Vermont

Statewide Communication Interoperability Plan (SCIP)

December 2015

EXECUTIVE SUMMARY

The Vermont 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 Vermont prioritize resources, strengthen governance, identify future investments, and address interoperability gaps.

The purpose of the Vermont SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, and local levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Guide the continual development, maintenance, and operation of a public safety grade interoperable communications network in Vermont, including both land mobile radios and broadband function for first responders.
- Highlight the roles and responsibilities of the Vermont Communications Board (VCOMM) and the Vermont Public Safety Broadband Commission (PSBC)

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

Vision: The vision is to create a public safety grade interoperable communications network throughout the state of Vermont capable of meeting the voice and data needs of all emergency responders.

Mission: The mission of the SCIP is to support the highest level of interoperable communications for all emergency response entities throughout Vermont by developing and implementing a unified strategy.

The following strategic goals represent the priorities for delivering Vermont's vision for interoperable and emergency communications.

- Governance –
  - Reinvigorate the VCOMM Board
  - Create a Succession Plan for the VCOMM Board
- Standard Operating Procedures (SOPs) –
  - Complete SOPs for the Lifeline System
  - Development of written comprehensive communications plans throughout Vermont for state and local response agencies
- Technology –

- o Provide guidance on the process of securing P25 capable radios with encryption across law enforcement entities in Vermont
- o Leverage current Fiber Optic Projects

- Training and Exercises –
  - o Ensure interoperable communications training for emergency responders and at all levels (e.g., in-service, executive, users)
  - o Develop and conduct annual statewide communications exercise throughout Vermont

- Outreach and Information Sharing –
  - o Promote information sharing among Vermont Federal, State, and Municipal responders
  - o Ensure VCOMM and Public Safety Broadband Commission websites are up to date
  - o Implement Vermont's comprehensive Public Safety Broadband Commission's Outreach and Education Plan

- Life Cycle Funding –
  - o Explore alternative funding solutions for voice interoperable communications systems

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1. INTRODUCTION

The Vermont 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 Vermont 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 Vermont.

- 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 Vermont 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.
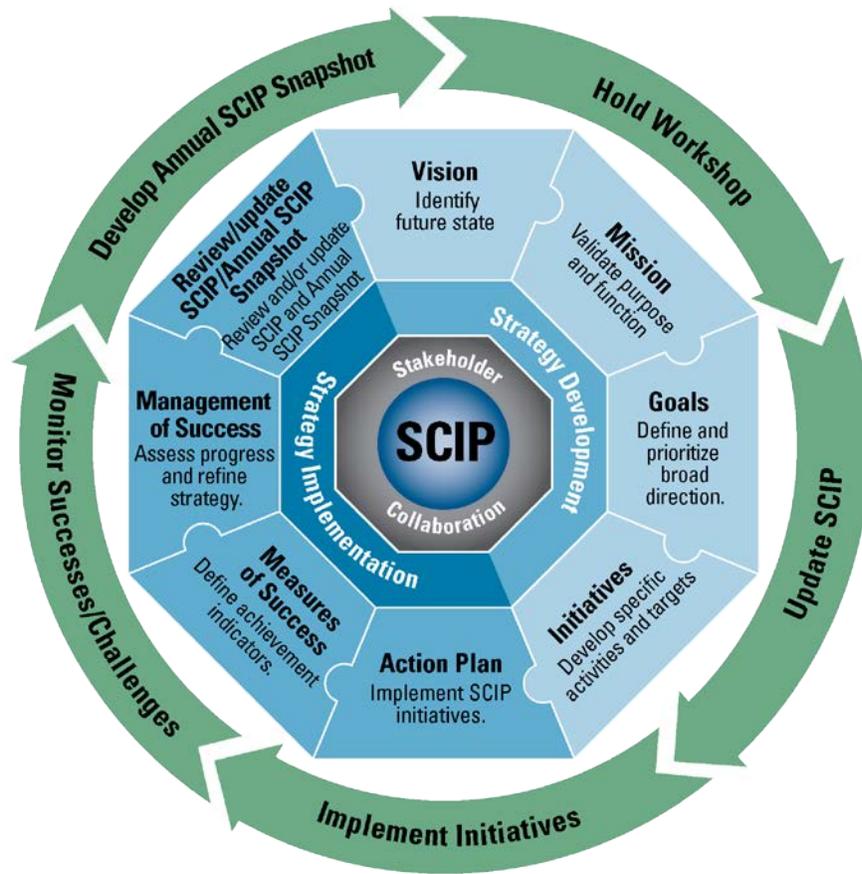
Figure 1: SCIP Strategic Plan and Implementation Components

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

- Increasing the use of data and mobile applications to coordinate responses to severe weather and hazardous road conditions or incidents, and increasing coordination between responders (e.g., emergency first responders, transportation and dispatchers) in the state and neighboring states to ensure an up-to-date situational awareness of incidents;

- Implementing a state-wide next generation NG911 system;

- Making extensive preparations for the use of public safety broadband; and

- Utilizing interoperability channels during emergencies and coordinated incidents such as flooding and fugitive search operations.

