



Vermont Public Safety Broadband Commission

2015 Annual Report

National Telecommunications Information Administration (NTIA)
State and Local Implementation Grant (SLIGP)
Vermont Department of Public Safety
Control Number: 0660-0038
Prepared by the Vermont Public Safety Broadband Commission
December 01, 2015
www.psbcb.vermont.gov

TABLE OF CONTENTS

FirstNet	3
Background	3
Governance: Vermont Public Safety Broadband Commission	4
Outreach and Education Update	5
Vermont Data Collection Status.....	6
2016: A Big Year For FirstNet and States	7
Financial Picture.....	8
From The Field	8
Timeline	9
Issues to follow closely in 2016.....	10

FIRSTNET

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.

BACKGROUND

The National Telecommunications and Information Administration (NTIA) awarded State and Local Implementation Grant Program (SLIGP) funds to 54 states and territories to begin planning for the nationwide public safety broadband network (PSBN).

SLIGP was created under the Middle Class Tax Relief and Job Creation Act of 2012. SLIGP is designed to provide resources to assist regional, state, local, and tribal government entities as they plan for the nationwide Public Safety Broadband Network (PSBN).

This funding provides state recipients with the resources to work with stakeholders throughout the state or territory to identify needs, gaps, and priorities for public safety wireless broadband. This work will also help recipients prepare for consultation with FirstNet. NTIA awarded the Vermont Department of Public Safety \$710,941.00 (VT will contribute \$177,735.00 as an in kind contribution) for:

- Support planning, governance, consultation, and outreach;
- Outreach out to all public safety disciplines and other entities that may be potential users of the Public Safety Broadband Network;
- Update the Statewide Communications Interoperability Plan (SCIP); and
- Fund data collection efforts as defined by FirstNet.

GOVERNANCE: VERMONT PUBLIC SAFETY BROADBAND COMMISSION

The Vermont Public Safety Broadband Network Commission was created by Executive Order in May of 2013, to help plan, develop, and implement an interoperable wireless network to support the communication needs of first responders. The purpose of the Commission is to ensure and/or facilitate the planning and outreach, the building, deployment and operation of a statewide interoperable wireless public safety broadband network that meets the interoperability goals and specifications of the FirstNet nationwide public safety broadband network, pursuant to Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (Act), Pub. L. No. 112-96, 126 Stat. 156 (2012). The purpose of the commission is to ensure the building, deployment and operation of a statewide interoperable public safety broadband network that meets the interoperability goals and specifications of the FirstNet nationwide public safety broadband network. The Commission shall advise the Governor on issues related to the public safety broadband network. In addition, the Commission shall report to the Governor annually on implementation of the public safety broadband network in Vermont and nationally, and shall include information regarding the use of grant money received in Vermont for the purpose of building a public safety broadband network.

The Public Safety Broadband Commission meets on the first Wednesday of each month at the Department of Public Safety Headquarters in Waterbury (45 State Drive). The meeting takes place in the Classroom on Floor One. We regularly encourage the public attend our meetings and we encourage people to read our meeting minutes, posted on our website: <http://psbc.vermont.gov/content/meeting-minutes-and-agendas>. A listing of Vermont Public Safety Broadband Commission members and their corresponding seat can be found here:

Board Member	Term Expires	Seat Description
Terry LaValley	7/15/2016	FirstNet Single Point of Contact, DPS
Francis (Paco) Aumand	7/15/2016	Chair, DPS at large member
Kiersten Bourgeois	7/15/2016	Vice Chair, Agency of Commerce and Community Development
Alton Barber	7/15/2016	Local Firefighter
Dan Manz	7/15/2016	Local Emergency Medical Services
Frank Costantino	7/15/2016	Department of Information & Innovation
Joe Flynn	7/15/2016	Department of Public Safety
William Laferriere	7/15/2016	Buildings and General Services
Steven Locke	7/15/2016	Hartford, VT Fire Department Chief
James Porter	7/15/2016	Department of Public Service
Barb Neal	7/15/2016	E-911
Robert T. White	7/15/2016	VTrans Representative
Douglas Johnston	7/15/2016	Local Police
Donald Patch	7/15/2016	Vermont State Police

OUTREACH AND EDUCATION UPDATE

Per NTIA and SLIGP grant requirements, the state of Vermont is required to conduct education and outreach to Vermont's public safety community to build awareness around the National Public Safety Broadband Network and keep the public up to date on how Vermont is preparing for participation in the NPSBN. The outreach is aimed at collecting user requirements, providing educational materials, and providing education about the FirstNet. The SLIGP grant is measured using the following metrics:

