year vision and mission for improving emergency communications operability, interoperability, and continuity of communications at all levels of government.
- Strategic Goals and Initiatives – Outlines the strategic goals and initiatives aligned with the three- to five-year vision and mission of the SCIP and pertains to the following critical components: Governance, Standard Operating Procedures (SOPs), Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.
- Implementation – Describes the process to evaluate the success of the SCIP and to conduct SCIP reviews to ensure it is up-to-date and aligned with the changing internal and external environment.
- Reference Materials – Includes resources that provide additional background information on the SCIP or interoperable and emergency communications in Oklahoma or directly support the SCIP.

Figure 1 provides additional information about how these components of the SCIP interrelate to develop a comprehensive plan for improving interoperable and emergency communications.

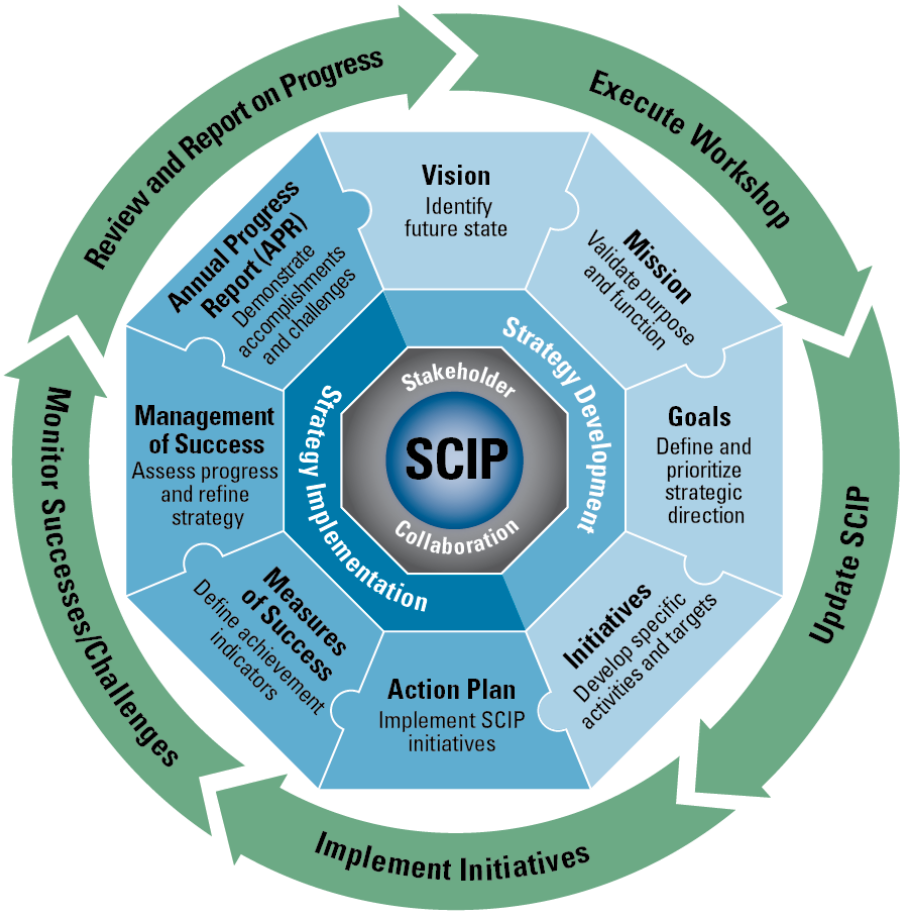


Figure 1: SCIP Strategic Plan and Implementation Components

The Oklahoma SCIP is based on an understanding of the current and mid-range interoperable and emergency communications environment. Oklahoma has taken significant steps towards enhancing interoperable and emergency communications, including:

- Establishment of a formal Communications Unit Leader (COML)/ Communications Unit Technician (COMT) credentialing program
- Development and implementation of the Oklahoma Field Operations Guide (OKFOG)
- Implementation of a communications component as part of all training and exercises funded by the Oklahoma Office of Homeland Security (OKOHS) in the State
- Establishment of regional communications resources and equipment (e.g., geographically dispersed COML/COMT positions and radio caches) that can be deployed to any incident within one hour

However, more remains to be done to achieve Oklahoma's vision. It is also important to note that this work is part of a continuous cycle as Oklahoma will always need to adapt to evolving technologies, operational tactics, and changes to key individuals (e.g.,

Governor, project champions). In the next three to five years, Oklahoma will encounter challenges relating to operability, interoperability, geography, aging equipment/systems, emerging technologies, changing project champions, and sustainable funding.

Wireless voice and data technology is evolving rapidly and efforts are underway to determine how to leverage these new technologies to meet the needs of public safety. For example, the enactment of the Middle Class Tax Relief and Job Creation Act of 2012 (the Act), specifically Title VI, related to Public Safety Communications, authorizes the deployment of the Nationwide Public Safety Broadband Network (NPSBN). The NPSBN is intended to be a wireless, interoperable nationwide communications network that will allow members of the public safety community to securely and reliably gain and share information with their counterparts in other locations and agencies. New policies and initiatives such as the NPSBN present additional changes and considerations for future planning efforts and require an informed strategic vision to properly account for these changes. Figure 2 illustrates a public safety communications evolution by describing the long-term transition toward a desired converged future.

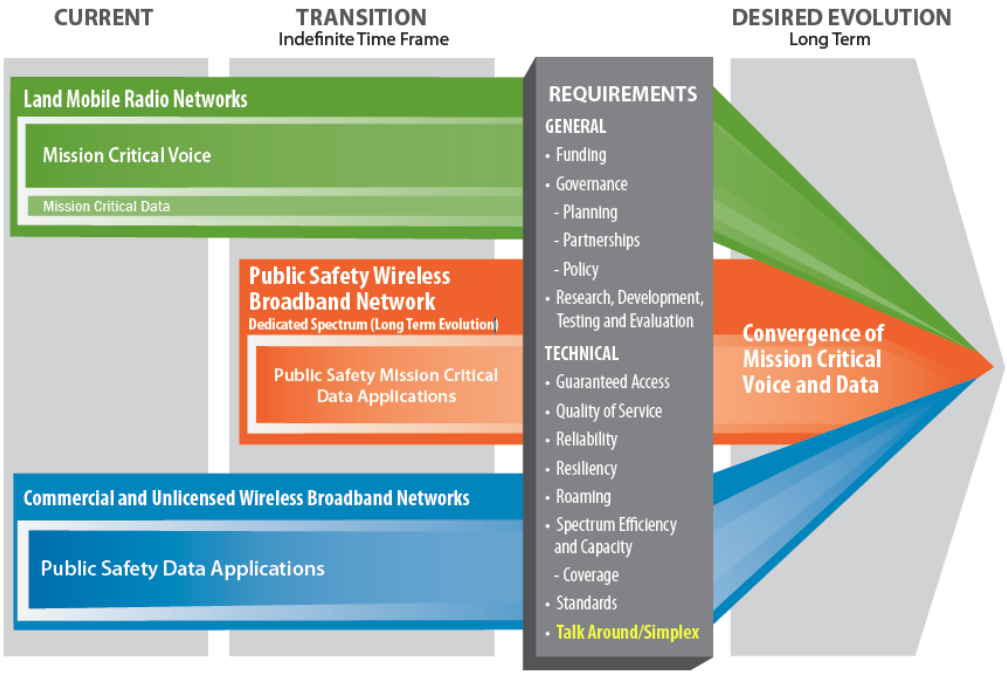


Figure 2: Public Safety Communications Evolution

Integrating capabilities such as broadband provide an unparalleled opportunity for the future of interoperable communications in Oklahoma. It may result in a secure path for information-sharing initiatives, Public Safety Answering Points (PSAP), and Next Generation 911 (NG911) integration. Broadband will not replace existing Land Mobile Radio (LMR) voice systems in the foreseeable future due to implementation factors associated with planning, deployment, technology, and cost. A cautious approach to this investment is needed. Therefore, robust requirements and innovative business practices must be developed for broadband initiatives prior to any implementation.