However, more remains to be done to achieve Vermont's vision. It is also important to note that this work is part of a continuous cycle as Vermont 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, Vermont will encounter challenges relating to operability, interoperability, geography, aging equipment/systems, emerging technologies, changing project champions, and sustainable funding. Vermont has established an interoperable communications board and a public safety broadband board to address these issues and update the SCIP to address new and emerging challenges.

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.
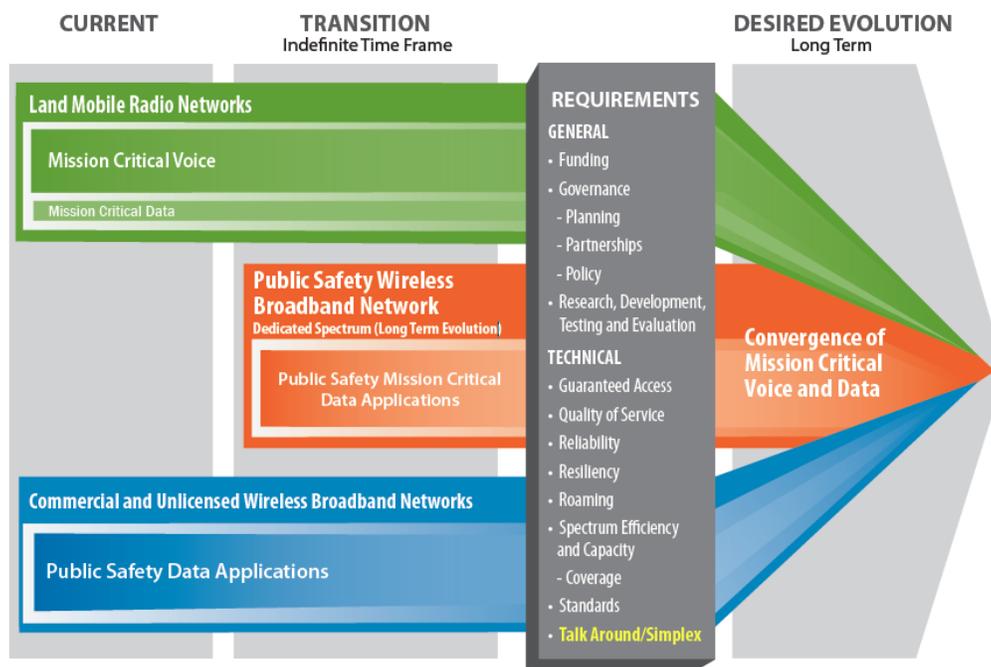
Figure 2: Public Safety Communications Evolution

Integrating capabilities such as broadband provide an unparalleled opportunity for the future of interoperable communications in Vermont. 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, 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, Vermont 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, and local 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] Vermont recently conducted its consultation with FirstNet during which a diverse group of public safety stakeholders discussed coverage considerations as well as other topics relating to public safety broadband. In 2013, the Governor established a Public Safety Broadband Commission (PSBC) to oversee and provide advice on the building of the network in Vermont and to report on relevant developments inside the state and around the country.

To support the Commission, the Department of Public Safety (DPS) has hired an IT Program Manager to support work associated with building the network and reporting annually to the Governor. Vermont is committed to continuing its outreach and education efforts with public safety officials to provide important updates on the network build-out during local outreach meetings and maintaining a website that has current informational materials and meeting minutes. The website link is in the Reference Section of this SCIP.

Additionally, achieving sustainable funding in the current fiscal climate is a priority for Vermont. 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 Vermont include:

- Continuing the operation and maintenance of the Lifeline system

- Coordinating the reprogramming of land mobile radios to ensure the correct channels are programmed to operate on Lifeline system and national interoperability channels

- Providing training for public safety entities in the State of Vermont regarding communications operability and interoperability

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

- Continuing outreach and education support for the national public safety broadband network in Vermont.

