

South Dakota Public Safety Communications Council (SDPSCC)

SOUTH DAKOTA STATEWIDE COMMUNICATION INTEROPERABILITY PLAN













December 2017

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LETTER FROM THE SWIC



Greetings,

I am pleased to present to you the 2017 South Dakota Statewide Communication Interoperability Plan (SCIP). This represents South Dakota's continued commitment to improving emergency communications and supporting the public safety practitioner community. The 2017 SCIP marks the next step towards achieving the National Emergency Communications Plan's (NECP) vision for interoperable communications at the local, regional, state, and federal level.

With support from the Department of Homeland Security's Office of Emergency Communications (OEC), representatives from the South Dakota Public Safety Communications Council (SDPSCC) and several other state and local public safety agencies from across South Dakota collaborated to update the SCIP goals and initiatives and redefine its vision and mission for public safety communications in the state.

The heartbeat of public safety communications in South Dakota is the statewide radio communications system. The statewide radio system has over 18,000 registered units and serves State and local law enforcement, first responders, support agencies and federal and tribal public safety entities. It is used every day, thousands of times, for nearly all public safety events in South Dakota. The modernization of the statewide system by 2023 and assisting local governments with mechanisms to update their portable and mobile radios are critical for the sustainability of interoperable communications in South Dakota and the effectiveness and efficiency of public safety services delivery.

As we move toward our goal of interoperability, we must remain dedicated and strive to improve 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 this SCIP and become a nationwide model for statewide interoperability.

Sincerely,

Jeff Pierce Statewide Interoperability Coordinator South Dakota Public Safety Communications Council



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EXECUTIVE SUMMARY / INTRODUCTION



The South Dakota Statewide Communication Interoperability Plan (SCIP) is a strategic planning document developed in September of 2017 by a group of public safety practitioners representing multiple public safety disciplines and jurisdictions from across South Dakota. During the South Dakota SCIP Workshop, participants developed goals based on the seven strategic areas, which are: Governance, Standard Operating Procedures (SOPs), Technology, Training & Exercises, Usage, Life Cycle Funding, and Outreach and Information Sharing. After the SCIP goals were identified, participants defined initiatives, timelines, and owners for each of them that will be used to keep track of the state's progress (see Appendix A).

The SCIP identifies South Dakota's Vision and Mission for public safety communications in the state as well as outlines specific public safety communications goals that were developed in a one-day Department of Homeland Security (DHS) Office of Emergency Communications (OEC) facilitated session. This SCIP highlights successes and current public safety communications gaps identified by state and local stakeholders. In identifying gaps and developing strategic goals workshop participants focused on improving the state's most important public safety communications tool which is the statewide radio communications system.

However, because the public safety communications landscape continues to rapidly evolve consideration was given to the 2014 National Emergency Communications Plan¹ and the Interoperability Continuum², developed by SAFECOM shown in Figure 1. This combined analysis has resulted in a strategic plan that coordinates the mutually-supportive strategies of Land Mobile Radio (LMR), NG9-1-1, FirstNet, nationwide public alerting systems, and other major capabilities that are being deployed.

¹ The 2014 National Emergency Communication Plan is available here: https://www.dhs.gov/sites/default/files/publications/2014%20National%20Emergency%20Communications%20Plan October%2029%202014.pdf

² OEC's Interoperability Continuum is available here: http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx

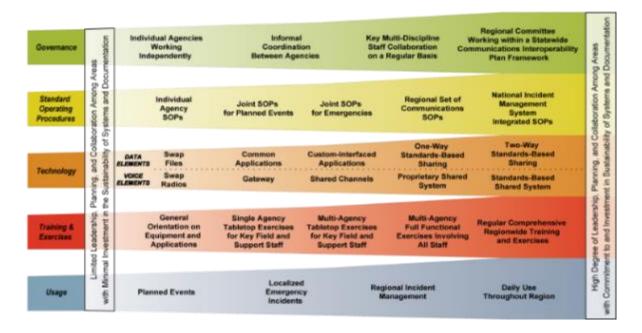


Figure 1: The Interoperability Continuum

Vision & Mission

South Dakota stakeholders developed the following vision and mission:

Vision:

Reliable statewide public safety communications

Mission:

Striving to provide the highest level of public safety communications for all responding entities throughout South Dakota by fostering and providing an effective organizational structure to oversee the proper planning, training, and resources to responders at all levels now and in the future.