There is no defined timeline for the deployment of the NPSBN; however, Oklahoma will keep up-to-date with the planning and build-out of the NPSBN in the near and long term in coordination with the First Responder Network Authority (FirstNet). FirstNet is the independent authority within the National Telecommunications and Information Administration (NTIA) and is responsible for developing the NPSBN, which will be a single, nationwide, interoperable public safety broadband network. The network build-out will require continuing education and commitment at all levels of government and across public safety disciplines to document network requirements and identify existing resources and assets that could potentially be used in the build-out of the network. It will also be necessary to develop and maintain strategic partnerships with a variety of stakeholder agencies and organizations at the national, State, regional, local, and tribal levels and design effective policy and governance structures that address new and emerging interoperable and emergency communications technologies. During this process, investments in LMR will continue to be necessary and in the near term, wireless data systems or commercial broadband will complement LMR. More information on the role of these two technologies in interoperable and emergency communications is available in the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Public Safety Communications Evolution brochure.[1]

Oklahoma has taken several steps toward preparing for implementation of the NPSBN. Initial public safety broadband efforts in the State were started by various localities and tribes before the establishment of FirstNet, and have now been put on hold until further direction from FirstNet. The State will use State and Local Implementation Grant Program (SLIGP) funding opportunity to align statewide efforts for the planning, build-out, and implementation of the NPSBN. Oklahoma has appointed the Governor's point of contact (POC) to FirstNet and established a Steering Committee under the Office of the Chief Information Officer (OCIO)/Office of Management and Enterprise Services (OMES). The Steering Committee will plan, research, and provide recommendations to the Statewide Interoperability Governing Body (SIGB). The SIGB will approve or deny recommendations and present all approved recommendations to the Governor.

Additionally, achieving sustainable funding in the current fiscal climate is a priority for Oklahoma. As State and Federal grant funding diminishes, States need to identify alternative funding sources to continue improving interoperable and emergency communications for voice and data systems. Key priorities for sustainable funding in Oklahoma are:

- Training and exercise – maintaining existing efforts for including communications components into all training and exercises
- Narrowbanding – Oklahoma has updated the Federal Communications Commission (FCC) on challenges with updating rural areas
- Communications assets – the State is purchasing radio caches for State-recognized COMLs, as well as rapidly deployable communications vehicles for rural deployment, as a result of lessons learned from recent tornadoes and other real-world events

[1] OEC's Public Safety Communications Evolution brochure is available here: http://publicsafetytools.info/oec_guidance/docs/Public_Safety_Communications_Evolution_Brochure.pdf

More information on a typical emergency communications system life cycle, cost planning, and budgeting is available in OEC's System Life Cycle Planning Guide.[2]

The Interoperability Continuum, developed by SAFECOM and shown in Figure 3, serves as a framework to address all of these challenges and continue improving operable/interoperable and emergency communications. It is designed to assist emergency response agencies and policy makers with planning and implementing interoperability solutions for voice and data communications.

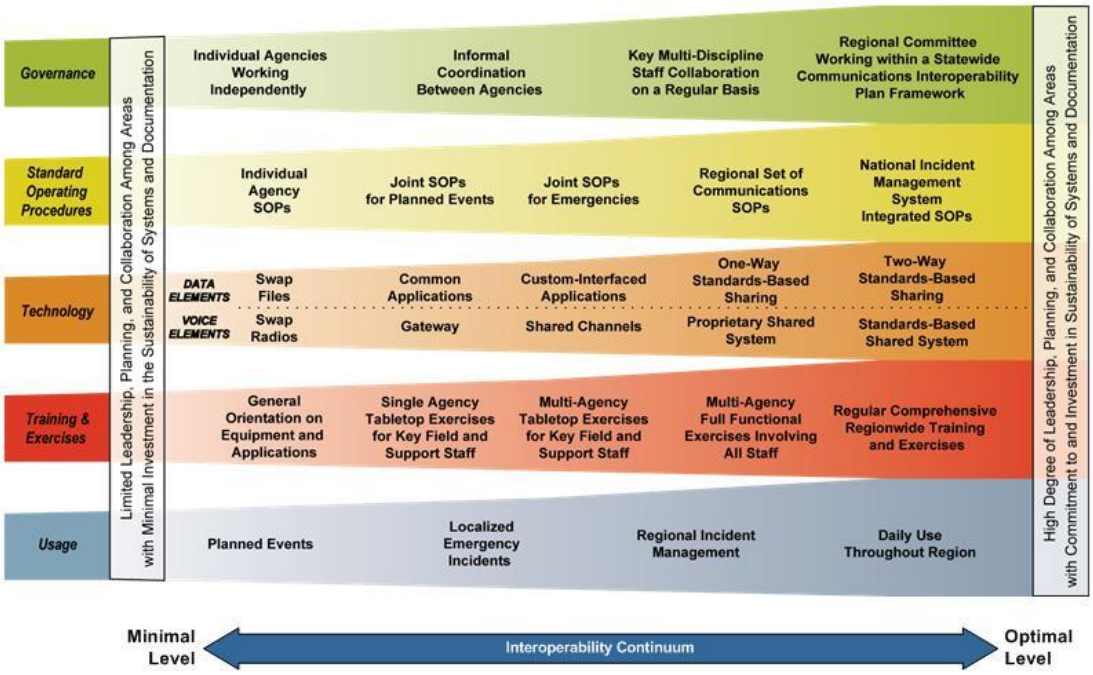


Figure 3: The Interoperability Continuum

The Continuum identifies five critical success elements that must be addressed to achieve a successful interoperable communications solution:

- Governance – Collaborative decision-making process that supports interoperability efforts to improve communication, coordination, and cooperation across disciplines and jurisdictions. Governance is the critical foundation of all of Oklahoma efforts to address communications interoperability.
- SOPs – Policies, repetitive practices, and procedures that guide emergency responder interactions and the use of interoperable communications solutions.
- Technology – Systems and equipment that enable emergency responders to share voice and data information efficiently, reliably, and securely.

[2] OEC's System Life Cycle Planning Guide is available here: http://publicsafetytools.info/oec_guidance/docs/OEC_System_Life_Cycle_Planning_Guide_Final.pdf

- Training and Exercises – Scenario-based practices used to enhance communications interoperability and familiarize the public safety community with equipment and procedures.
- Usage – Familiarity with interoperable communications technologies, systems, and operating procedures used by first responders to enhance interoperability.

More information on the Interoperability Continuum is available in OEC's Interoperability Continuum brochure.[3] The following sections will further describe how the SCIP will be used in Oklahoma and Oklahoma's plans to enhance interoperable and emergency communications.

2. PURPOSE

The purpose of the Oklahoma SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Serve as a guidance tool and reference document, particularly for rural areas in the State, to articulate the efforts Oklahoma is undertaking with regard to interoperable and emergency communications and what communications resources may be available for use across the State.

