



New Hampshire Statewide Communication Interoperability Plan (SCIP)

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EXECUTIVE SUMMARY

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

The purpose of the New Hampshire SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Combine interoperability efforts with the State's grant acquisition process to create an efficient and focused communications interoperability strategy.

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

Vision: Stakeholders optimally share critical information in a rapid, efficient, simple, reliable, and sustainable way utilizing a variety of video, voice and data technologies by following common protocols.

Mission: Develop, implement and oversee common approaches, strategies, plans and procedures to achieve day-to-day communications interoperability between all stakeholders. This mission will be accomplished through best practices, common procedures, allocation of necessary resources, and training and exercising.

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

- Governance –
 - Establish and maintain meaningful relationships that allow information sharing and coordination
 - Establish a Communications Leader/Communications Technician COML/COMT Certification Authority
- Standard Operating Procedures (SOPs) –
 - Identify best practices for, and current users of technology
 - Establish regional Tactical Interoperable Communications Plans (TICPs) in support of the development of a statewide TICP
- Technology –

- Provide standards for common interoperability channels
- Maintain current, establish where needed, and promote future interoperability efforts
- Identify a statewide hailing frequency that can be monitored 24/7/365
- Prepare for and engage in consultation and outreach process for the Nationwide Public Safety Broadband Network (NPSBN)
- Training and Exercises –
 - Create a repeatable and systematic statewide training process for initial and recurring training on communications equipment/technology/SOPs
- Outreach and Information Sharing –
 - Create and utilize a statewide Outreach and Information Sharing Plan
 - Leverage federal partners and other States on upcoming equipment purchases, planned training, etc.
- Life Cycle Funding –
 - Identify Federal, State, and local resources for sustainable funding to maintain current and future interoperability levels

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1. INTRODUCTION

The New Hampshire 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 New Hampshire 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 New Hampshire.
- 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 New Hampshire 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.

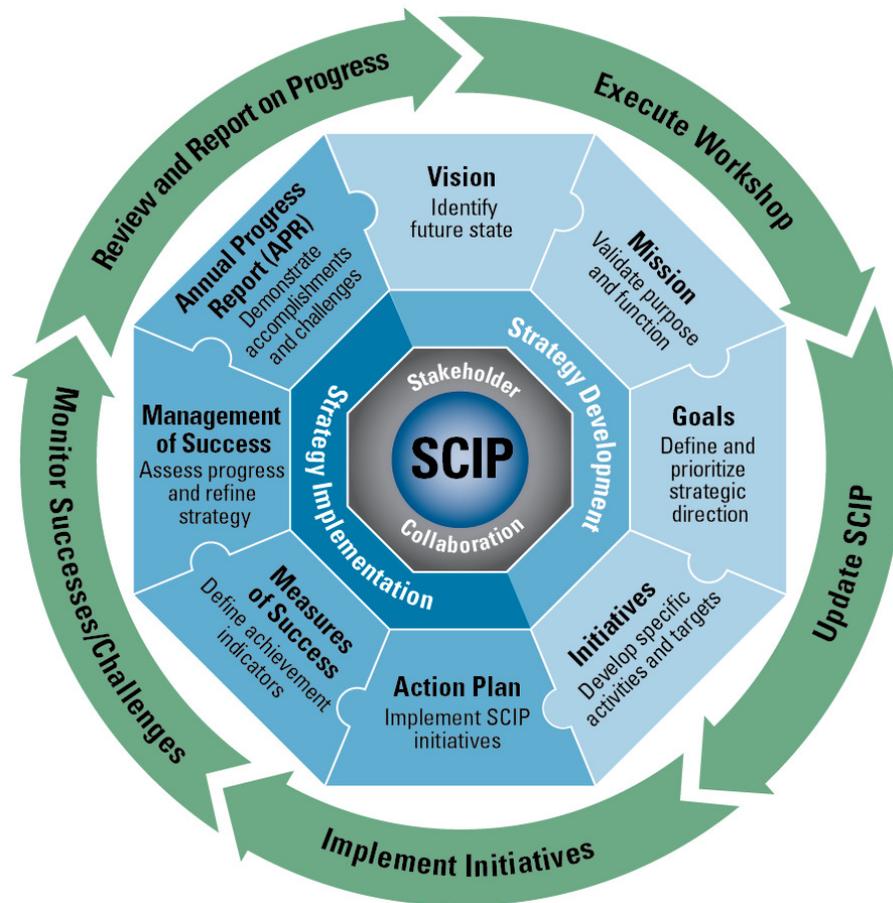


Figure 1: SCIP Strategic Plan and Implementation Components

The New Hampshire SCIP is based on an understanding of the current and mid-range interoperable and emergency communications environment. New Hampshire has taken significant steps towards enhancing interoperable and emergency communications, including establishing a Statewide Interoperability Executive Committee (SIEC) with working groups that will address critical interoperable communications needs in the State, and the hiring of a SWIC to facilitate interoperability efforts statewide and foster meaningful partnerships at all levels and across all public safety disciplines.