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.
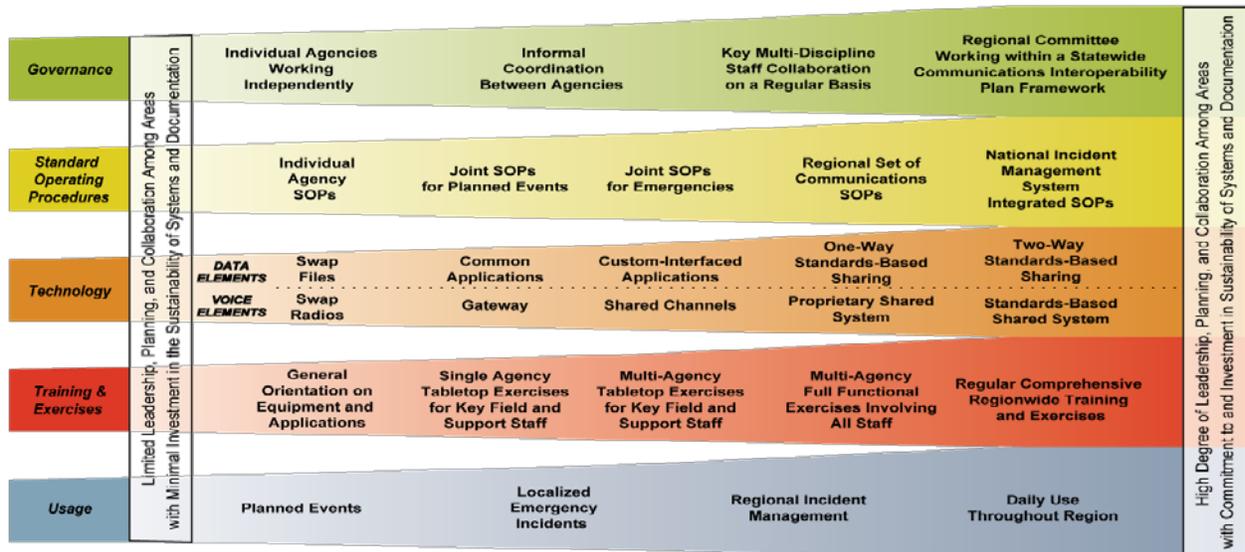
Figure 3: The Interoperability Continuum

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 Vermont 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.

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[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 Vermont and Vermont*'s* plans to enhance interoperable and emergency communications.

2. PURPOSE

The purpose of the Vermont SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, and local levels.

- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.

- Guide the continual development, maintenance, and operation of a public safety grade interoperable communications network in Vermont, including the function for first responders.

- Highlight the roles and responsibilities of the Vermont Communications Board (VCOMM) and the Vermont Public Safety Broadband Commission (PSBC).

The development and execution of the SCIP assists Vermont with addressing the outcomes 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 accordance with Executive Order 02-12, The SCIP is owned and managed by the SWIC. The VCOMM Board "shall be accountable for…implementation and other activities related to the Statewide Plan…" and reports to the Governor. To accomplish this mandate, VCOMM recognizes the importance of working in coordination with the Homeland Security Section Chief-SWIC, Division of Emergency Management and Homeland Security (DEMHS) of the DPS and the PSBC on broadband planning efforts.

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[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.

VCOMM, PSBC, SWIC and SPOC have agreed to work in a collaborative partnership effort to ensure all aspects of this plan are carried out.

In addition to this SCIP, Vermont will develop an Annual SCIP Snapshot 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. More information on the SCIP Snapshot is available in Section 6.4.

Vermont held a SCIP Revision Workshop in July 2015 to review and update the SCIP to reflect current and future priorities, broadband efforts, and new and emerging technology that affects public safety communications. The SCIP Workshop included 14 representatives from across the public safety field including: State Police, Public Safety and Emergency Management and Homeland Security, Vermont Agency of Transportation (VTrans), Vermont Department of Health, associations representing local fire and police chiefs, members and staff from the PSBC, and members of the Army and Air National Guard. Participants worked to create goals that address the voice and data needs for all hazards responses and coordination.