The development and execution of the SCIP assists Oklahoma with addressing the results of the National Emergency Communications Plan (NECP) Goals and the Federal government with fulfilling the Presidential Policy Directive 8 (PPD-8)[4] National Preparedness Goal for Operational Communications.[5]

In addition to this SCIP, Oklahoma will develop an Annual Progress Report (APR) that will be shared with OEC and other stakeholders to highlight recent accomplishments and demonstrate progress toward achieving the goals and initiatives identified in the SCIP. The APR will satisfy State statute to submit an annual report on the SCIP. More information on the SCIP APR is available in Section 6.4.

This SCIP is owned and managed by the Statewide Interoperability Coordinator (SWIC). The SWIC has the authority to and is responsible for making decisions regarding this

[3] OEC's Interoperability Continuum is available here: http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx

[4] PPD-8 was signed in 2011 and is comprised of six elements: a National Preparedness Goal, the National Preparedness System, National Planning Frameworks and Federal Interagency Operational Plan, an annual National Preparedness Report, and ongoing national efforts to build and sustain preparedness. PPD-8 defines a series of national preparedness elements and emphasizes the need for the whole community to work together to achieve the National Preparedness Goal. http://www.dhs.gov/presidential-policy-directive-8-national-preparedness.

[5] National Preparedness Goal – Mitigation and Response Mission Area Capabilities and Preliminary Targets – Operational Communications: Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

1. Ensure the capacity to communicate with the emergency response community and the affected populations and establish interoperable voice and data communications between Federal, State, and local first responders.
2. Re-establish sufficient communications infrastructure within the affected areas to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

strategic plan. The SWIC is also responsible for ensuring that this plan is implemented and maintained statewide. These actions and responsibilities occur under the guidance and approval of the SIGB.

3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW

The state of Oklahoma's public safety communications landscape consists primarily of disparate communications systems with limited interoperability, operating under the challenges of a rural geography and limited funding. The interoperable and emergency communications-related governance structure defined by Senate Bill (SB) 1153, which names OKOHS as the central point of contact for all statewide interoperable communications planning efforts, including:

- Oversight and implementation of the SCIP
- Coordination of a migration plan for use of interoperable communications technologies including aid to connect disparate systems used by public safety agencies
- Assistance with applying for, receiving, and holding authorization for frequencies and channels for State agencies
- Authority to establish minimum mandatory standards and protocols for interoperable communications equipment purchases made by State agencies

The State employs three major communication systems. Oklahoma Wireless Information Network (OKWIN), the wide-area public safety communications radio system, is a 700/800 megahertz (MHz) trunked system that consists of 45 fixed sites and 2 mobile sites. OKWIN's infrastructure and equipment is owned by six partner cities and/or agencies and the system provides coverage to 70 percent of Oklahoma's population, including the three largest metropolitan areas. Oklahoma is currently in the process of implementing the first of a three-phase approach to upgrading OKWIN to a standards-based Project 25 (P25) system. Previous grant funding supported expansion of the statewide system, but the State needs to identify long-term life cycle funding for maintenance and sustainment, ongoing training, and future upgrades. In addition to the OKWIN, the State also has two regional systems, the Oklahoma City 800 MHz Trunked Radio System and the Broken Arrow Communications Regional Network, which provide interoperability to the two largest population centers in the State (Oklahoma City and Tulsa, respectively).

Oklahoma's homeland security grant funding has been reduced by nearly 80 percent in the past few years. Interoperable and emergency communications advancement over the next three to five years will require strengthened leadership and continued oversight by a full-time statewide coordinator, increased efficiency, and a unified path forward in order to sustain and enhance existing communications systems and programs.

4. VISION AND MISSION

The Vision and Mission section describes the Oklahoma vision and mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

Oklahoma Interoperable and Emergency Communications Vision:

All public safety entities in the state of Oklahoma will possess the knowledge, resources and technology to effectively communicate as authorized through voice and data, on demand and in real-time, to ensure life safety, incident stabilization, and property conservation.

Oklahoma Interoperable and Emergency Communications Mission:

The mission of the SCIP is to support the highest level of interoperable communications for all public safety entities throughout the state of Oklahoma by fostering an effective organizational structure to oversee that proper planning, training and resources are provided to responders at all levels.

5. STRATEGIC GOALS AND INITIATIVES

The Strategic Goals and Initiatives section describes the statewide goals and initiatives for delivering the vision for interoperable and emergency communications. The goals and initiatives are grouped into seven sections, including Governance, SOPs, Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.

5.1 Governance

The Governance section of the SCIP outlines the future direction of the Oklahoma governance structure for interoperable and emergency communications. Oklahoma Office of Homeland Security in cooperation with the State CIO's office serves as the central coordination point for interoperability efforts statewide. To effectively manage and implement the SCIP and its interoperable and emergency communications goals and efforts on a daily basis, OKOHS established the Statewide Interoperable Communications (IOC) Planning Division. The Division is managed by a full-time SWIC and works closely with the SIGB, which advises OKOHS on the annual update of the SCIP. The SIGB is comprised of representatives from the local, regional, State, Federal, and tribal levels, as well as authorized non-governmental organizations. It includes six subcommittees (SOP, Technology, Training and Exercise, Usage, Outreach, and Funding). The State also employs a COML Committee to manage efforts related to COML/COMT training, certification, equipment, and utilization.

In addition to State-level governance, Oklahoma has eight homeland security planning regions. Each region meets twice per year to coordinate planning, protecting, providing funding, and responding to an incident. Because the program is currently being revised, Oklahoma may also have the opportunity to regain momentum for its intra-State regional efforts and coordination.

The major challenge for interoperable and emergency communications governance efforts in Oklahoma is the lack of a clear leadership mandate for the SIGB and its subcommittees' as a result of a prolonged realignment of State agencies in Oklahoma. Various interoperability efforts have slowed as implementers wait for the realignment to

be finalized. Additionally, as part of the realignment, OKWIN may move from governance under OKOHS to another agency still to be determined. Stakeholders at all levels agree on the need to implement an OKWIN user group to provide feedback and recommendations for system enhancements, but establishment is difficult in the current environment. However, these shifts in governance present an opportunity to institute a single leadership entity for the statewide system, a governing body that can coordinate among the six system owners and receive feedback from all OKWIN users.

Based on these governance-related challenges, Oklahoma is focused on strengthening its SIGB. The State recognizes that decreases in national and State funding for interoperable and emergency communications efforts, particularly in the past two fiscal years, require the SIGB and its subcommittees to achieve effective coordination, leverage opportunities, and maximize efforts and funding.

Table 1 outlines Oklahoma's goals and initiatives related to governance.