OVERVIEW OF STRATEGIC SECTIONS

The following are high-level summaries of South Dakota's goals in each of the seven strategic areas:



Governance

Develop appropriate governance through the addition of Legislative and Financial components



Standard Operating Procedures

Update current processes and procedures for public safety communications



Technology

Maintain existing systems and adopt emerging technologies



Training and Exercises

Continue to take a communicationsfocused approach to training that marries day-to-day operations with incident response



Life Cycle Funding

Identify sustainable funding mechanisms for achieving interoperable and public safety communications goals



Usage

Maintain operations capabilities of existing equipment



Outreach and Information Sharing

Develop a marketing plan for the dissemination of communications plans and education on IPAWS



Goals, Initiatives & Benefits

	Goals	Initiatives	Benefits
Governance	Include Bureau of Finance and Management, Governor's Office, and Legislative officials in Governance structure	Legislation introduced or executive order modified to change the makeup of the Governance structure	Diverse SIEC membership ensures all disciplines are represented
SOPs	Update statewide SOPs in Appendix B (2014 SCIP) to ensure redundant communications pathways	Review and modify SOPs at the regional level	Policies and procedures need to be updated regularly to include new and emerging technologies
	Initiate review of broadband procedures in public safety communications	 Data collection of standards being used Recommend statewide standards 	Ensures uniformity across all agencies
Technology	Complete upgrade to statewide P25 system	Upgrade subscriber radiosFinalize network upgrades	Promotes interoperability
	Enhance coverage of statewide P25 system	Prioritize site expansionsDesign and build sites	
	Complete NG9-1-1 upgrade	Fully implement ESInetImplement text to 9-1-1 statewide	
	Coordinate with FirstNet on implementation of statewide RAN	Provide oversight and ensure FirstNet is implemented per the state plan	Ensure smooth implementation of FirstNet
Training & Exercise	Continue and enhance end user training on the statewide system	 Continue current end user training and track the number of classes and participants Implement a train-the-trainer program 	Promotes continuing education and training of end users
	Continue to promote a communications centric component during exercises	Continue to include communications capabilities as a requirement of the SLA exercise program	Ensures that current and future users will have communications training
	Develop a statewide COMU training program	 Conduct a TA workshop Implement initiatives from the workshop 	An established COMU program will support the state's efforts to train, manage and deploy personnel and equipment when needed
Usage	Encourage local agencies to do testing and refresher trainings on the use of equipment	Establish and distribute recommendations for testing and exercising	Ensures end users receive up-to- date training



	Evaluate what standards and technologies are currently in use	 Participate in the development of standards for the sharing of information across the state Determine compatibility among vendor technologies 	Informs later decisions about what standards and technology should be in use
Outreach & Information Sharing	Educate stakeholders on communications plans	 Identify what communication mediums are currently in use by end users Develop a marketing plan 	Raises awareness about the state's strategic / long-term goals
	Promote statewide use of IPAWS	 Identify what jurisdictions are currently authorized to use IPAWS Include education and outreach in marketing plan 	IPAWS provides nationwide alerts and warnings in the case of an emergency
	Establish a sustainable funding source for the maintenance and enhancement of public safety communications statewide	Present plan to Governor's Office and State Legislature	Ensures that a sustainable funding source is available to maintain current and future communications systems
Life Cycle Funding	Establish a fully funded, full-time SWIC	Request FTE in 2019 budget request	A full-time SWIC can concentrate time on implementing the SCIP, and advocating for support and dedicated resources
	Establish a broadband POC FTE	Request FTE in 2019 budget request	Ensure smooth implementation of FirstNet



STRATEGIC GOALS: GOVERNANCE

The South Dakota Public Safety Communications Council (SDPSCC) was created in March of 2007 through an Executive Order signed by the Governor (see Appendix C). The SDPSCC is an oversight council that provides policy level direction to address South Dakota's public safety communications interoperability issues. The 18-member council represents the following organizations:

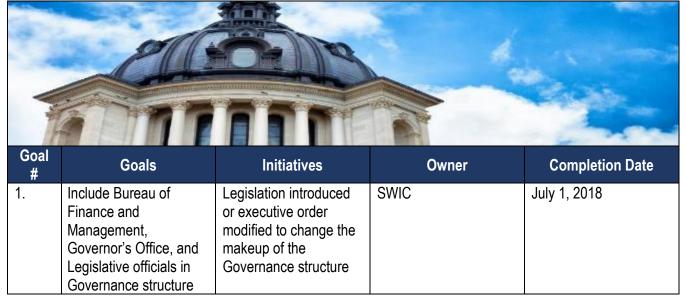
- South Dakota Police Chief's Association
- South Dakota Sheriff's Association
- Division of Criminal Investigation, Office of Attorney General
- South Dakota Game, Fish, and Parks
- South Dakota Department of Transportation
- South Dakota National Guard
- South Dakota Emergency Managers Association
- South Dakota Fire Fighters Association
- South Dakota Department of Public Safety/Highway Patrol
- South Dakota APCO/NENA Chapter

- South Dakota Emergency Medical Technician's Association
- South Dakota Department of Agriculture/Wildland Fire
- South Dakota Association of County Commissioners
- South Dakota Department of Health
- Tribal Government Representative
- Federal Government Representative
- South Dakota Bureau of Information and Telecommunications
- South Dakota Association of Healthcare Organizations

The Council assumes responsibility for the SCIP, defines priorities for grant funding, and continuously updates this document.

The establishment of the SDPSCC in 2007 through Executive Order represented a major step forward in public safety governance in the State. However, the council membership currently does not include representatives from the Legislature or Finance Bureau.

Table 1: Governance Goals and Initiatives



STRATEGIC GOALS: STANDARD OPERATING PROCEDURES

The SDPSCC in conjunction with agencies have developed best practices and procedures that encompass both operational and technical components. Command and control protocols have been developed as National Incident Management System (NIMS)-compliant and incorporate the Incident Command System (ICS) as an operational guide. The South Dakota Communications Field Operations Guide (CFOG) serves as a ready reference with a collection of technical reference material to aid Communications Unit personnel in establishing solutions to support communications during emergency incidents and planned events.

As South Dakota continues to develop SOPs for public safety communications, it will look next to focus on procedures for emerging technologies like broadband. In addition, the State plans to update the tactical-level SOPs that were found in Appendix B of the 2014 SCIP.

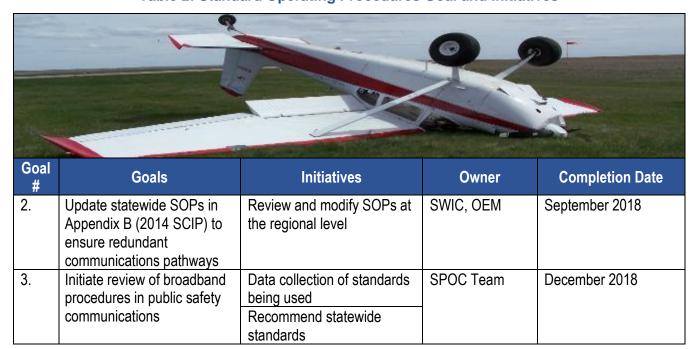


Table 2: Standard Operating Procedures Goal and Initiatives

STRATEGIC GOALS: TECHNOLOGY

In 2003 South Dakota established a statewide radio system. Since then, the statewide system has expanded coverage and provided capabilities to over 90% of the state's responders. While the statewide system signifies a significant step towards interoperable public safety communications, the State has also identified the following successes related to technology:

- Responders can leverage the South Dakota Health Alert Network (SDHAN) to obtain reliable and timely information regarding disasters via email and text messaging.
- When local dispatch channels are too busy responders can utilize interoperable communications channels for other counties to communicate.
- Dispatchers can utilize the Computer-Aided Dispatch (CAD) System to contact responders out in the field where there is unreliable radio and cellular service.

• There are 36 Public Safety Answering Points (PSAP) in the State.

However, the uncertainty surrounding upgrading the statewide radio communications system poses a significant challenge to state and local users in South Dakota. Another challenge is seamlessly implementing NG9-1-1 and FirstNet capabilities for day-to-day use by public safety responders in South Dakota.