3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW

As a state that has many rural areas and mountainous terrain, Vermont faces complex challenges to work towards achieving interoperable emergency communications (e.g., coverage, international coordination). Additionally, significant snowfall, flash flooding, extreme storms, and other environmental threats can impede communications efforts. Vermont consistently pursues intra-, inter- State, and international collaboration to address interoperable and emergency communications challenges (e.g. frequency coordination). Specifically, Vermont is committed to working with all partners (e.g. the FCC, neighboring states, and Canadian organizations) to address issues relating to 'Line A', the boundary that signifies required coordination with Canada in accordance with the agreement relating to the "Coordination and Use of Radio Frequencies Above 30 Megacycles per Second", signed at Ottawa on June 16 and 24, 1965. To ensure interoperability in accordance with this agreement, Vermont has established and continues to work with neighboring states and Canadian provinces on a regular basis.

In terms of governance, Vermont has two separate governance groups with some overlapping membership to guide the interoperable and emergency communications strategy. The Vermont Communications Board (VCOMM) and the Public Safety Broadband Commission (PSBC). VCOMM is charged with overseeing interoperable land mobile radio communications for first responders in Vermont. It developed the Vermont Lifeline system as well as recommends course of distribution for the Homeland Security Grant Program communications grant allocations within Vermont. VCOMM was established by Executive Order No. 02-12 and its members are appointed by the Governor. Every three years, the Board elects a Chair to oversee the Committee and its work. Similarly, the PSBC, was created by Executive Order No. 05-13, assigning the responsibility to oversee public safety broadband activities related to and within Vermont as well as advise the Governor on issues related to the NPSBN. The Chair and Commission membership are appointed by the Governor and represent a variety of state and local perspectives.

Vermont recognizes that land mobile radio continues to be a critical public safety means of communications as work on implementing broadband solutions moves forward. The VCOMM and PSBC agreed to provide regular status updates on work progress to ensure a cohesive and unified strategic approach to communications interoperability.

The Lifeline System is a hailing system that operates on the VHF and UHF bandwidths, and connects any first responder anywhere in the state coverage areas to a dispatch center. All Vermont PSAPs have been connected to the system, although work remains to ensure the system is operable (e.g., training). Vermont has been working with the Federal Communications Commission (FCC) and its Canadian counterpart, Industry Canada, to guarantee the Lifeline system has access to the spectrum needed to ensure public safety communications are reliable and interference free. Vermont has utilized interoperability channels for a variety of incident responses, including major flooding in the capital area. Vermont is working to formalize public standard operating procedures and provide other documents needed to ensure effective operation of the system.

Vermont, through the VCOMM Steering Committee, recommends the distribution of grant funding in support of communications interoperability. Previously, Vermont provided the funding capability to reprogram all of the land mobile radio systems throughout Vermont to ensure the interoperability processes used at the time were fully functions for all first responders. VCOMM, in coordination with the DEMHS, is working to fund a new round of radio reprogramming and other initiatives to ensure interoperability among first responders in the state and the adjacent states, which regularly work closely with Vermont due to the unique geography and borders of the New England region. In addition, VCOMM is committed to working with state agencies, such as VTrans and the Enhanced 9-1-1 Board to ensure that responders and operators have the capabilities they need to ensure public safety. This includes working on infrastructure placement, coordinating projects, and working with Federal/Department of Defense (DOD) partners.

4.   VISION AND MISSION

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

Vision:

The vision is to create a public safety grade interoperable communications network throughout the state of Vermont capable of meeting the voice and data needs of all emergency responders.

> **Mission:**
>
> **The mission of the SCIP is to support the highest level of interoperable communications for all emergency response entities throughout Vermont by developing and implementing a unified strategy.**

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 Vermont governance structure for interoperable and emergency communications. VCOMM and the PSBC serve as the key governance groups to guide interoperable and emergency communications strategy and activities. In Vermont, VCOMM and PSBC membership represents a wide range of public safety disciplines and serves as a key place where expertise can be applied to wide ranging issues affecting communications interoperability in the state (e.g., grant priorities, inter-discipline coordination). While VCOMM has traditionally focused on land mobile radio interoperability, and the PSBC's focus is the NPSBN, the two groups have employed methods to ensure coordination (e.g., status updates, members serve on both boards). This is to work towards a cohesive and unified strategic approach to communications interoperability.

In recent years, VCOMM Board has not met on a regular schedule and the VCOMM Steering Committee has largely carried out SCIP goals. To address this, Vermont has committed to evaluating the current operating principles for the Board to ensure the Board fully complies with its legal mandates.