Table 1: Governance Goals and Initiatives

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
1.	Set or adopt a Governing Board to lead emergency communication Statewide.	Seek legislative support and pass a law that will support the objectives of the Governance Charter and provide means for sustainability of the service.	SWIC and State CIO	September 2014
2.	Strengthened SIGB strategy by ensuring all relevant stakeholders (e.g., Federal, State, local, and tribal) and systems are represented and participatory in the SIGB to implement communications best practices	Codify SIGB in State law to ensure broad and sustained participation	SWIC and OKOHS Director	May 2015
		Implement SIGB Technology Subcommittee as the oversight body for interoperable communications among the various statewide radio systems (e.g., OKWIN, OHP)	SWIC and Technology Subcommittee Chair to approach system owners	September 2014
		Establish an OKWIN User Group under the SIGB and demonstrate membership and value to system owners	SIGB	December 2013
3.	Reciprocal representation established between SIGB, the State's OMES, and the NPSBN Steering Committee	Add SIGB agenda item for FirstNet updates	SWIC	November 2013
		Add FirstNet agenda item for SIGB updates	OMES Director of Public Safety	November 2013

5.2 Standard Operating Procedures (SOPs)

The SOPs section of the SCIP identifies the framework and processes for developing and managing SOPs statewide. Previously, documented SOPs in Oklahoma have existed only on a limited basis, due in part to the lack of authority, planning, and collaboration among public safety entities and regions. As a result of SWIC leadership, coordination with the SIGB's SOP Committee, and increased collaboration among agencies, more SOPs are under development and implementation. Most notably, the State recently completed the OKFOG, which provides guidance to emergency responders in the use of interoperable communications resources.

Moving forward, the State is focused on specific projects currently in progress to address the need for documented SOPs:

- Development of regional SOPs based on a template created during an OEC Technical Assistance (TA) Workshop
- Distribution of the OKFOG
- Development and update of the Tactical Interoperable Communications Plans (TICPs) for the urban areas.

In 2009, the Tactical Communications Task Force (TCTF) was formed to identify and recommend the proper procedures and tools needed to communicate effectively during any incident or event involving multiple jurisdictions or elements of the Oklahoma Regional Response System. The TCTF provides recommendations to OKOHS and the SIGB regarding improvements to the Regional Response System. The TCTF will also be tasked with creating standards for State agencies regarding tactical communications equipment and identifying any training necessary to ensure that the system is used properly.

In November, 2009, OKOHS published the *Minimum Standards for Communication Equipment Purchases Phase I: Subscriber Equipment*, as required by Oklahoma State Statute. The publication is a multi-phase set of standards for future purchases of equipment and infrastructure made by State agencies in support of interoperable communications in Oklahoma. The goal of the standards is to eliminate redundancy and ensure the compatibility of new purchases made by State agencies with existing technology. All purchases of interoperable communications equipment and infrastructure by State agencies in Oklahoma made after November 1, 2009, must comply with Phase 1. Additionally, purchases made by local agencies using funding provided through OKOHS must adhere to the standards. OKOHS continues to work with other State agencies to determine standards for the additional phases.

Table 2: Standard Operating Procedures Goals and Initiatives

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
4.	Development of	Provide TICP template for regional	SWIC	January 2014 regional

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
	regional and State-level Tactical Interoperable Communications Plans (TICPs), to include major communications resources statewide and national interoperability channels	councils as part of regional response trailer dissemination and conduct information sharing on TICP value to regions and State		council meetings
		Add TICP agenda item to biannual meetings to encourage TICP development	Regional Council Advisory Group and Regional Council Coordinator	January 2014 regional council meetings
		Complete assets/capabilities inventory for Blackbox Rodeo (radio vendor event) to aid population of statewide TICP	Oklahoma Department of Emergency Management (OEM) and COMLs	October 2013
5.	Development of an app for the OKFOG	Identify application (app) development cost (iPhone and Android) and determine necessity/viability	SWIC, SIGB, OMES	May 2015
		Achieve relevant approvals and develop app in-house	SWIC and OMES	December 2015
		Identify software or other updates necessary to use app	OMES	January 2015
6.	Periodic revision of the OKFOG	Identify and incorporate necessary revisions	SIGB SOP Subcommittee	November 2013
		Disseminate updated OKFOG 2.0 electronically	SWIC	December 2013
		Revise OKFOG biennially	SIGB SOP Subcommittee	December 2015, 2017
7.	Public safety radios in the state of Oklahoma are programmed with national interoperability channels	Develop recommended statewide, standardized templates for programming radios with national interoperability channels	SIGB SOP Subcommittee	January 2014
		Obtain buy-in for statewide standardized radio programing guidelines from OMES, Oklahoma Department of Transportation (ODOT), Emergency Medical Services (EMS), and Department of Public Safety (DPS)	SWIC and SOP Subcommittee Chair	January 2014

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		Determine national interoperability channels that require licensing (Very High Frequency [VHF], Ultra High Frequency [UHF], and 700/800 MHz)	SIGB Technology Subcommittee	January 2014
		Identify an appropriate State frequency coordinator to work with the FCC to license chosen national interoperability channels	OMES, SWIC	December 2014
		Include recommended templates for radio programming in the State and regional TICPs and the Programming Guide	SIGB SOP Subcommittee	December 2014
		Distribute standardized radio programming guidelines via OMES, ODOT, DPS, and regional councils and conduct outreach and education to promote statewide use	SWIC, Regional Council Coordinator, SIGB SOP, Technical, and Outreach Subcommittees	December 2014
8.	Through collaboration with the Office of the State CIO, establish standards addressing building and use of radio infrastructure, service agreements, service metrics, management of frequencies, etc.	Identify and develop approved plans for Public Safety Broadband Networks that leverages all available state assets.	OMES, SIGB, and OKPSBN Steering Committee	June 2014

5.3 Technology

The Technology section of the SCIP outlines Oklahoma's plan to maintain and upgrade existing technology; the roadmap to identify, develop, and implement new and emerging technology solutions; and the approach to survey and disseminate information on current and future technology solutions to ensure user needs are met. Voice communications interoperability in Oklahoma varies regionally and from agency to agency. A majority of agencies in urban areas of Oklahoma participate in proprietary shared systems. Many rural public safety agencies located within a shared voice system's coverage area utilize the systems as primary or mutual users. A majority of the

agencies located outside the footprint of an 800 MHz system rely on standalone conventional VHF technology solutions, but there are a limited number of these solutions in the State. Both VHF and UHF users rely heavily on swapping radios, mobile gateways and shared mutual aid frequencies to interoperate with other public safety agencies.

In terms of statewide communications, Oklahoma recently expanded OKWIN, its 700/800 MHz shared trunked radio system, to include 45 fixed sites and 2 mobile sites. OKWIN's infrastructure and equipment is owned by six partner cities and/or agencies and the system provides coverage to 70 percent of Oklahoma's population, including the three largest metropolitan areas. Previous grant funding supported expansion of the statewide system, but the State needs to identify long-term life cycle funding for maintenance and sustainment, ongoing training, and future upgrades. Oklahoma is implementing the first of a three-phase approach to upgrading OKWIN to a standards-based Project 25 (P25) system. OKOHS recognizes that not every public safety entity is willing or able to participate in a single shared system and implemented a statewide fixed gateway interface that utilizes the national interoperability channels. This system is currently online and active in the Oklahoma City metropolitan area, and coverage reaches into seven counties from five repeater locations. OKOHS also developed and implemented the Oklahoma Regional Response System, which includes multiple units equipped with mobile gateway devices programmed with the national interoperability channels.

Major regional systems include the Oklahoma City 800 MHz Trunked Radio System, which operates in both digital and analog modes and is comprised of two rings of Harris Corporation's Enhanced Digital Access Communication System (EDACS) ProVoice simulcast. The system provides 95 percent handheld coverage to more than 1,100 square miles and functions as a gateway to many channels and talkgroups on radio systems operated by surrounding mutual aid partner agencies. National mutual aid VHF, UHF and 800 MHz conventional channels are linked to the Oklahoma City Radio System. Current expansion plans include migration to P25 trunking for the system.