However, more remains to be done to achieve New Hampshire's vision. It is also important to note that this work is part of a continuous cycle as New Hampshire 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, New Hampshire will encounter challenges relating to operability, interoperability, geography, aging equipment/systems, emerging technologies, changing project champions, and sustainable funding.

Wireless voice and data technology is evolving rapidly and efforts are underway to determine how to leverage these new technologies to meet the needs of public safety. For example, the enactment of the Middle Class Tax Relief and Job Creation Act of 2012 (the Act), specifically Title VI, related to Public Safety Communications, authorizes

the deployment of the Nationwide Public Safety Broadband Network (NPSBN). The NPSBN is intended to be a wireless, interoperable nationwide communications network that will allow members of the public safety community to securely and reliably gain and share information with their counterparts in other locations and agencies. New policies and initiatives such as the NPSBN present additional changes and considerations for future planning efforts and require an informed strategic vision to properly account for these changes. Figure 2 illustrates a public safety communications evolution by describing the long-term transition toward a desired converged future.

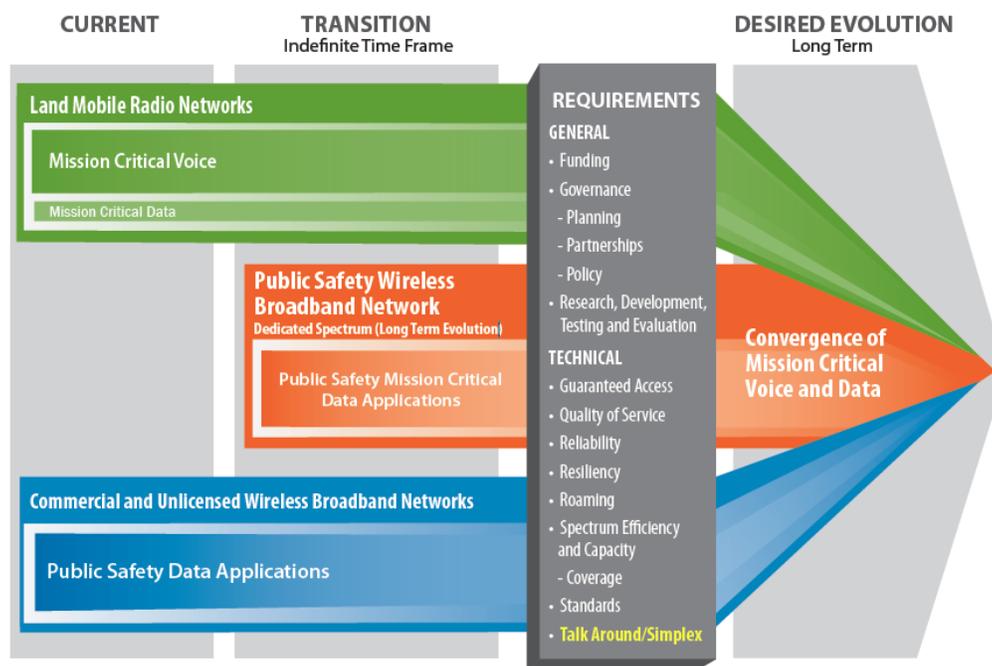


Figure 2: Public Safety Communications Evolution

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

There is no defined timeline for the deployment of the NPSBN; however, New Hampshire will keep up-to-date with the planning and build-out of the NPSBN in the near and long term in coordination with the First Responder Network Authority (FirstNet). FirstNet is the independent authority within the National Telecommunications and Information Administration (NTIA) and is responsible for developing the NPSBN, which will be a single, nationwide, interoperable public safety broadband network. The network build-out will require continuing education and commitment at all levels of government and across public safety disciplines to document network requirements and

identify existing resources and assets that could potentially be used in the build-out of the network. It will also be necessary to develop and maintain strategic partnerships with a variety of stakeholder agencies and organizations at the national, State, regional, local, and tribal levels and design effective policy and governance structures that address new and emerging interoperable and emergency communications technologies. During this process, investments in LMR will continue to be necessary and in the near term, wireless data systems or commercial broadband will complement LMR. More information on the role of these two technologies in interoperable and emergency communications is available in the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Public Safety Communications Evolution brochure.¹ The New Hampshire Department of Safety (NHDOS) has been conducting outreach with a variety of stakeholders in preparation for FirstNet consultation. The State has also been ensuring that its strategic plans for current systems will maintain communications operations with current technology and prepare for the build out of the NPSBN.

