



# South Dakota Public Safety Broadband Network (SDPSBN)

2015

## Annual Report



## **Executive Summary**

The State of South Dakota recognizes the importance of public safety communications interoperability within our state. As a rural state, we rely upon multi-agency response and shared resources to cooperatively provide for the public's safety.

South Dakota can take pride in the fact that our state has one of the most comprehensive Land Mobile Radio (LMR) communications systems for first responders in the country. We have approximately 98% geographic coverage and nearly every local, tribal, federal, and state first responder has a radio capable of establishing communications instantly. This robust radio system is just one component of the modern day first responder's communications toolkit. Wireless data services (such as smartphones, tablets, etc.) have become much more integral to how these responders operate on a daily basis. These capabilities add efficiency and functionality to their duties.

The Middle Class Tax Relief and Job Creation Act of 2012 included language creating the First Responder Network Authority (FirstNet). FirstNet is tasked with the mission of building, operating and maintaining the first high-speed, nationwide wireless broadband network dedicated to public safety to address the current access and capacity issues on the commercial wireless systems being used.

We are focused on how this network is designed, built, and impacting South Dakota. The National Telecommunications & Information Administration (NTIA) implemented the State and Local Implementation Grant Program (SLIGP) to support planning, education and outreach efforts at the state and local level. Within the Bureau of Information and Telecommunications (BIT) we have assigned staff to administer this grant. The team is called the South Dakota Public Safety Broadband Network (SDPSBN) team.

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## Purpose

This report serves to update the Governor, BIT Commissioner, and others on the progress of the South Dakota Public Safety Broadband Network (SDPSBN) team on their activities and efforts during 2015.

This report does not cover Land Mobile Radio (LMR) interoperability efforts. For more information on LMR capabilities in South Dakota see the Statewide Communication Interoperability Plan (SCIP)” located on the South Dakota Public Safety Communications Council website ([www.sdpscc.sd.gov](http://www.sdpscc.sd.gov)) – Last accessed 12/29/15.

## Introduction

### What is FirstNet?

The First Responder Network Authority (FirstNet) is the independent authority overseeing development of a nationwide broadband network for first responders and public safety agencies. The term “FirstNet” is also used to describe the broadband network itself, which will be a single, nation-wide network.

From the FirstNet website:

“Signed into law on February 22, 2012, the Middle Class Tax Relief and Job Creation Act created the First Responder Network Authority (FirstNet). The law gives FirstNet the mission to build, operate and maintain the first high-speed, nationwide wireless broadband network dedicated to public safety. FirstNet will provide a single interoperable platform for emergency and daily public safety communications.

This broadband network will fulfill a fundamental need of the public safety community as well as the last remaining recommendation of the 9/11 Commission. FirstNet will bring 21st century tools to millions of organizations and individuals that respond to emergencies at the local, state, tribal and federal levels.

The FirstNet organization is the first of its kind. Never before has Congress established an independent government authority with a mandate to provide specialized communication services for public safety. Using nationwide 700 MHz spectrum, FirstNet will put an end to decades-long interoperability and communications challenges and help keep our communities and emergency responders safer. “

- <http://firstnet.gov/about>, Last accessed 12/22/15.

## **Why does the nation need FirstNet?**

In emergencies wireless carriers can be overwhelmed and congested, rendering their services to become unreliable. In many situations, our emergency first responders are trying to utilize these same congested networks to call for help or provide emergency assistance. This FirstNet network creates a separate wireless network specifically for the public safety industry, thus ensuring access in the worst of times.

## **What is the SDPSBN?**

The statute that created FirstNet requires that this federal initiative has extensive state and local input through the entire process. The National Telecommunications & Information Administration (NTIA) implemented the State and Local Implementation Grant Program (SLIGP) to support planning, education and outreach efforts at the state and local level. Information about the grant can be found on the NTIA website:

<https://www.ntia.doc.gov/sligp/south-dakota> - Last accessed 12/29/15.