Goal **Initiatives Completion Date** Goals Owner # BIT June 2023 4. Complete upgrade to Upgrade subscriber radios statewide P25 system Finalize network upgrades 5. Enhance coverage of Prioritize site expansions BIT, SDPSCC July 2019, on-going statewide P25 system Design and build sites 6. Complete NG9-1-1 upgrade DPS December 2018 Fully implement ESInet Implement text to 9-1-1 statewide Provide oversight and SPOC Team January 2023 7. Coordinate with FirstNet on implementation of statewide ensure FirstNet is RAN implemented per the state plan

Table 3: Technology Goals and Initiatives

STRATEGIC GOALS: TRAINING AND EXERCISES

South Dakota has promoted a communications centric portion of local, regional and statewide exercises to ensure interoperable communications is planned for and exercised. The State has initiated the following efforts:

- Dispatchers are required to attend a two-week introductory training at the State Law Enforcement Training Center on communications interoperability.
- The statewide system is used and tested on a daily basis as it's the primary communications platform for responders in the State
- Request OEC's assistance in hosting trainings and workshops through their Technical Assistance (TA) Program. In 2018, South Dakota will be requesting a COMT training and any additional TA they deem necessary.

However, there continues to be a gap in training for day-to-day operations versus special events and/or incidents that significantly affects communications in State. In addition, a



statewide Communications Unit (COMU) training is also a key focus for the State to build and formalize COMU-related efforts.

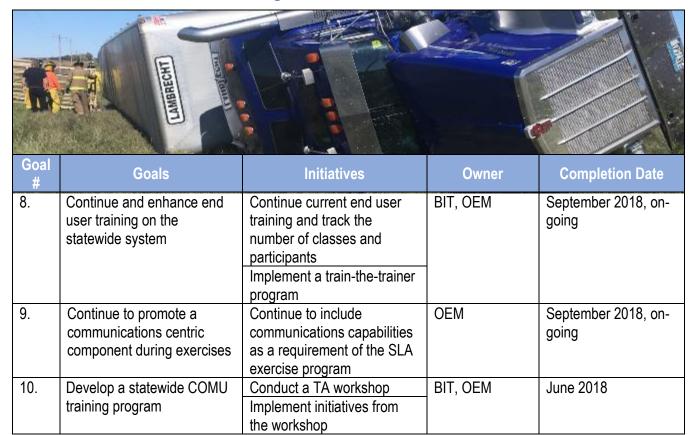


Table 4: Training and Exercises Goals and Initiatives

STRATEGIC GOALS: USAGE

Regular usage of public safety equipment ensures the maintenance and establishment of interoperability in case of an incident. Currently, emergency managers attend training at least once a quarter to ensure their equipment is operational. However, in some of the more rural counties across South Dakota responders rarely use their equipment so when an incident does occur it may no longer be operational, or the user may not recall how to use the equipment. As a result of this gap stakeholders have developed the following goal:



Table 5: Usage Goals and Initiatives

STRATEGIC GOALS: OUTREACH AND INFORMATION SHARING

across the state

13.

14.

Educate stakeholders on

Promote statewide use of

communications plans

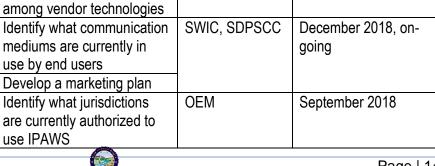
IPAWS

Determine compatibility

South Dakota is focused on enhancing its outreach and information sharing efforts because in many instances valuable information related to public safety communications planning is still not reaching end users. Therefore, the State seeks to develop a marketing plan for the education and sharing of information from the top down.

Goal Goals **Initiatives Owner Completion Date** # SPOC Team. December 2019 12. Evaluate what standards Participate in the BIT, DPS and technologies are development of standards currently in use for the sharing of information

Table 6: Outreach and Information Sharing Goals and Initiatives



	Include education and	
	outreach in marketing plan	

STRATEGIC GOALS: LIFE CYCLE FUNDING

Establish a broadband POC

17.

FTE

South Dakota needs to establish a sustainable funding source for the maintenance of the statewide LMR system and establish a full-time SWIC and broadband point of contact (POC). This funding source may also be necessary for the implementation of NG9-1-1 and FirstNet and the expansion of statewide alerts and warnings. The current SWIC position is a collateral duty with no support staff. The SWIC also serves as the current POC for FirstNet/broadband, but as these technologies continue to move forward it will require dedicated FTE to ensure smooth implementation.