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

Table 1: Governance Goals and Initiatives

Goal #	Goals	Initiatives	Owner	Completion Date
Governance Goals and Initiatives				
1.	Reinvigorate the VCOMM Board	1.1 Research and identify any relevant operating principles that exist (e.g., current Executive Order, governance charter or rules of order, meeting minutes/open meeting law compliance)	Homeland Security Section Chief-SWIC	December, 2015
		1.2 Convene a meeting with the current full VCOMM Board to determine the operating principles for the Board, including developing Working Groups as needed (e.g., Training, Outreach, SOP Writing)	Homeland Security Section Chief-SWIC, VCOMM Steering Committee	January, 2016
		1.3 Ensure implementation of VCOMM Board decisions	Homeland Security Section Chief-SWIC, VCOMM Steering Committee	March, 2016
		1.4 Draft and submit an annual report to the Governor	VCOMM Board	In compliance with the most current Executive Order
		1.5 Conduct an annual review of the SCIP	VCOMM Board and PSBC	July 2015, annually thereafter
		1.6 Determine best method to formalize interactions with the Public Safety Broadband Commission (PSBC) (e.g., annual meeting)	VCOMM, PSBC	January, 2016

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
2.	Create a Succession Plan	2.1 Promote the benefits of interoperable public safety communications work (e.g., collect real world examples of good work, create promotional brochure)	Homeland Security Section Chief-SWIC, VCOMM, PSBC	December, 2016
		2.2 Create a VCOMM Board Member Packet to provide information to new board members	Homeland Security Section Chief-SWIC, VCOMM	December, 2017
		2.3 Explore the possibility of having volunteer or intern opportunities that provide support to interoperable communications initiatives	Homeland Security Section Chief-SWIC	December, 2015
		2.4 Work with key decision makers to revise the Executive Order and allow staggered terms to ensure institutional knowledge retention.	Homeland Security Section Chief-SWIC	January, 2016
		2.5 Develop an online knowledge repository that is regularly updated by members [e.g., interviews, meeting minutes, project notes)	Homeland Security Section Chief-SWIC	March, 2016

5.2 Standard Operating Procedures (SOPs)

The SOPs section of the SCIP identifies the framework and processes for developing and managing SOPs statewide. VCOMM Steering Committee has authored some SOPs, but they have not been finalized or distributed. VCOMM Steering Committee is committed to ensuring the SOPs are authored and cleared by the Board for public release in support of a fully functioning Lifeline system.

Table 2 outlines Vermont's goals and initiatives for SOPs.

Table 2: Standard Operating Procedures Goals and Initiatives

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
3.	Complete SOPs for the Lifeline System	3.1 Conduct a review of the current draft SOPs to ensure above/below Line A requirements are incorporated	VCOMM Steering Committee	January, 2016
		3.2 Update draft SOPs as needed	VCOMM Steering Committee	February, 2016
		3.3 Provide the Draft SOPs to the Board at the next meeting	VCOMM Steering Committee	March, 2016
		3.4 Assign Board members with relevant skills to update and complete the procedures, as needed	VCOMM Steering Committee	May, 2016
		3.5 Compile and cross-reference SOPs from neighboring states to ensure inter-state interoperability	OEC Coordinator, New England	March, 2016
		3.6 Development of written SOPs throughout Vermont for state and local response agencies	Homeland Security Section Chief-SWIC	December 2016

5.3 Technology

The Technology section of the SCIP outlines Vermont'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. Vermont has facilitated the purchase and programming of numerous radios throughout the state for law enforcement first responders. In addition, Vermont is pursuing several fiber optic projects that present opportunities for VCOMM to access additional bandwidth.

Within a constrained fiscal environment, Vermont is committed to updating the radios previously purchased and radios slotted for future purchase to be P25 capable. In order to accomplish this, Vermont must pursue affordable update technology. Additionally, the lack of a Chief Technology Officer for the state hampers coordination among fiber optic projects, but VCOMM has identified a plan to reach out to system owners and coordinate activities through the board.

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

Table 3: Technology Goals and Initiatives

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
4.	Guide the process if securing P25 capable radios with encryption across law enforcement entities in Vermont	4.1 Query the state database to determine types and capabilities of existing radio supplies	Homeland Security Section Chief-SWIC	February, 2016
		4.2 Conduct a survey to determine the needs and gaps in radio equipment in preparation for a radio refresh	VCOMM, Homeland Security Section Chief-SWIC	April, 2016
		4.3 Promote standards, including the use of a common encryption standard, Over the Air Reprogramming and timeline for the next radio refresh	VCOMM	December, 2016
		4.4 Publish and disseminate the standards to all law enforcement entities	VCOMM	December, 2016
		4.5 Coordinate with entities to refresh the radios	VCOMM	December, 2018
5.	Leverage current Fiber Optic Projects	5.1 Identify current fiber optic projects and the owners	DPS, VCOMM	December, 2020
		5.2 Examine current projects and identify VCOMM access opportunities	VCOMM	December, 2020