#	Objective	Measurement
1	Stakeholder meetings	To date, the PSBC has connected with 3,503 first responders statewide through outreach initiatives, tabling events, website interactions, Facebook activity, newsletter distribution, and data collection activities
2	Broadband Conferences (<i>Note: this refers to the conferences and events that FirstNet, NTIA, Public Safety Research Center hosts. They want states staying up with industry standards, research, etc.</i>)	To date Vermont has taken part in three broadband conferences nationally.
3	Contract Executions	To date, Vermont has executed one contract with a vendor to assist in GIS and technical advising.
4	Governance Meetings	Since the award of the grant in 2013 the Public Safety Broadband Commission has convened as a governing body 15 times.
5	Education and Outreach Materials	To date, the PSBC has distributed 3,113 articles of Outreach and Educational

2015 has been a significant year in the Public Safety Broadband Commission's work throughout Vermont. In this year alone the PSBC has:

- Launched outreach website as the main platform to communicate with Vermont's public safety community: www.psbv.vermont.gov
- Met with every Local Emergency Planning Committee (14),
- Met with Emergency Medical Service District meeting (14)
- Contacted every Police, Fire, and EMS entity in the state for their input in planning for FirstNet (over 500 entities).
- Contacted every town road and highway department in the state of their input in planning for participation in FirstNet.
- Achieved a 70% survey response rate for survey data to help the VT PSBC plan for participation in FirstNet.

- Reached out to 230 telecommunications providers and encouraged participation in the national conversation.
- Presented at the annual Emergency Management and Emergency Medical Services conferences.
- Tabled at the VT State Firefighters Association annual meeting.
- Reached 3,503 people through outreach initiative
- Held a successful State Consultation with FirstNet on June, 16 2016 with over 70 members of the Vermont public safety community.

VERMONT DATA COLLECTION STATUS

Fundamental to planning for participation in the National Public Safety Broadband Network, every state and territory in the nation was asked to conduct a data collection project with submission to FirstNet by September, 30 2015. The data collected by Vermont will help inform capacities needs for the dedicated public safety broadband network.

Vermont was recognized nationally by FirstNet as a state that was successful in completing this phase of the project. We reached a 70% response rate after targeting 850 public safety entities, statewide. This exercise was critical in the PSBC gaining a deeper understanding of how many public safety personnel operate within the state of Vermont. The PSBC estimates that there are just over 20,000 public safety personnel around the state. Vermont, along with every state and territory in the nation was requested by FirstNet to propose a minimum of five phases of deployment for the National Public Safety Broadband Network in our state. The following inputs were part of the planning:

1. **Coverage:** Identify desired coverage within the state or territory and proposed build out phases.
2. **Users and Operational Areas:** Gather information on the eligible user base and their respective operational areas.
3. **Capacity Planning:** Estimates current data usage today from typical users with indicators of potential growth.
4. **Current Providers/Procurement:** Identifies current service providers and plans, procurement vehicles, and barriers to adoption.
5. **State Plan Decision Process:** Vermont needs to submit a plan to FirstNet that will determine how we will communicate the state Radio Access Network Plan on our governor in calendar year 2017

The VT PSBC identified five phases of deployment. Phases one and two encompassed the areas in Vermont that currently lack any access to cell phones coupled with our most densely populated areas. The first phase also covers Vermont's critical infrastructure such as Vermont Yankee, Ski Lifts, Agency of Transportation Regional Office, DPS Headquarters, major roadways, etc. The result of this prioritization was that proposed phases one and two of deployment will reach 86.4% of Vermont's population and 38.8% of Vermont's land area. The next phases of deployment; three through five cover the second, third, and fourth quintile of the population that was not prioritized in phases one and two.

2016: A BIG YEAR FOR FIRSTNET AND STATES

The Public Safety Broadband Commission is planning to focus efforts in 2016 on larger associations, regional groups, legislators, and Vermont's public safety entities within the college and universities. The challenge of the commission currently is to strike a delicate balance between keeping the public informed, with the right frequency, at the right times to the appropriate audiences while managing expectations among the public safety community.

The Public Safety Broadband Commission continues to push education and outreach throughout Vermont. There continues to be a significant amount of education and outreach work to be completed. With an estimated 20,000 first responders statewide, there is a huge opportunity to build grass roots and grass top support for the National Public Safety Broadband Network.