Goal **Completion Date** Goals **Initiatives** Owner # 15. Establish a sustainable Present plan to Governor's BIT, SDPSCC July 2018 funding source for the Office and State Legislature maintenance and enhancement of public safety communications statewide Establish a fully funded, full-16. Request FTE in 2019 BIT July 2019 time SWIC budget request

BIT

Request FTE in 2019

budget request

Table 7: Life Cycle Funding Goals and Initiatives

July 2019

IMPLEMENTATION PLAN

The SWIC serves as the chief administrator of the SCIP and is responsible for tracking progress towards achieving SCIP goals. The SDPSCC will add the goals assigned to its committees as formal agenda items for review during regular meetings. The SWIC, Committee Chairs or their designee will provide regular status updates and coordinate collaborative action and planning to ensure continued progress. The SDPSCC will also conduct a thorough review of the SCIP on an annual basis to update goals and initiatives to address identified needs and advancements involving statewide emergency communications capabilities.

Each year, OEC works with all 56 states and territories in measuring progress towards implementing SCIP goals through the annual SCIP Snapshot process. Findings from the reporting help identify successes and challenges in meeting goals and help OEC provide targeted technical assistance in the form of training and resources offered through its Interoperable Communications Technical Assistance Program (ICTAP).

ICTAP offerings of interest include:

- Formal Governance Documentation Review, Assessment and Development
- Communications Unit (COMU) Planning and Policies, Project Management
- Tactical Interoperable Communications Plan (TICP) Field Operations Guide (TIC-FOG)
 Review and Development
- Next Generation 9-1-1 / Strategic Planning Support
- Communications Unit Leader (COML) Training
- Communications Unit Technician (COMT) Training
- Communications Assets Survey and Mapping (CASM) Tool Next Generation

Requests for technical assistance are coordinated through the South Dakota SWIC on an annual basis.

For more information, states/territories are encouraged to contact OEC at: SCIP@hq.dhs.gov



APPENDIX A: SCIP Goals, Initiatives, Owners & Timelines

	Goal #	Goals	Initiatives	Owner	Completion Date
Governance	1.	Include Bureau of Finance and Management, Governor's Office, and Legislative officials in Governance structure	Legislation introduced or executive order modified to change the makeup of the Governance structure	SWIC	July 1, 2018
SOPs	2.	Update statewide SOPs in Appendix B (2014 SCIP) to ensure redundant communications pathways	Review and modify SOPs at the regional level	SWIC, OEM	September 2018
	3.	Initiate review of broadband procedures in public safety communications	Data collection of standards being used Recommend statewide standards	SPOC Team	December 2018
Technology	4.	Complete upgrade to statewide P25 system	Upgrade subscriber radios Finalize network upgrades	BIT	June 2023
	5.	Enhance coverage of statewide P25 system	Prioritize site expansions Design and build sites	BIT, SDPSCC	July 2019, on- going
	6.	Complete NG9-1-1 upgrade	Fully implement ESInet Implement text to 9-1-1 statewide	DPS	December 2018
	7.	Coordinate with FirstNet on implementation of statewide RAN	Provide oversight and ensure FirstNet is implemented per the state plan	SPOC Team	January 2023
Training & Exercise	8.	Continue and enhance end user training on the statewide system	Continue current end user training and track the number of classes and participants Implement a train-the-	BIT, OEM	September 2018, on-going
	9.	Continue to promote a communications centric component during exercises	trainer program Continue to include communications capabilities as a requirement of the SLA exercise program	OEM	September 2018, on-going
	10.	Develop a statewide COMU training program	Conduct a TA workshop Implement initiatives from the workshop	BIT, OEM	June 2018



Usage	11.	Encourage local agencies to do testing and refresher trainings on the use of equipment	Establish and distribute recommendations for testing and exercising	SDPSCC, OEM, BIT	September 2018, on-going
	12.	Evaluate what standards and technologies are currently in use	Participate in the development of standards for the sharing of information across the state	SPOC Team, BIT, DPS	December 2019
			Determine compatibility among vendor technologies		
Outreach & Information Sharing	13.	Educate stakeholders on communications plans	Identify what communication mediums are currently in use by end users	SWIC, SDPSCC	December 2018, on-going
			Develop a marketing plan		
	14.	Promote statewide use of IPAWS	Identify what jurisdictions are currently authorized to use IPAWS	OEM	September 2018
			Include education and outreach in marketing plan		
Life Cycle Funding	15.	Establish a sustainable funding source for the maintenance and enhancement of public safety communications statewide	Present plan to Governor's Office and State Legislature	BIT, SDPSCC	July 2018
- r unumg	16.	Establish a fully funded, full-time SWIC	Request FTE in 2019 budget request	BIT	July 2019
	17.	Establish a broadband POC FTE	Request FTE in 2019 budget request	BIT	July 2019