Within the Bureau of Information and Telecommunications (BIT) we have designated staff to administer this grant. This team is called the South Dakota Public Safety Broadband Network (SDPSBN) team.

Additionally, each state has a designated “Single Point of Contact,” or SPOC, to interface with FirstNet. In our state it is Jeff Pierce (Engineering Manager) with the SD Bureau of Information and Telecommunications (BIT). In addition to Jeff, the SDPSBN team consists of a project manager, Mike Waldner.

## **Governance Council (SDPSCC)**

The SDPSBN is governed by the existing South Dakota Public Safety Communication Council (SDPSCC). Rather than establishing a separate governance council or committee, it was decided to utilize this already established and active council. It is comprised of the necessary mixture of stake holders needed to help guide and govern the FirstNet activities within South Dakota.

The SDPSCC has met three times in Pierre during the 2015 calendar year. Since the beginning of the FirstNet Project, it has been a regular agenda item, allowing state decisions on FirstNet to come from a representative group.

## **Who makes up the SDPSCC?**

The South Dakota Public Safety Communications Council (SDPSCC) was created by Executive Order 2007-05 on March 14th 2007 with the following directive:

*"The South Dakota Public Safety Communications Council shall foster collaboration among stakeholders at the local, federal, and state level."*

Appointed to the PSCC are the following individuals:

Dave Kull (Brandon Police Chief) -- SD Police Chiefs Association  
Dave Ackerman (Sheriff, McPherson County) -- SD Sheriff's Organization -- **Executive Board**  
Dan Satterlee -- SD Division of Criminal Investigation  
Andy Albon -- SD Game, Fish, and Parks  
Greg Fuller (Director of Operations) -- SD Department of Transportation  
SSG David Goodwin-- SD National Guards  
Harold Timmerman (Lincoln EM) -- SD Emergency Managers Association  
Dennis Gorton (Pennington Co Fire Director) -- SD Firefighters Association  
Scott Duke -- SD Association of Healthcare Organizations  
Matt Tooley (Metro Communications) -- SD APCO/NENA Chapter -- **Chairman**  
JD Geigle -- SD Emergency Medical Technicians Association -- **Vice Chairman**  
Paul Reiter -- Great Plains Interagency Fire Center  
Bob Wilcox -- SD Association of County Commissioners  
Rick LaBrie -- SD Department of Health  
Larry Jandreau (Facilities Director) -- Lower Brule Sioux Tribe  
Jesse Behrain (US Forest Service) Federal  
Jeff Pierce (Engineering Manager) SD BIT -- **Executive Board**  
Jason Husby -- SD Department of Public Safety

## 2015 Overview

In January 2015 Mike Waldner moved from the South Dakota Broadband Initiative project to become the South Dakota FirstNet Project Manager. South Dakota has been frugal in allotting staff time for this project. Our project manager is the only full time person dedicated to this project to maintain the day-to-day duties to fulfill the necessary requirements. The majority of time is spent reviewing information as it comes available from FirstNet, other states, media, or general information about mobile broadband as it relates to public safety.

As directed by our governance council, we were very strategic about the amount of outreach we organized. Rather than organizing a team of people to make on-site visits to each public safety location, we attended various public safety association meetings. Some meetings allowed us the opportunity for full presentations, while some only allotted for a quick 10 minute update. We were happy to accommodate the organizations schedules.

## South Dakota Initial State Consultation

On April 1<sup>st</sup> fifty-four stakeholders from the telecommunication industry, tribal entities, law enforcement, fire, EMS, 911 communications, and government officials converged to discuss FirstNet. The main goal was to engage in collaborative communication to clarify communication needs and issues with the FirstNet representatives and learn where South Dakota state leaders are in the process. The South Dakota team and stakeholders were able to learn from the consultation, and also provide FirstNet with examples specific to the unique needs and issues across all of South Dakota. An article recapping the outcome of the meeting can be found on our

## Data Collection Efforts

A significant task this year was to collect data from our first responders to be included in the FirstNet Request for Proposals (RFP). FirstNet is utilizing the RFP to find a vendor or vendors to build this network. FirstNet requested input from each state and territory and we have provided our requirements for phased build-out priorities, user and operational information, capacity requirements, and current commercial coverage that the state is utilizing. FirstNet has included this information in the RFP to provide more insight for the potential vendors to build out an appropriate system in South Dakota.