The Broken Arrow Communications Regional Network, an 800 MHz multi-site communications network in the Tulsa metropolitan area, consists of four Harris EDACS radio sites, four P25 radio sites and four OpenSky radio sites. All users can communicate with each other due to the VIDA platform utilizing IP technology—regardless of which Harris platform on which they operate. The system also employs Harris NetworkFirst IP technology, which allows users to communicate directly with other radio systems—UHF, VHF, and 700/800 MHz. The Regional Network will soon have an ISSI link to directly connect to OKWIN at the IP-level, allowing direct communications at the user level and the system level.

Owners from the three 800 Trunked radio communications systems in Oklahoma maintain regular discussions regarding P25 and other planning. However, some agencies and/or jurisdictions in the State have not updated to P25 and/or are still on VHF/UHF/Low-Band systems; many cannot afford to upgrade. Changes in governance, limited funding, and challenges related to rural areas in Oklahoma have made it difficult to identify an approach to achieving statewide interoperability.

Table 3 outlines Oklahoma's goals and initiatives for technology.

Table 3: Technology Goals and Initiatives

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
9.	Defined, approved plan for a standards-based statewide trunked LMR wide area network to include all state assets and available trunked and conventional LMR networks.	Identify existing networks and conduct a user needs assessment for a standards-based statewide trunked LMR wide area network	OMES (in conjunction with broadband assessments)	December 2014
		Conduct a gap analysis and develop a conceptual design for a standards-based statewide trunked LMR wide area network based on user needs	OMES	June 2015
		Present conceptual design for a standards-based statewide trunked LMR wide area network to State legislature	OMES	February 2016
10.	Technology Services Management	Design a consolidated holistic approach to providing radio based communication service that reaches all of the state's first responders.	SWIC, OMES	June 2015

5.4 Training and Exercises

The Training and Exercises section of the SCIP explains Oklahoma's approach to ensure that emergency responders are familiar with interoperable and emergency communications equipment and procedures and are better prepared for responding to real-world events. The Statewide IOC Planning Division coordinates regularly with the Training and Exercise Division within OKOHS to ensure that communications components are incorporated into the Oklahoma Training and Exercise Program. Incorporating these components into regularly scheduled exercises tests different levels of communications and displays the ability to communicate among multiple agencies, multiple disciplines and multiple jurisdictions. It also integrates Federal, State, local, tribal, and non-governmental organizations in order to promote interoperability across agencies and jurisdictions within the State creating regular comprehensive training and exercise. National Incident Management system (NIMS) training and certification is required of all emergency responders in Oklahoma.

Oklahoma is focused on continued efforts to build on its COML/COMT program. The State formed a COML Committee in 2010 as a working group under the guidance of the

Training and Exercise Committee of the SIGB. The COML Committee makes recommendations to the SIGB and to OKOHS regarding the COML Program in the State, and it's Credentialing Subcommittee, which consists of State-certified COML's and COMT's, reviews COML and COMT Task Books before individuals can receive State-level certification. The COML Committee is a key component of Oklahoma's COML Program and recently established a formal COML/ COMT credentialing program. In addition to COML/COMT certification efforts, the State also plans to develop "Radio 101" training and/or train-the-trainer courses for radio end-users, primarily for law enforcement.

Table 4 outlines Oklahoma's goals and initiatives for training and exercises.

Table 4: Training and Exercises Goals and Initiatives

Training and Exercises Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
11.	Enhanced understanding of deployable communications resources statewide via training and exercises	Identify and develop a comprehensive list of deployable communications resources and capabilities statewide. Include list on www.ioc.ok.gov website and share through WebEOC	Regional Response Coordinator and SWIC	June 2014, annually
		Incorporate deployable communications statewide resources and capabilities into existing exercises and events to increase awareness and use	Regional Response Coordinator, SWIC, OKOHS Training & Exercise Division, and OEM	October 2013, annually each October (with fiscal year decisions)
		Determine what training on deployable communications resources and capabilities statewide is required based on exercise and event AARs	COML Committee, SWIC, OKOHS Training & Exercise Division, and OEM	October 2013, annually each October (with fiscal year decisions)
		Conduct training on deployable communications resources and capabilities statewide (e.g., COMU awareness, Regional Response System SOGs)	Regional Response Coordinator, SWIC, and SIGB Training & Exercise Subcommittee	Ongoing
		Assign amateur radio operators to specific sites and incorporate into regular training for those sites, as appropriate	COML Committee	December 2014

Training and Exercises Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
12.	Specific communications objectives are incorporated into all training and exercises statewide	Develop a list of communications scenarios and/or injects that could be exercised and post the list to www.ioc.ok.gov	SIGB Training & Exercise Subcommittee	December 2013
		Provide the list of potential communications scenarios and/or injects to the Oklahoma Emergency Management Agency (OEMA) for distribution to members	SIGB Training & Exercise Subcommittee	January 2014 and August 2014 (next OEMA statewide conference)
		Encourage participation of trained COML/COMTs in training and exercises	SIGB Outreach Subcommittee, COML Committee, and SIGB Training & Exercise Subcommittee	January 2014, ongoing
		Encourage participation and collaboration with Federal and Tribal as well as amateur radio partners in training and exercises by conducting outreach	SIGB Outreach Subcommittee, COML Committee, and SIGB Training & Exercise Subcommittee	January 2014, ongoing

5.5 Usage

The Usage section of the SCIP outlines efforts to ensure responders adopt and familiarize themselves with interoperable and emergency communications technologies, systems, and operating procedures in the State. Regular usage ensures the maintenance and establishment of interoperability in case of an incident. Within the OKWIN footprint, responders are able to have daily use throughout the area, if they have compatible radios. Additional 700/800 MHz radios are needed within the footprint to achieve daily usage from all responders. Currently, usage can only be achieved by moving in mobile gateway technology when an incident is located outside of the OKWIN footprint.

In 2009, Oklahoma used a vendor to enter communications equipment data into the Communications Assets Survey and Mapping Tool (CASM). The State also conducted a 2011 refresher workshop on utilizing CASM through OEC TA. However, many of those trained in CASM have retired or are otherwise no longer in their positions. The State aims to increase use of CASM, which requires training of new users.

Table 5 outlines Oklahoma's goals and initiatives for usage.

Table 5: Usage Goals and Initiatives

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
13.	Routine, scheduled, and monitored usage of regional communications equipment (e.g., strategic technology reserve [STR])	Develop guidelines for periodic use of regional communications equipment	COML Committee and OEM	December 2013
		Encourage regular usage of regional communications equipment through outreach and education	SIGB Outreach Subcommittee, COML Committee, and SIGB Training & Exercise Subcommittee	December 2014, ongoing
		Document usage and viability of assets via WebEOC	OEM	March 2014
14.	Through collaboration with the Office of the State CIO, establish service-level agreements and performance metrics addressing State and regional communications service and equipment.	Develop procedures, guidelines, and service-level agreements.	OMES, SIGB	December 2014

5.6 Outreach and Information Sharing

The Outreach and Information Sharing section of the SCIP outlines Oklahoma's approach for building a coalition of individuals and emergency response organizations statewide to support the SCIP vision and for promoting common emergency communications initiatives. Oklahoma has developed and is enhancing an outreach strategy to ensure that policy makers and public safety practitioners remain aware of interoperable communications issues and SCIP progress. Representatives of the Statewide IOC Planning Division and the SIGB attend various meetings and conferences to participate in information sessions regarding a variety of topics (e.g., NECP Goal 2, Narrowbanding, OKFOG, and broadband planning). To coordinate and

support information sharing efforts, the Statewide IOC Planning Coordinator receives and coordinates request for presentation from associations and public safety agencies. The Regional Council Coordinator also organizes information sharing from OKOHS through each of the regional councils.