Additionally, achieving sustainable funding in the current fiscal climate is a priority for New Hampshire. 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 New Hampshire are:

- Replacing aging equipment and infrastructure to maintain operational and interoperable capabilities with cutting edge technology;
- Devoting resources to maintaining current, establishing where needed, and promoting future interoperability efforts;
- Ensuring the State has a robust training program that comprehensively equips all levels of personnel with the skills and practical experience to perform assigned duties and respond to planned and unplanned events.

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.

¹ OEC's Public Safety Communications Evolution brochure is available here:

http://publicsafetytools.info/oec_guidance/docs/Public_Safety_Communications_Evolution_Brochure.pdf

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

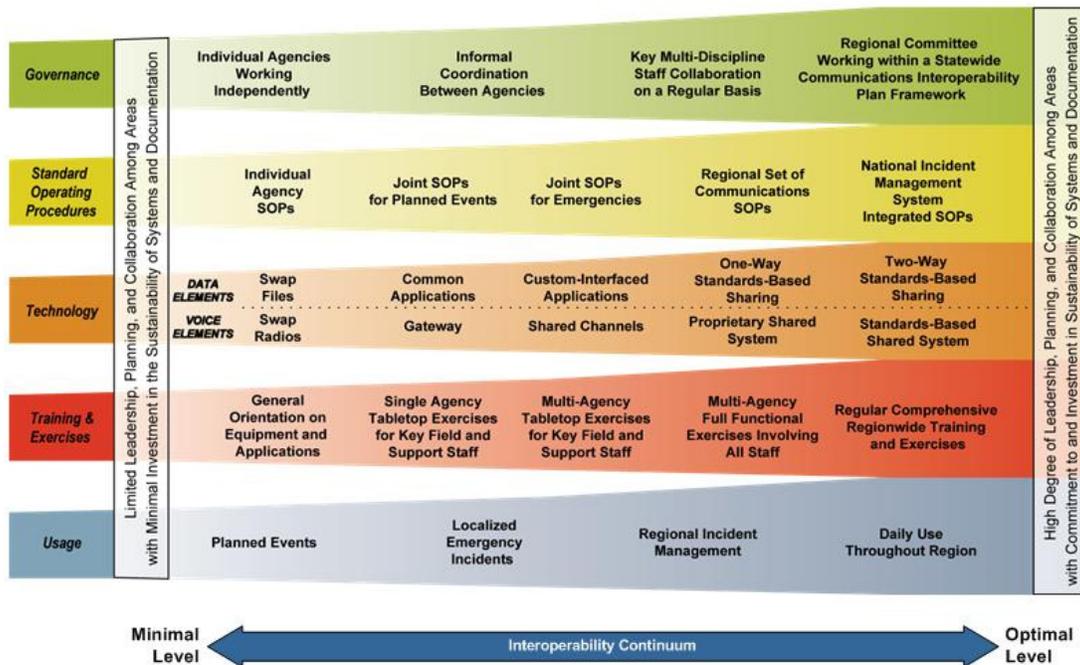


Figure 3: The Interoperability Continuum

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 New Hampshire 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.
- **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 New Hampshire and New Hampshire's plans to enhance interoperable and emergency communications.

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

2. PURPOSE

The purpose of the New Hampshire SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Combine interoperability efforts with the State's grant acquisition process to create an efficient and focused communications interoperability strategy.

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

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

This SCIP is managed by the SWIC, who is responsible for presenting issues relating to the plan to the SIEC. The SWIC, along with the SIEC has the authority to and is responsible for making decisions regarding this plan. The SWIC is also responsible for ensuring that this plan is implemented and maintained statewide. In 2008, NHDOS worked with the Radio Interoperability Committee and local agencies to develop the SCIP. In October 2014, New Hampshire worked with OEC to complete a SCIP Revision Workshop, which updated the SCIP to reflect the current interoperable and emergency communications environment in New Hampshire, as well as include the strategic goals for the next 2-5 years.