The development of FirstNet's Request for Proposal is a significant milestone in the National Public Safety Broadband Network. 2016 will be a monumental year for FirstNet as they move forward with vendor selection and proceed to make decisions that will be critical to the deployment of the network. FirstNet is posting final RFP documents by the end of calendar year 2015 and they anticipate that by the end of 2016 responses will be evaluated. Solidifying the national partner for the build out of the network is significant for two reasons. The Middle Class Tax Relief Job Creation Act states that every state and territory must issue a state Radio Access Network plan for consideration prior to network deployment. States will begin to receive the Radio Access Network Plans in 2017. Upon receipt of the plan, a Governor will have 90 days to choose whether to participate in the plan provided by FirstNet or conduct its own deployment of a radio access network.

If a Governor decides to opt out, then he/she is required to notify FirstNet, NTIA, and the FCC. After providing the notification, the Governor has 180 days to develop and complete requests for proposals for the construction, maintenance and operation of the RAN within the State. The State is required to submit an alternative plan to the FCC that is interoperable with the NPSBN and complies with the minimum technical interoperability requirements under the Act.

If the State's plan is approved by the FCC, the state may apply for a grant from NTIA to construct the RAN. To obtain Federal funding for its RAN, the State must demonstrate it can:

- Provide the technical capability to operate and fund the RAN
- Maintain ongoing interoperability with the NPSBN
- Complete the project within specified comparable timelines
- Execute its plan cost effectively
- Deliver security, coverage and quality of service comparable to the NPSBN

There are additional funding implications if a state receives approval to build its own RAN:

- States pay any fees associated with using FirstNet core elements
- Grant program specifics are not developed yet
- NTIA will determine eligible costs of the grant program, whether a match will be required, and funding levels

Vermont plans on continuing to utilize an in-house Project Manager to continue with education and outreach efforts throughout the state. We have identified almost 20,000 first responders in the state and so far have touched 3,500.

FINANCIAL PICTURE

The following is the budget breakdown showing expenses for this grant program.