In addition to providing information sessions around the State, the Interoperable Communications Website is regularly maintained and provides information about planning efforts and initiatives, recent news, details regarding upcoming events and a secure portal for authorized SIGB members to view important information. The Oklahoma Interoperability Newsletter is issued electronically on a quarterly basis, and is also posted to the Interoperable Communications Website for public access. Oklahoma stakeholders and subject matter experts often contribute articles on a variety of subjects to the newsletter.

Oklahoma is conducting targeted outreach and information sharing to public safety broadband stakeholders. Additionally, the State has identified the following topics to add to a formal statewide outreach and information sharing program:

- Benefits of standards-based vs. proprietary systems
- Proper radio programming and testing for narrowbanding and national interoperability channels
- Standard operating guidelines and procedures
- Air-to-ground communications
- WebEOC

In addition to current outreach and information sharing-related efforts, the State seeks broader and continued buy-in for SCIP goals and initiatives, and has identified the following goals and initiatives to ensure sustained momentum for new and existing efforts. Table 6 outlines Oklahoma's goals and initiatives for outreach and information sharing.

Table 6: Outreach and Information Sharing Goals and Initiatives

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
15.	Educate State, local, tribal, and Federal users on planning for and implementation of the Nationwide Public Safety Broadband Network (NPSBN)	Implement the SLIGP requirements, which include stakeholder outreach	OMES NPSBN Steering Committee and SIGB	December 2016, ongoing
16.	Formal outreach and information sharing program for all stakeholders about statewide	Educate public safety community by: • Giving presentations at relevant meetings/events • Working through professional	SWIC Office, SIGB Outreach Committee, Regional Council Coordinator	September 2014, ongoing

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
	interoperability efforts	associations • Utilizing regional councils • Promoting statewide interoperability tools (e.g., ioc.ok.gov website, quarterly Interoperability Newsletter)		
		Develop resources and educate State, local, and tribal users on benefits of standards-based technology as opposed to proprietary technology	SWIC Office, SIGB Outreach Committee, and SIGB Technical Committee	June 2014, ongoing
		Educate public safety community and radio vendors about the need for properly functioning LMR equipment: • Standard channel labels • Testing and alignment • Programming • Narrowbanding	SWIC Office, SIGB Outreach Committee, and SIGB Technical Committee	2016, ongoing
		Share TICPs and OKFOG with State, local, tribal, and Federal partners to enhance understanding of general response guidelines	SWIC Office, SIGB Outreach Subcommittee, and COML Committee	December 2013, ongoing
		Develop a plan to conduct targeted outreach to agencies/jurisdictions that have yet to complete the FCC mandated narrowbanding process	SWIC Office and SIGB Outreach Committee	
		Develop resources (e.g., job aids, training materials) and educate State, local, and tribal users on availability and procedures for air-to-ground communications	OMES, SWIC Office, and SIGB Outreach Committee	March 2014, ongoing
		Enhance the process and continue to educate agencies on how to request access to State and regional asset lists and increase utilization of WebEOC by all State Emergency Support Functions (ESFs)	OEM (process) with SWIC Office and SIGB Outreach Committee (education)	March 2014, ongoing

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		Conduct outreach on Regional Response System standard operating guidelines (SOGs)	Regional Response Coordinator and SWIC	January 2014

5.7 Life Cycle Funding

The Life Cycle Funding section of the SCIP outlines Oklahoma's plan to fund existing and future interoperable and emergency communications priorities. Oklahoma has experienced significant loss of funding for interoperable and emergency communications in the past few years. Previous funding allowed for expansion of systems; the State is now focused on identifying funds to sustain those systems. Oklahoma aims to plan for long-term maintenance and upgrades to State-owned communications resources, equipment, and infrastructure as well as for statewide interoperability programs and governance by determining costs, developing funding plans, and identifying funding sources.

Table 7 outlines Oklahoma's goals and initiatives for life cycle funding.

Table 7: Life Cycle Funding Goals and Initiatives

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
17.	Established life cycle funding plan and timeframe for major State-owned and -maintained deployable resources, communications systems, and subscriber equipment	Identify a sustainable source(s) of funding to implement the life cycle funding plan for State-owned and -maintained deployable resources, communications systems, and subscriber equipment, including but not limited to: • OKWIN • Cache radios • Conventional statewide system • Deployable resources • WebEOC	OMES, OKOHS	January 2016
18.	Established life cycle funding plan for statewide	Determine administrative costs for: • OKOHS interoperability	SWIC, SIGB, OKOHS (including the	January 2016

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
	interoperability programs and governance	program • SIGB and subcommittees operations • Education and outreach activities • Development, review, and maintenance of SOPs • Training and exercise programs	SAA)	
19.	Through collaboration with the Office of the State CIO, establish a sustainability model based on public/private partnership addressing funding and operational needs of state-owned public safety communication systems.	Determine local, State, and tribal assets to assist with identifying funding and operational assets.	OMES, SIGB, local, State, and tribal partnerships	December 2014

6. IMPLEMENTATION

6.1 Action Plan

The Action Plan section of the SCIP describes the process Oklahoma will use to determine a plan to execute the initiatives in the SCIP. The Oklahoma SIGB will call a special session annually to conduct all components of action planning, management of success, and strategic plan review. During the special session, stakeholders will outline steps necessary to complete strategic goals and initiatives. Each of the owners, including the SIGB committees, will follow up on specific goals and initiatives themselves, as applicable.

6.2 Measures of Success

The Measures of Success section of the SCIP defines the measures that Oklahoma will use to monitor progress and indicate accomplishments toward achieving the vision for interoperable and emergency communications. Measures of success are used to meaningfully assess the outcomes and impacts of program functions and processes in meeting strategic goals. Table 8 outlines these measures for Oklahoma. More information on how these measures are managed is included in Section 6.3.

Table 8: SCIP Measures of Success

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
1.	Strengthened SIGB strategy by ensuring all relevant stakeholders (e.g., Federal, State, local, and tribal) and systems are represented and participatory in the SIGB to implement communications best practices	SIGB meets quarterly but is not well-attended, empowered, or impactful	70% participation in quarterly SIGB meetings and 90% completion of SCIP-assigned initiatives each year	October 2015, annually each October	SWIC, OKOHS
2.	Reciprocal representation established between SIGB and the State's OMES NPSBN Steering Committee	There is a SIGB representative on the OMES NPSBN Steering Committee, but no broadband representation or coordination with the SIGB	Each body has a permanent agenda item for the other to ensure coordination and information sharing	December 2013, annually	SIGB
3.	Development of regional and State-level TICPs, to include major communications resources statewide and national interoperability channels	One TICP has been developed for the former COUASI region (regions 6 and 8).	6 TICPs completed (1 State, 5 regional), each used at a planned or unplanned event and documented in After Action Reports (AARs)	December 2015	SWIC and SIGB