3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW

New Hampshire established its SIEC with members representing jurisdictions and associations from across the public safety community. Launching the SIEC and its current three Working Groups is a major accomplishment and its membership is planning to handle a variety of upcoming projects by utilizing working groups. The charter authority outlines the membership and responsibilities of the SIEC and can be

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.

found as an attached reference to this document. As of October 2014, the SIEC has met twice and plans to meet regularly throughout the upcoming year. In addition, many members, representing experienced personnel from multiple disciplines, attended the SCIP Revision Workshop held in October 2014, highlighting the high level of interest in promoting interoperable communications statewide.

New Hampshire faces a variety of events that necessitate first responders engaging in interoperable communications (e.g., sporting events, Presidential election-related events). As a northern State, New Hampshire routinely deals with weather events that impact communications, including wind, ice, and snow storms, as well as a varied geography. These events and terrain challenges have the possibility to severely impact communications and recovery efforts depending on what sites are affected. New Hampshire has actively worked to increase interoperability by implementing Project 25 (P25) compliant equipment and policies, including reprogramming communications devices to common standards and training end-users on P25 compliant radios. P25 is a set of standards used by emergency personnel to enable radio communication interoperability among separate systems. While training is ongoing, New Hampshire has identified a need to create a repeatable and systematic training program for personnel at all levels and across all disciplines. New Hampshire will also prepare succession planning to ensure that attrition does not hamper interoperability efforts.

The State Police maintain a VHF P25 compatible statewide system. This system is available for local agencies to piggy-back onto for use, but several local and county jurisdictions maintain separate towers. Two of the largest regional systems are maintained by Manchester and Nashua, the two largest metropolitan areas in the State. These systems operate on the 800 MHz band, but have permanent gateways to interoperate on the statewide system. The State Police recently conducted an audit to determine where terrain creates coverage gaps in order to identify future system upgrade needs. The system and equipment for troopers and dispatch centers was initially funded by the State Police. However as equipment needs replacing and State expenditures become more constrained, additional funding streams will have to be identified.

4. VISION AND MISSION

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

New Hampshire Interoperable and Emergency Communications Vision:

Stakeholders optimally share critical information in a rapid, efficient, simple, reliable, and sustainable way utilizing a variety of video, voice and data technologies by following common protocols.

New Hampshire Interoperable and Emergency Communications Mission:

Develop, implement and oversee common approaches, strategies, plans and procedures to achieve day-to-day communications interoperability between all stakeholders. This mission will be accomplished through best practices, common procedures, allocation of necessary resources, and training and exercising.

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 New Hampshire governance structure for interoperable and emergency communications. Pursuant to New Hampshire Revised Statutes Annotated (RSA) 21-P:48, the State's Advisory Council on Emergency Preparedness and Security serves as the legislative authority for the SIEC. The SIEC has met twice and has set up three working groups: Interoperability and Frequencies (IFWG); Operations, Policy and Procedures (OPPWG); and Broadband/FirstNet (BFWG). The membership consists of representatives from Federal, State, local, county jurisdictions, non-governmental organizations, the private sector, and the NH National Guard as stakeholders. In addition, the SIEC approved a charter to guide the council's work on interoperability.

The SIEC's main objective is to set up the policies and procedures that will allow it to implement the authorities granted by legislative authority and its Charter. This includes creating a certification authority to approve COML and COMT class graduates to ensure the State maintains a cadre of trained incident responders. Also, New Hampshire recognizes the need to create a plan to address change management, to accommodate upcoming personnel changes and retirements.

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

Table 1: Governance Goals and Initiatives

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
1.	Establish and maintain meaningful relationships	1.1 Develop and provide guidance on equipment minimum	IFWG; OPPWG	December 2017, ongoing

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
	that allow information sharing and coordination	standards		
		1.2 Designate the office of the SWIC as the single point of contact to receive frequency changes and provide that information to the SIEC Working Group	SWIC	March 2015, ongoing
		1.3 Refine and maintain Frequency Matrix	IFWG	March 2015, quarterly
		1.4 Establish and maintain Partner MOUs and provide template materials to local licensees if necessary	IFWG	March 2015, quarterly
2.	Establish a COML/COMT Certification Authority	2.1 Identify signing authority	SWIC, OPPWG	December 2014
		2.2 Establish a statewide policy for certification	OPPWG	June 2015

5.2 Standard Operating Procedures (SOPs)

The SOPs section of the SCIP identifies the framework and processes for developing and managing SOPs statewide. New Hampshire purchases equipment in accordance with State law and policies, including utilizing a bulk purchasing agreement where possible. In addition, the State has established procedures to ensure data integrity. Local jurisdictions have developed best practices for a variety of issues.