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		5.3 Conduct outreach to project owners	VCOMM	December, 2020
		5.4 Leverage fiber optic networks where feasible	VCOMM	December, 2020

5.4 Training and Exercises

The Training and Exercises section of the SCIP explains Vermont'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 Vermont DPS is responsible for coordinating a training program and exercise program that provides first responders, volunteers, elected officials, emergency managers, private industry and others a chance to learn, sharpen, and implement those skills necessary to protect lives and property during simulated incident.

However, more can be done to enhance training for first responders in Vermont. The state is committed to examining the current training opportunities and examining the best way to fill gaps in training and expand current training to reach responders and decision makers at all levels of Vermont government.

Table 4 outlines Vermont'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
6.	Ensure interoperable communications training for emergency responders and at all levels (e.g., in-service, executive)	6.1 Examine the current training provided to identify gaps and incorporate data from 2015 Statewide Training Needs Assessment	VCOMM	January, 2016
		6.2 Evaluate the need for Communications Unit (COML, COMT, other) training	Homeland Security Section Chief- SWIC, VCOMM	January, 2016

Training and Exercises Goals and Initiatives

Goal #	Goals	Initiatives	Owner	Completion Date
		6.3 Determine best practices for completion tracking	Homeland Security Section Chief- SWIC, VCOMM	January, 2016
		6.4 Request and gather relevant interoperability training materials from neighboring states and RECCWG	Homeland Security Section Chief- SWIC, OEC Coordinator- New England	January, 2016
		6.5 Create and disseminate interoperability training materials (e.g., in-service training module, executive briefing materials, incident commander guidelines) through the VCOMM website, including a Lifeline Usage Guide	VCOMM	May, 2016
		6.6 Create an instructor/material standard to ensure training is provided correctly	VCOMM	May, 2016
		6.7 Evaluate After Action Reports to refine and update training as needed	DEMHS, VCOMM, Homeland Security Section Chief-SWIC	December, 2017, annually thereafter
7.	Develop annual communications exercise	7.1 Identify exercise planning team, schedule, plan and conduct exercise	Homeland Security Section Chief-SWIC, Exercise Planning Committee	July 2017, annually thereafter

5.5 Outreach and Information Sharing

The Outreach and Information Sharing section of the SCIP outlines Vermont'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. VCOMM and PSBC both have significant outreach activities associated with their work. The PSBC has done significant outreach and educational briefings associated with FirstNet activities. In addition the PSBC is developing a regular newsletter feature and has established a website to complement the existing VCOMM website. In addition the Board and the Commission have committed to providing each other regular status updates on current projects, priorities, and upcoming events and issues.

In order to provide the most up-to-date information, both websites must be maintained with current documents and dates. In addition VCOMM will work with its Federal partners at Homeland Security and DOD to examine different capabilities and opportunities for partnerships. This work will require significant time and resources to ensure compliance with both Federal and state laws and policies.

Table 5 outlines Vermont*'s* goals and initiatives for outreach and information sharing.

Table 5: Outreach and Information Sharing Goals and Initiatives

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
8.	Promote information sharing among Vermont Federal, State, and Municipal responders	8.1 Provide a list of capability information available to Vermont-based Federal/DoD partners	OEC Coordinator- New England,	December, 2018
		8.2 Conduct a review of the list to ensure accuracy	VCOMM Board	December, 2019
		8.3 Develop a controlled-access baseline frequency list for Federal partners	Frequency Management Agency (DPS)	December, 2020
		8.4 Determine best course of action for Vermont-Federal channel agreements	DPS, VCOMM Board	December, 2020
		8.5 Post information for Federal/DoD communications personnel to request frequency permissions	DPS	December, 2020
9.		9.1 Create VCOMM website content strategy, including content, site manager, and website location	VCOMM Board	February, 2016