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
4.	Development of an app for the OKFOG	OKFOG exists on paper and in PDF form. The SIGB's Outreach Subcommittee is in the process of a campaign to spread awareness and increase usage	Daily use of the OKFOG occurs across the State. 50% of incident or event AARs describe successes and challenges of using OKFOG	December 2015	SIGB Outreach Committee
5.	Periodic revision of the OKFOG	First version of OKFOG recently implemented and outreach and education in process	OKFOG updated every two years, along with an outreach campaign	December 2017	SIGB SOP Committee
6.	Public safety radios in the state of Oklahoma are programmed with national interoperability channels	Many radios across the State have been programmed incorrectly or not at all	80% of all radios are programmed correctly and national interoperability channels are used on incidents	December 2016	SIGB Technology Subcommittee
7.	Defined, approved plan for a standards-based statewide trunked LMR wide area network	OMES beginning to study and some network elements exist for leveraging, but no statewide standards based plan or system exists	Digital, trunked, P25, standards-based, 700/800 MHz or hybrid public safety grade statewide LMR network	December 2018	SWIC and SIGB
8.	Enhanced understanding of deployable communications resources statewide via training and exercises	Resources are new to each region and there is very little familiarity with the new resources	Annual exercises occur within each of the 8 regions that examine deployment of the communications resources	SIGB Training and Exercise Subcommittee	October 2013, annually each October

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
9.	Specific communications objectives are incorporated into all training and exercises statewide	Exercises take place but include communications as a means to other objectives	100% of training and exercises include specific communications objectives	SIGB Training and Exercise Subcommittee	August 2014
10.	Routine, scheduled, and monitored usage of regional communications equipment (e.g., STR)	Only a few entities routinely schedule usage of STR equipment	Each STR location documents on WebEOC routine usage of interoperability equipment to ensure familiarity and equipment effectiveness	December 2014	SWIC, SIGB and OEM
11.	Educate State, local, tribal, and Federal users on planning for and implementation of the NPSBN	Stakeholders are waiting for more information to be published about the NPSBN	Complete all SLIGP activities with high involvement of multi-jurisdictional, multi-disciplinary, multi-level stakeholders	2016	SIGB Outreach Committee
12.	Formal outreach and information sharing program for all stakeholders about statewide interoperability efforts	A website and newsletter regularly inform stakeholders about interoperability efforts in the State, but regular, specific, and targeted outreach and information sharing campaigns have not been developed	Systematic, two-way flow of information occurs throughout every region in the State	December 2014, ongoing	SIGB Outreach Committee

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
13.	Established life cycle funding plan and timeframe for major State-owned and -maintained deployable resources, communications systems, and subscriber equipment	No life cycle plan or funding for a life cycle plan exists. State owned and maintained equipment and resources do not have adequate maintenance funding and no plan for replacement at end of life	Sustainable funding to support a robust life cycle funding plan for major State-owned and maintained deployable resources, communications systems, and subscriber equipment to ensure continuity of critical day-to-day and large scale emergency communications	January 2016	OMES, OKOHS
14.	Established life cycle funding plan for statewide interoperability programs and governance	Some State general funds and federal grant dollars support State interoperability programs and personnel	Sustainable funding provided to support Oklahoma governance (including Regional Councils), State interoperability program (SWIC) and regionally based outreach and education personnel	January 2016	SWIC, SIGB, OKOHS (including the SAA)

6.3 Management of Success

The Management of Success section describes the iterative, repeatable method Oklahoma will follow to add, update, and refine the measures of success. Management of Success in Oklahoma will occur during the annual special session for the SIGB. Members will collectively update the initiatives and the status of Measures of Success and will adjust measures of success as necessary during the special session to best demonstrate the impacts of accomplishing strategic goals and initiatives.

6.4 Strategic Plan Review

The Strategic Plan Review section outlines the process Oklahoma will use to conduct reviews of the SCIP to ensure it is up to date and aligned with the changing internal and external interoperable and emergency communications environment, as well as to track

and report progress against the defined initiatives and measures of success. The State is required by statute to update the SCIP annually and submit an annual report to the State. Review of the Oklahoma SCIP will occur during the special session of the SIGB meeting. The updated report will be presented for approval at the following, regular session SIGB meeting.

7. REFERENCE MATERIALS

The Reference Materials section outlines resources that contribute additional background information on the SCIP and interoperable and emergency communications in Oklahoma. Table 9 includes the links to these reference materials.

Table 9: SCIP Reference Materials

Title	Description	Source/Location
Oklahoma Statewide Interoperability Governing Body Charter	This document describes the purpose, authority, outcomes, scope, operating principles, membership and management by which the Statewide Interoperability Governing Body (SIGB) will achieve success.	http://www.ok.gov/homeland/Interoperable_Communications/Statewide_Interoperability_Governing_Body_(SIGB)/
Oklahoma Field Operations Guide (OKFOG)	The OKFOG is a pocket-sized communications quick-reference booklet for first responders regarding: • Guidelines for proper use, naming, and programming of shared radio channels • Standard Operating Procedures (SOPs) for the use of interoperable radio resources based on statewide and regional interoperability plans • Technical reference information for radio technicians to program local agency radios for optimal interoperable capabilities	http://www.ok.gov/homeland/Interoperable_Communications/Oklahoma_Field_Operations_Guide_(OKFOG)/

APPENDIX A: MAJOR SYSTEMS

Table A-1 lists major interoperable and emergency communications systems in the state of Oklahoma.

Table A-1: Major Systems, Updates, and New Systems

Major Systems Information						
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
Multi-County/ Parish System	Oklahoma Wireless Information Network (OKWIN)	City of Edmond, City of Norman, City of Shawnee, City of Tulsa, City of Owasso and the Oklahoma Department of Public Safety (DPS).	800MHz Non-P25 Motorola Digital Trunked Other: All infrastructure equipment is owned and maintained by the OKWIN partners. The OKWIN system provides coverage to 70 percent of Oklahoma's population. Primary usage: Voice 42 sites with three P25-compliant sites	There are more than 520 agencies and 25,000 handheld and mobile radios currently operating on the OKWIN system.	Local State	Existing System The OKWIN system is currently implementing the first of a three phase plan to upgrade to a standards-based P25 shared system. In summary, the three phases of the OKWIN expansion are described as: 1) Upgrade core infrastructure to P25 2) Upgrade subscriber units to P25 3) Upgrade tower infrastructure to P25 Upon fully migrating to a P25 shared system, the OKWIN network will be able to integrate with other P25-compliant systems located internal and external to Oklahoma. P25 will also allow public safety entities to purchase radio equipment from multiple vendors. OKWIN is also working with the Arkansas Wireless Information Network to connect the two systems utilizing P25 technology.