## Data Collection Outcomes

Our data collection efforts utilized a survey tool from which we collected data on 115 agencies across our state. We received a good cross section of metro areas, tribal lands, municipalities, and rural areas.

This information was used at the state level to augment the FirstNet provided “Baseline” coverage objective map (refer to figure 1 on next page). The following was used to prioritize areas of the state that might benefit most from additional services:

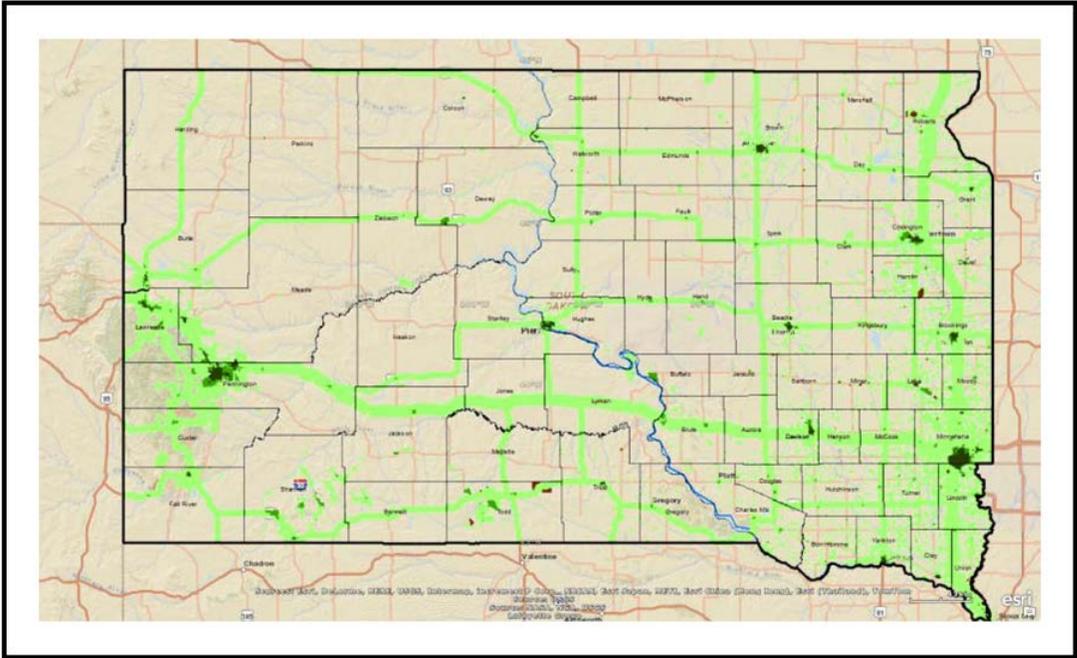
- Computer Assisted Dispatch (CAD) data provided, and analysis of that.
- Primary and secondary road maintained and patrolled by state units.
- Offenses reported by capita for all towns and counties statewide.
- Tribal criminal statistics.

After a review of the FirstNet baseline map and augmentations with the above information, it was determined by the SDPSCC that this approach still did not meet the operational needs of first responders in our state:

- A five-year phased approach did not meet our statewide needs for roadways.
- Does not provide jurisdiction-wide coverage to a single county in our state.
- Does not provide region-wide coverage to accommodate emergency response.
- Proposed satellite backup systems were problematic.
- As roaming is yet undetermined, coverage off of the baseline area is unknown.