APPENDIX B: List of Acronyms

APCO Association of Public Safety Communications Officials

BIT South Dakota Bureau of Information and Telecommunications

CAD Computer-Aided Dispatch

CASM Communications Assets Survey and Mapping CFOG Communications Field Operations Guide

COML Communications Unit Leader COMT Communications Unit Technician

COMU Communications Unit

DHS Department of Homeland Security

DPS South Dakota Department of Public Safety

FTE Full-Time Equivalent

ICS Incident Command System

ICTAP Interoperable Communications Technical Assistance Program

IPAWS Integrated Public Alert and Warning System

LMR Land Mobile Radio

NIMS National Incident Management System
NECP National Emergency Communications Plan

NG9-1-1 Next Generation 9-1-1

OEC Office of Emergency Communications

OEM South Dakota Office of Emergency Management

P25 Project 25
POC Point of Contact

PSAP Public Safety Answering Point

RAN Radio Access Network

SCIP Statewide Communications Interoperability Plan

SDHAN South Dakota Health Alert Network

SDPSCC South Dakota Public Safety Communications Council

SLA State and Local Agreement SOPs Standard Operating Procedures

SPOC Single Point of Contact

SWIC Statewide Interoperability Coordinator

TA Technical Assistance

TIC-FOG Tactical Interoperable Communications Field Operations Guide

TICP Tactical Interoperable Communications Plan

APPENDIX C: Executive Order 2007-05

STATE OF SOUTH DAKOTA OFFICE OF THE GOVERNOR EXECUTIVE ORDER 2007-05

WHEREAS, Meeting emergency communications needs for all public safety entities in South Dakota is critical for ensuring public safety; and,

WHEREAS, At the encouragement of the South Dakota public safety community, the state of South Dakota has developed a comprehensive and coordinated statewide emergency communications network; and,

WHEREAS, A representative user group must be developed that will provide oversight for providing policy level direction related to planning, designing and implementing guidelines, best practices and standard approaches to address South Dakota's public safety communications interoperability issues.

IT IS, THEREFORE, BY EXECUTIVE ORDER, Directed that the Public Safety Communications Council be established and authorized to function in compliance with the following sections of this order:

General Provisions

Section 1. The name of the committee is the South Dakota Public Safety Communications Council (SDPSCC).

Section 2. The governor of South Dakota may appoint 18 members to the committee which are representative of the major users of the communications network. The membership shall include representatives from the following public safety agencies, professional associations and state departments:

- South Dakota Police Chief's Association
- South Dakota Sheriff's Association
- Division of Criminal Investigation, Office of Attorney General
- South Dakota Game, Fish and Parks
- South Dakota Department of Transportation
- South Dakota National Guard
- South Dakota Emergency Managers Association
- South Dakota Fire Fighters Association
- South Dakota Association of Healthcare
- South Dakota Department of Public Safety/Highway Patrol
- South Dakota Association of Public Safety Communications Officials, Inc. / National Emergency Management Association Chapter
- South Dakota Emergency Medical Technician's Association
- South Dakota Department of Agriculture/Wildland Fire



- South Dakota Association of County Commissioners
- South Dakota Department of Health
- Tribal government or tribal government association
- Federal government or federal government association
- South Dakota Bureau of Information and Telecommunications Engineering Manager

Section 3. The South Dakota Public Safety Communications Council shall foster collaboration among stakeholders at the local, federal and state level. The South Dakota Public Safety Communications Council shall focus on the following priorities:

- Update protocols and standards for operation and use of the South Dakota Interoperable Communications System.
- Develop strategies and recommendations to improve current and future operations of the radio network.
- Develop recommendations for legislation or other state action that may be required to future promote public safety communications in South Dakota.
- Develop recommendations and strategies for best utilization of grant funding to improve communications in South Dakota.

Section 4. The South Dakota Public Safety Communications Council shall be administered by the South Dakota Bureau of Information and Telecommunications.

Section 5. Members shall be appointed for 1-year terms which end June 30. Members may be reappointed for no more than three consecutive terms. Representatives of state agencies shall serve as long as their agency directs.

Section 6. The South Dakota Public Safety Communications Council shall elect a chairperson.

Section 7. The council shall prepare an annual report for the governor.

Section 8. All expenses and costs of administration for the council shall be paid from funds available to the Bureau of Information and Telecommunications.

Dated in Pierre, South Dakota, this 14th day of March, 2007.