Major Systems Information

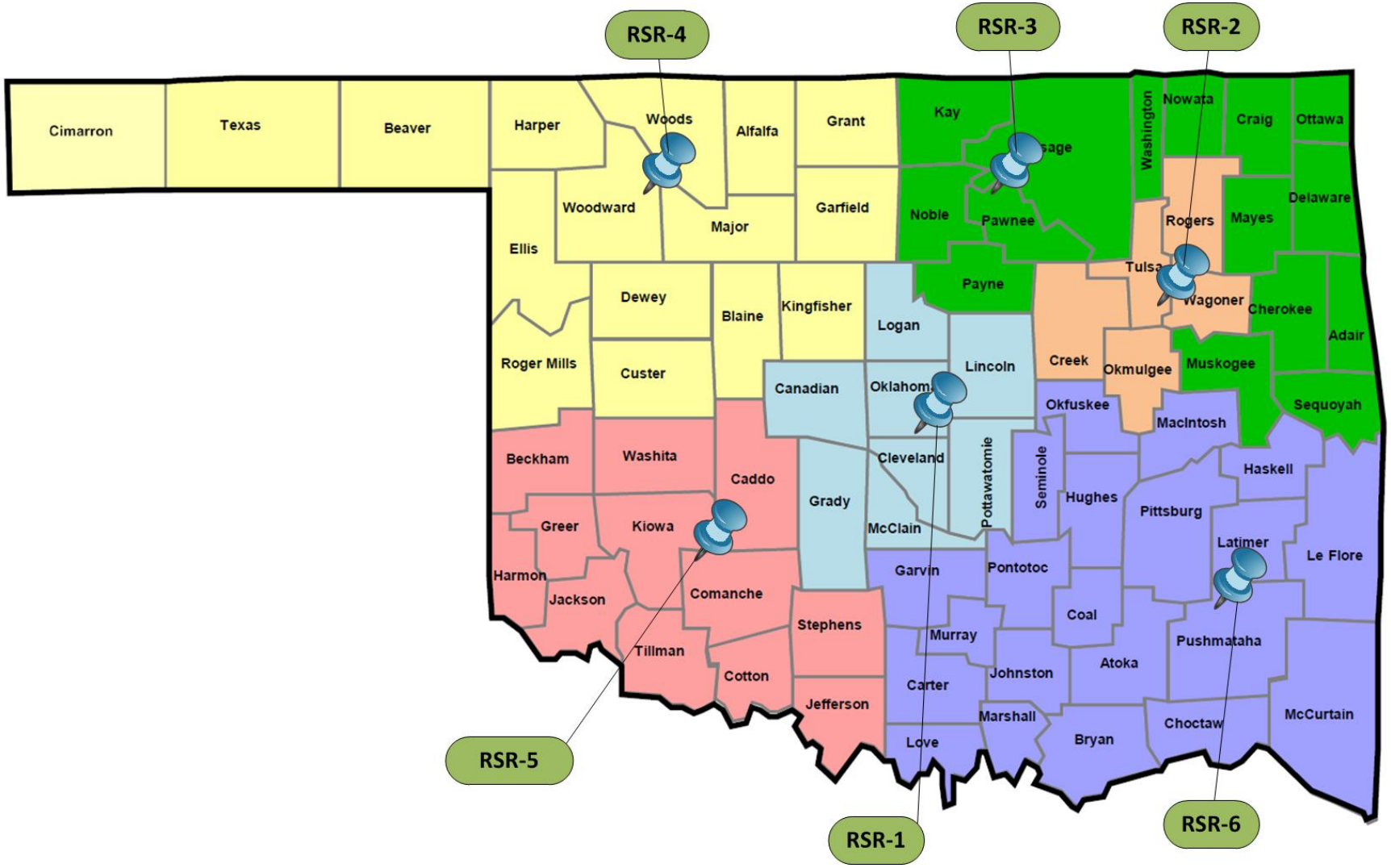
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
Multi-City System	Oklahoma City Radio System	Oklahoma City	800MHz Non-P25 Harris Digital/Analog Trunked DES Encryption on Encrypted Talk Groups Primary usage: Voice Sites: 13	5060 subscribers Users include all city of Oklahoma City Departments and Trusts, as well as the cities of Yukon, Bethany, Warr Acres, Mustang, and Putnam City Schools Police	Local Regional	Existing System Oklahoma City EDACS System The current system is comprised of two concentric rings of Harris EDACS® Simulcast. The inner ring consists of seven transmitter sites, and 18 RF channels. The outer ring consists of 6 sites with 14 RF channels. The two systems share a central site that is also the Bypass site in the event of simulcast failure. The sites are connected by two rings of TDMA microwave, each configured with T1 path switching in order to provide redundant operation. Connecting the two simulcast systems is a Harris Integrated Multi-site Controller (IMC) that also serves as a Console Electronics Controller (CEC). This CEC/IMC is co-located with the new Harris VIDA Switch that serves as the Interop Gateway for up to 60 channels of interoperability. The VIDA Switch will allow any of the many radios to be connected to one another or to the trunked radio system. This VIDA Switch is capable of becoming the Core Switch of Harris P25 System at a later date. The VIDA Switch also has ISSI capability that is planned to be used to connect to the OKWIN System. Connected to the system through the IMC and VIDA are numerous interoperability channels including but not limited to links to OHP talk groups, Oklahoma County Sheriffs' Office, Links allowing

Major Systems Information						
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
						OKWIN users to communicate with OCPD Divisions, links to some of the OKWIN RMA talk groups, Connections to the 8TAC, UTAC, and VTAC interoperability channels. The national Interoperability channels are located at sites around the Metro area and are configured in a manner that allows the system to automatically select the best transmit site based upon the received signal from the various sites or to be manually selected by a dispatcher. Future plans include an upgrade to higher capacity IP based microwave and a later migration to P25.
City/County System	Broken Arrow Regional Communications Network	Partnerships between the City of Broken Arrow, City of Bixby, City of Glenpool, City of Jenks and Wagoner County	800MHz Harris EDACS OpenSky2 & P25 Mixed Mode System Primary usage: Voice 13 sites (The system consists of four Harris EDACS radio sites, four P25 radio sites and five OpenSky radio sites. All users can communicate with	There are 6 agencies and 1500 subscribers operating on the system as of today.	Local	Existing System The system also has the Harris Interoperable Gateway which allows users the ability to communicate directly with other radio systems—UHF, VHF, and 700/800 MHz—not directly on the Broken Arrow Communications Regional Network. The Regional Network has in place ISSI to directly connect to the Oklahoma Wireless Information Network at the IP level allowing direct communications at the user-level and the system-level.

Major Systems Information						
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
			each other due to the VIDA platform utilizing IP technology—regardless of which Harris platform they currently operate on.)			

APPENDIX B: LIST OF ACRONYMS

AAR	After Action Report
APR	Annual Progress Report
COML	Communications Unit Leader
COMT	Communications Unit Technician
DHS	U.S. Department of Homeland Security
EDACS	Enhanced Digital Access Communication System
ESF	Emergency Support Function
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
FOG	Field Operations Guide
IOC	Interoperable Communications (Planning Division)
IP	Internet Protocol
ISSI	Inter-RF Subsystem Interface
MHz	Megahertz
LMR	Land Mobile Radio
NECP	National Emergency Communications Plan
NG911	Next Generation 911
NIMS	National Incident Management System
NPSBN	Nationwide Public Safety Broadband Network
NTIA	National Telecommunications and Information Administration
OCIO	Office of the Chief Information Officer
ODOT	Oklahoma Department of Transportation
OEM	(Oklahoma) Department of Emergency Management
OMES	(Oklahoma) Office of Management and Enterprise Services
OEC	Office of Emergency Communications
OKFOG	Oklahoma Field Operations Guide
OKOHS	Oklahoma Office of Homeland Security
OKWIN	Oklahoma Wireless Information Network
PPD	Presidential Policy Directive
PSAP	Public Safety Answering Point

SAA	State Administering Agency
SCIP	Statewide Communication Interoperability Plan
SIEC	Statewide Interoperability Executive Committee
SIGB	Statewide Interoperability Governing Body
SOP	Standard Operating Procedure
SWIC	Statewide Interoperability Coordinator
TA	(OEC) Technical Assistance (Program)
TCTF	Tactical Communications Task Force
TICP	Tactical Interoperable Communications Plan
VHF	Very High Frequency
UHF	Ultra High Frequency

APPENDIX C: RADIO SERVICE REGIONS