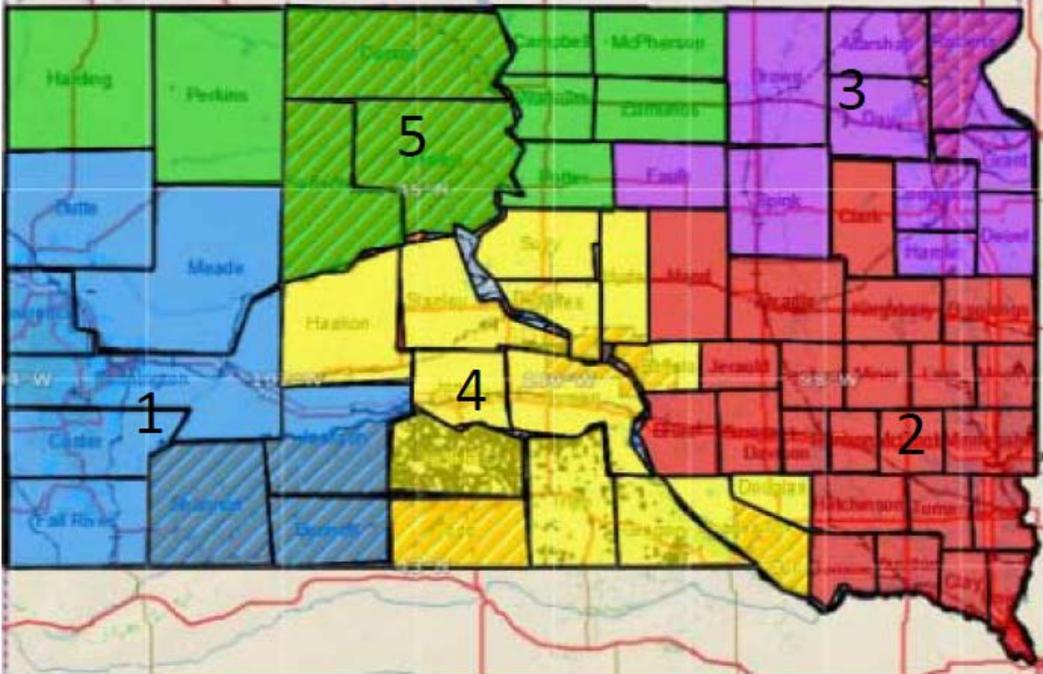
The SDPSCC determined that a distributed buildout in our state would be far less useful and less well-received than a regional approach (refer to figure 2 on next page), as mutual aid is conducted regionally at all levels of government in South Dakota. Rationale submitted by the council to FirstNet for a regional buildout approach included:

- State agencies such as Highway Patrol, Game Fish and Parks, Emergency Management, Department of Transportation, and others operate along similar designated regions.
- Local region-wide response services such as SWAT, Hazmat, mobile command centers, etc. operate regionally and need common tools for their response area.
- Each phase designated by the SDPSCC included tribal areas.



**Figure 1: FirstNet Baseline Coverage Map**

South Dakota Governance Adopted Buildout Plan  
 Expects FirstNet to Provide Best Effort to Cover Regions



**Figure 2: SDPSCC Adopted Buildout Plan**

## Phased Buildout Comments

During discussion of the governance council, the following comments were discussed and documented. From the comments you will see the council wants to first cover the regional area with the greatest need for a network like FirstNet promises. Then in phase two the buildout would cover a major population area of our state including the largest city. The council also took into consideration our tribal areas in all phases.

### **Phase 1 comments:**

- Includes the primary need (in South Dakota) for mobile broadband priority over commercial use during the Sturgis Rally event.
  - Primarily the area of need for capacity versus coverage needs in South Dakota
- Includes Rapid City (2<sup>nd</sup> largest city in SD) area as well as the Black Hills
  - Tourism brings many visitors to the area
- Includes Federal Lands
  - US Forest Service - Black Hills National Forest
- Includes the Mount Rushmore National Memorial
  - “America’s Shrine of Democracy”
- Includes the Badlands National Park (U.S. National Park Service)
- The area is covered by only a few providers
  - Most area is covered by one broadband provider
  - Limiting the amount of coordination should make it easier to implement
- The area covers a significant area of tribal lands