Outreach and Information Sharing Goals and Initiatives

Goal #	Goals	Initiatives	Owner	Completion Date
	Ensure VCOMM Board and Public Safety Broadband Commission websites are up to date	9.2 Create a list of resources that are posted and identify missing materials (e.g., Federal resource list, training materials, outreach materials)	VCOMM Board	February, 2016
		9.3 Collect missing materials	VCOMM Steering Committee, Homeland Security Section Chief-SWIC	February, 2016
		9.4 Provide content to website manager for regular website updates	VCOMM Steering Committee, Homeland Security Section Chief-SWIC, Website Manager	February, 2016
10.	Implement Vermont's comprehensive Public Safety Broadband Commission's Outreach and Education Plan	10.1 Ensure regular communication with NTIA on broadband matters	PSBC	Ongoing
		10.2 Provide regular updates to VCOMM	SPOC, PSBC, Project Manager	January 2016, semi-annually thereafter
		10.3 Continue publishing PSBC information (e.g., meeting minutes, outreach materials) on the public website	Project Manager	As Needed

5.6 Life Cycle Funding

The Life Cycle Funding section of the SCIP outlines Vermont's plan to fund existing and future interoperable and emergency communications priorities. Vermont is committed to working through the VCOMM Board to identify and fund interoperability projects with Homeland Security Grant funds allocated to Vermont. VCOMM Steering Committee

meets annually to evaluate grant applications using established criteria. Vermont is committed to ensuring interoperability projects continue with the least amount of financial burden for agencies and jurisdictions as possible.

However, in a constrained fiscal environment, more can be done to prioritize funding priorities in line with the state's strategic interoperability goals outlined in this SCIP. Vermont will work on a long-term funding plan in order to ensure projects continue.

Table 6 outlines Vermont's goals and initiatives for life cycle funding.

Table 6: Life Cycle Funding Goals and Initiatives

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
11.	Explore alternative funding solutions for land mobile radio interoperable communications systems	11.1 Identify and prioritize near-term (3-5 years) projects	VCOMM Board	December, 2016
		11.2 Discuss funding sources	VCOMM Board	December, 2016

6. IMPLEMENTATION

6.1 Action Plan

The Action Plan section of the SCIP describes the process Vermont will use to determine a plan to execute the initiatives in the SCIP. VCOMM and PSBC will conduct a review of the SCIP in coordination with the DPS Homeland Security Section Chief-SWIC. The full VCOMM Board will conduct a meeting in the winter of 2016 to review the strategic goals within this SCIP and identify the best path to accomplish each goal assigned to the Board. The SCIP will be reviewed and approved by the DPS Commissioner and finalized. After the plan is approved by the full Board and any edits are made to keep timeframes in line with priorities, the plan will be published online and updated annually.

6.2 Measures of Success

The Measures of Success section of the SCIP defines the measures that Vermont 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 7 outlines these measures for Vermont. More information on how these measures are managed is included in Section 6.3.

Table 7: SCIP Measures of Success

	Measures of Success				
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
1.	Reinvigorate the VCOMM Board	VCOMM members do not meet regularly, all committee appointments expire at the same time, and Steering Committee meets on an as needed basis.	VCOMM membership is at full authorized number and has regular meetings of both the full board and the Steering Committee	January 2016, annually thereafter	Homeland Security Section Chief-SWIC, VCOMM
2.	Create a Succession Plan	A small dedicated group of stakeholders largely participate in communications-related meetings	New VCOMM members receive information regarding interoperability (i.e., welcome packet) and VCOMM promotes interoperability experiences on website	December 2017	Homeland Security Section Chief-SWIC, VCOMM
3.	Complete SOPs for the Lifeline System	SOPs are in draft form and not utilized	SOPs are finalized, published, and utilized during system operation	May 2016	VCOMM Steering Committee
4.	P25 capable radios with encryption across law enforcement entities in Vermont	Some radios are P25 capable, no central list compiled of radios needing an update	All law enforcement radios have been refreshed to be P25 capable with encryption	December 2018	VCOMM, Homeland Security Section Chief-SWIC

Measures of Success

Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
5.	Leverage current Fiber Optic Projects	VCOMM does not currently coordinate with Fiber Optic project owners	Fiber Optic projects are identified and assessed for public safety use, and leveraged where possible	December 2020	VCOMM
6.	Ensure interoperable communications training for emergency responders and at all levels (e.g., in-service, executive)	No standard review and evaluation process of interoperability training at any level	Interoperable communications training is provided and reviewed annually; training materials are kept up-to-date	May 2016	VCOMM
7.	Develop annual communications exercise	Identify exercise planners, schedule, plan and conduct exercise	Exercise planning committee is identified, and exercise scheduled	July 2017	Homeland Security Section Chief-SWIC, Exercise Planning Committee
8.	Promote information sharing among Vermont Federal, state, and municipal responders	Interactions with Federal and Vermont responders are not coordinated on a regular basis	Interactions with Federal/DoD partners are guided by a controlled-access list of frequencies and channel agreements	December 2020	Frequency Management Agency (DPS), VCOMM
9.	Ensure VCOMM and Public Safety Broadband Commission websites are up to date	Information is not kept up-to-date and no regular update cycle exists	Information on both websites is updated consistently and in a timely fashion	February, 2016	VCOMM, website Manager