Budget Summary

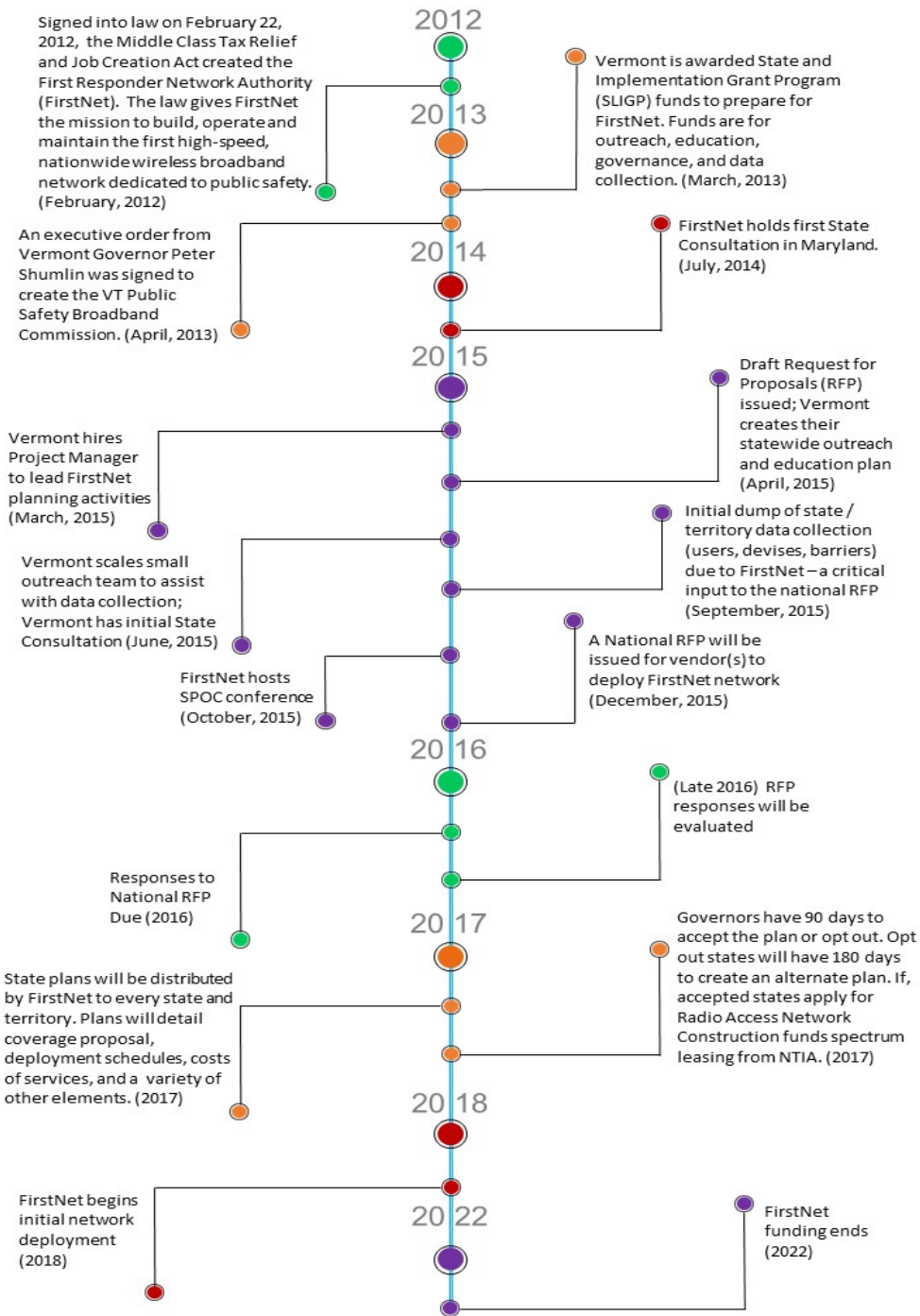
<u>Budget Category</u>	<u>Amount</u>	<u>Expended</u>	<u>Balance</u>
A. Personnel	\$ 344,290	\$ 86,320	\$ 257,970
B. Fringe Benefits	\$ 94,795	\$ 21,877	\$ 72,918
C. Travel	\$ 34,506	\$ 10,771	\$ 23,735
D. Equipment	\$ -	\$ -	\$ -
E. Supplies	\$ 12,000	\$ 281	\$ 11,719
F. Construction	\$ -	\$ -	\$ -
G. Consultants/Contracts	\$ 267,398	\$ -	\$ 267,398
H. Other	\$ 6,431	\$ 4,343	\$ 2,088
Total Direct Costs	\$ 759,420	\$ 123,591	\$ 635,829
I. Indirect Costs	\$ 129,256	\$ -	\$ 129,256
TOTAL PROJECT COSTS	\$ 888,676	\$ 123,591	\$ 765,085
Federal Share	\$ 710,941		
Non-Federal Share	\$ 177,735		

FROM THE FIELD

There is a diversity in what the Vermont public safety community provides in feedback through our outreach and education efforts. For example, many towns in the northern part of the state are concerned about issues of radio frequency interference with our Canadian neighbors or “A-Line” issues.

Because of historically poor cell phone service in Vermont, communities are cautious about the ability for the terrestrial towers to provide coverage in topographically challenged areas throughout the state. Further we have heard from many first responders that they foresee local town zoning ordinances as a major barrier to the future FirstNet network and fear that towns throughout Vermont will not approve towers to serve their critical communications needs. Aside from the cautious optimism expressed by first responders throughout Vermont the top three topics we field questions on are: cost, coverage, and timeline of deployment. We have heard these concerns, and continue to promote the need for robust coverage, expeditious build out and cost containment to FirstNet

TIMELINE



ISSUES TO FOLLOW CLOSELY IN 2016

Vermont is concerned with how FirstNet will generate a revenue model that supports the significant rural milestones in network deployment, written in the federal legislation that created FirstNet. As we know, the case for rural broadband deployment from the commercial sector side presents major obstacles to broadband development because there is a limited business case for commercial providers to build out to infrastructure in rural areas. Vermont plans to also track the national relationship between FirstNet and the newly formed Canadian entity that is charged with exploring the creation of a Canadian public safety broadband network. It is in the interest of Vermont's first responder community to be up to speed on how this relationship is developing. The progression of a Canadian network will ease the A-Line issues between the US and Canada in the northern part of the state.

We anticipate that with the FirstNet network there will be an increased need for new infrastructure; towers, fiber development, etc. In recent years we have seen some broadband projects in the state delayed because of resistance to tower construction in Vermont towns. We do not anticipate that this project will be any different. In our work in towns throughout Vermont we consistently hear from first responders that they feel their local and state zoning ordinances will act as a barrier to their public safety entities benefiting from the National Public Safety Broadband Network.