### **Phase 2 comments:**

- Includes the city of Sioux Falls (Largest city in SD)
  - Capacity needed versus coverage needs
- Includes other areas where Sioux Falls first responders provide mutual aid
  - Large population of our state covered in these first two phases
- Includes coverage of I-29 interstate in the SE part of SD
- Includes coverage on I-90 interstate in Eastern part of SD
- The area covers tribal lands

### **Phase 3 comments:**

- Includes additional larger cities
- Includes coverage of I-29 interstate in the NE part of SD
  - Phase 3 gives us full coverage on I-29 in our state
- The area covers the tribal lands in the NE corner of our state

### **Phase 4 comments:**

- Includes coverage of I-90 interstate in the central part of SD
  - Phase 4 finalizes full coverage on I-90 in our state
- Includes much of the Missouri river (Dams, recreation, etc.)
- Includes our Capital City of Pierre
- The area covers the tribal lands in the south central area of our state

### **Phase 5 comments:**

- Fills in the rest of our state in a regional phased in approach
- This area is the least populous
- Many roads are traveled to the oil boom in North Dakota
- Finalizes coverage of the Missouri river (Dams, recreation, etc.)
- Finalizes coverage of our tribal lands

## A look to 2016

At the end of 2015 the FirstNet board approved the Request for Proposals (RFP) document seeking a vendor or vendors to build the FirstNet network. A planned release in January of 2016 should be followed by a year of significant developments. Responses are due by the end of 2<sup>nd</sup> quarter.

Once a vendor(s) is chosen, FirstNet must develop a "State Plan" for each of the states. The state plan will provide information on how FirstNet would build out the mobile broadband network in our state, incorporating many elements such as coverage, sites, management, customer service, costs, devices, capacity, service levels, and much more.

FirstNet will be working closely with the SDPSBN team while building this state plan to ensure that state requirements are incorporated. The plan will then be analyzed by the SDPSCC for modification and final approval, at which point the plan will be presented to the Governor for an "opt-in" or "opt-out" decision.

FirstNet has sent a 2016 Consultation Letter to each state outlining their plan for expanding outreach and education in the states, and continuing to inform the states about the state plan and network deployment policies, processes, and procedures. SDPSBN will be busy organizing and coordinating various meetings with FirstNet folks and our state first responders, key decision makers, tribal leaders, key executives, and public safety officials.

## Conclusion

We have challenges ahead for 2016.

The concept of FirstNet has had a lukewarm reception in South Dakota thus far. Our state is covered fairly well with mobile broadband capabilities from the commercial carriers, <http://broadband.sd.gov/Docs/MapPdfs/WirelessSpeedTestResults.pdf> - *Last Accessed 12/29/15*) and we have not had a wide-area disaster in recent memory. The idea of "you are attempting to fix a problem we don't have" has been expressed by responders who view the need for enhanced rural coverage to be a higher priority than a separate network. Events like the 2015 Sturgis Rally do remind us that a system like this would be invaluable. Our mission is to continue to make that point with responders.

Another challenge for our SDPSBN team is discussing a system, which at this point, is only conceptual. It is hard to appreciate something that cannot be demonstrated, and we believe that during 2016 we will be able to provide more tangible information to our first responders that will show the benefits we believe this brings to South Dakota.

We will continue conversations with FirstNet to ensure South Dakota gets a public safety network designed in accordance with the needs of our state. With the RFP being released, continued outreach and education, and the beginning of building the state plan, 2016 will be an interesting time for FirstNet in South Dakota.