Measures of Success

Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
10.	Implement Vermont's comprehensive Public Safety Broadband Commission's Outreach and Education Plan	Work has begun on the plan	Formal plan is followed and regular updates are posted	October 2015, as needed	SPOC, PSBC, Project Manager
11.	Explore alternative funding solutions for voice interoperable communications systems	Projects have not been prioritized and funding sources are not identified	List of prioritized projects and funding sources discussed at a formal VCOMM Board meeting	December, 2016	VCOMM

6.3 Management of Success

The Management of Success section describes the iterative, repeatable method Vermont will follow to add, update and refine the measures of success. Vermont will annually assess progress made on SCIP Goals and Initiatives, identify roadblocks to success, and work to mitigate those and identify emerging issues that will affect public safety interoperable communications in Vermont. VCOMM Board will work with partners at the DPS, PSBC, and other government partners as needed to accomplish identified SCIP Goals and initiatives. Additionally VCOMM Board will report annually to the Governor and legislature on SCIP progress.

6.4 Strategic Plan Review

The Strategic Plan Review section outlines the process Vermont 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. VCOMM will convene to discuss emerging challenges to Vermont's public safety interoperable communications systems and programs. Vermont recognizes that a multi-disciplinary approach is necessary to maintain and respond to the full operational environment and the risks within it. At the end of every year Vermont will update the SCIP and create a SCIP Snapshot that captures the challenges, accomplishments and interoperability progress made over the past calendar year. Vermont will disseminate this report to relevant officials within the state and to OEC. OEC will use the information provided to better deliver services and assistance to Vermont.

Vermont is dedicated to employing strong interoperable communications governance to ensure efficiency of efforts and maximization of efforts. VCOMM, in partnership with the PSBC, DPS, 9-1-1 officials and other public safety agencies and jurisdictions across the state, is dedicated to implementing the goals outlined in the SCIP. Progress on the SCIP will be reported on an annual basis in a public manner and VCOMM and PSBC will conduct business in compliance of open meeting regulations.

7. REFERENCE MATERIALS

The Reference Materials section outlines resources that contribute additional background information on the SCIP and interoperable and emergency communications in Vermont. Table 8 includes the links to these reference materials.

Table 8: SCIP Reference Materials

Title	Description	Source / Location
Vermont Communications Board Website	The main website of the Vermont Communications Board	http://vermontcommunications.vermont.gov/about_us
Executive Order No. 02-12	Executive Order that founded VCOMM	http://vermontcommunications.vermont.gov/sites/vcomm/files/VCOMM%20Executive%20Order%20No.%2002-12%20(01-17-12).pdf
Vermont Public Safety Broadband Commission website	The main website of the Public Safety Broadband Commission (PSBC)	http://psbc.vermont.gov/
Executive Order No. 05-13	Executive Order that founded the PSBC	http://governor.vermont.gov/sites/governor/files/executive_orders/EO%2005-13%20Pub%20Safety%20Broadband%20Network%20Commission.pdf

APPENDIX A: LIST OF ACRONYMS

In this section, list the acronyms used throughout the document.

COML	Communications Unit Leader
COMT	Communications Unit Technician
DEMHS	Vermont Division of Emergency Management and Homeland Security
DHS	U.S. Department of Homeland Security
DPS	Department of Public Safety
DOD	United States Department of Defense
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
LMR	Land Mobile Radio
NECP	National Emergency Communications Plan
NPSBN	Nationwide Public Safety Broadband Network
NTIA	National Telecommunications and Information Administration
OEC	Office of Emergency Communications
P25	Project 25 Standards
PPD	Presidential Policy Directive
PSAP	Public Safety Answering Point
PSBC	Vermont Public Safety Broadband Commission
SCIP	Statewide Communication Interoperability Plan
SOP	Standard Operating Procedure
SWIC	Statewide Interoperability Coordinator
TICP	Tactical Interoperable Communications Plan
UHF	Ultra High Frequency
VHF	Very High Frequency
VCOMM	Vermont Communications Board
VTrans	Vermont Agency of Transportation