## Appendix A: Resources To Stay Informed

For more information about the national FirstNet project you can browse to the FirstNet website at: <http://FirstNet.gov>

For more information about the South Dakota efforts you can follow along with the following resources:

Our state website: <http://psbn.sd.gov/>

Twitter: @SDPSBN

Follow along at: <https://twitter.com/sdpsbn>

Facebook: <https://www.facebook.com/sdpsbn>

E-Mail: [PSBNInfo@state.sd.us](mailto:PSBNInfo@state.sd.us)



## Appendix B: Notable Events for 2015

- Initial State Consultation (April 1<sup>st</sup>)
  - Article recapping the outcome of the meeting
    - <http://psbn.sd.gov/docs/2015-SDFirstNetInitialConsultation.pdf>
  - Photos posted on Facebook:
    - <https://www.facebook.com/media/set/?set=a.384328058442413.1073741831.194205997454621&type=3>
- Attended various state consultations to prepare for our meeting.
  - Colorado, Wyoming, Nebraska – Good discussions with our neighbor states
- Watched live webcasting of Senate Hearing: The Senate Committee on Commerce, Science, and Transportation hearing.
  - Hearing Entitled: “Three Years Later: Are We Any Closer To A Nationwide Public Safety Wireless Broadband Network?”
  - SD FirstNet staff worked with Senator Thune’s staff to help prepare him
  - Gathered information from the western states and forwarded it on to Thune’s FirstNet staff member
    - Many western states have Senators on the committee
- Attended the Spring FirstNet Single Point of Contact meeting (Reston, VA in April)
- Attended the PSCR (Public Safety Communications Research) conference (June 3,4,5)
  - Good information on some of the technical needs of FirstNet
  - Good discussion with our neighbor states and other states in attendance
- Data Collection submission (September 30<sup>th</sup>)
  - Provided information to FirstNet to be included in the RFP
  - 115 agencies responded to our survey
- Fall FirstNet Single Point of Contact meeting (Westminster, Co in October)
  - SD project manager presented on our outreach efforts
- The South Dakota team has been:
  - Attending (and/or presenting at) state association meetings to keep our local stake holders informed.
  - Attending national meetings organized to keep the state teams informed
- Submitted our Quarterly Grant Reports before deadlines. Submitted to NTIA
- Partnered with ND Broadband Technology Manager, CIO and IT Manager
  - Held a meeting during the United Tribal Summit discussing FirstNet with ND/SD Tribal Leaders
- Reviewed and prepared a draft response to the FirstNet draft RFP
- Held an onsite visit/meeting from NTIA SLIGP Federal Program Officer Mike Dame
- September Governance Board Meeting -SD Public Safety Communication Council
  - Discussed Phased build out of FirstNet in SD
  - Decision was made to go with regions (like first responders work today)
    - Sturgis Rally counties as phase one
- Submitted a FirstNet article to the South Dakota Municipal League (SDML) for their November monthly magazine

## Appendix C: FirstNet Timeline for 2016

*Many of these dates could slip and be moved further back. Unless otherwise stated, these dates are from FirstNet presentation slide decks, or other communications from them.*

2015

- Dec. 9, 2015 – FirstNet voted unanimously to release the final RFP in early January

2016

- Throughout the year FirstNet Plans Expanded Outreach and Engagement
  - In General:
    - Key Public Safety Stakeholders, CIO's, AG's office, PS Associations
  - SPOC Working Sessions: (Typically in April & October)
    - More targeted/focused audiences
    - State planning and data teams
    - Topic-specific: Policies, Plans, Procedures, etc.
  - Executive Engagement:
    - Key Decision Makers (Key Influencers Meetings)
      - Governance Body, Governors' Office, Public Safety Stakeholders, CIO, Attorney Generals, etc.
- Develop: Specific State Plan Elements (Complete Non-Acquisition Elements)
- Jan: (early) FirstNet will release the RFP
  - SDPSBN – has provided data that will be made available in the RFP Reading Room
- Feb: RFP Offeror Questions Due
- Mar: Responses to RFP Questions Issued
- Mar: Pre-Proposal Conference
- April 29<sup>th</sup>: Due date for RFP responses
- Nov 1<sup>st</sup>: Date FirstNet would like to Award Bid...
  - Most industry experts think end of 2016 is more realistic.
  - FirstNet would like to see evaluations completed by end of 2016
    - Will depend on how many offers they may get.