New Hampshire has identified two challenges relating to SOPs and created steps to address them. The State recognizes that its TICPs need to be refreshed in order to reflect the current interoperable communications environment. Additionally, New Hampshire has identified the need to add communications tasks to all emergency preparedness exercises that reflect the critical importance of interoperability during planned and unplanned events. The State recognizes that local jurisdictions in-State and throughout New England have developed best practices for a variety of issues that impact communications in the region. New Hampshire is dedicated to identifying, via the Mobile Data Survey Tool (MDST) and other collection means, and disseminating these policies and procedures in order to improve public safety statewide.⁶

Table 2 outlines New Hampshire's goals and initiatives for SOPs.

⁶ The MDST is an online survey tool available for States to assist agencies in collecting information on the current usage, system costs, and user needs from public safety stakeholders. It is available online at www.publicsafetytools.info

Table 2: Standard Operating Procedures Goals and Initiatives

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
3.	Identify best practices for, and current users of technology	3.1 Research and recommend best practices for technology solutions	SIEC, BFWG	September 2015
		3.2 Disseminate and encourage agencies to use the MDST	BFWG	December 2014
4.	Establish regional TICPs in support of the development of a statewide TICP	4.1 Define an appropriate TICP region	IFWG	June 2017
		4.2 Leverage data from the Frequency Matrix to create regional TICPs	IFWG	December 2018

5.3 Technology

The Technology section of the SCIP outlines New Hampshire'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. New Hampshire was an early leader in upgrading its public safety communications equipment. The State Police provided the funding for cutting edge technology to drive initial interoperability efforts. This resulted in thousands of radios being programmed with common channels and the development of a Standard Frequency Matrix to keep track of the frequencies used. Due to geographical features that reduce the coverage options for other bandwidths; the State Police utilize a VHF statewide system in order to provide wide coverage with the goal of achieving public safety 95% coverage, 95% of the time. The NHDOS's Office of Interoperability is in the process of standing up a secure website which will be a central repository for public safety resources, including a centralized point of contact list. This list can be utilized when local and regional jurisdictions make changes to their systems and frequencies, or if one jurisdiction is seeking interoperability information.

New Hampshire recognizes that an important source of information about current and future technologies is the private sector, and is dedicated to creating meaningful public-private partnerships to facilitate information sharing regarding current and future technology.

Eventually, New Hampshire will have to upgrade the equipment and purchase new units in order to maintain the quality of service provided and keep par with technological advancements. New Hampshire needs to identify capable equipment and develop a process for procuring the equipment as well as identify upgrades to infrastructure.

These upgrades will allow New Hampshire to better mitigate the effects of natural hazards, increase coverage capabilities, and continue to improve interoperability among responders. This work on resiliency and redundancy will provide the continuity of operations needed during planned and unplanned events.

Table 3 outlines New Hampshire's goals and initiatives for technology.

Table 3: Technology Goals and Initiatives

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
5.	Provide standards for common interoperability channels	5.1 Develop and implement consistent conventions standards (e.g., PL tones, naming conventions, usage).	OPPWG	December 2015
		5.2 Develop a point of contact list for all levels (e.g., Department of Safety, local agencies) and post on the Interoperability secured website	OPPWG	June 2016
		5.3 Conduct outreach to the professional associations as well as vendors	OPPWG	January 2016, ongoing
6.	Maintain current, establish where needed, and promote future interoperability efforts	6.1 Develop and disseminate guidance for equipment purchases (e.g., P25 compliant, solutions for cross-system connections, minimum equipment specifications)	IFWG/ OPPWG	June 2016, ongoing
7.	Identify a statewide hailing frequency that can be monitored 24/7/365	7.1 Identify an interoperable frequency that can be accessed statewide	IFWG	March 2015
8	Prepare for and engage in consultation and outreach process for the Nationwide Public Safety Broadband Network (NPSBN)	8.1 Prepare for initial consultation with FirstNet	SPOC, SIEC	January 2015
		8.2 Research and leverage best practices (e.g., NPSTC, FirstNet research) for broadband standards	BFWG	June 2015, ongoing
		8.3 Develop and continue an outreach, engagement, and marketing plan	SPOC, SIEC	December 2015, ongoing

5.4 Training and Exercises

The Training and Exercises section of the SCIP explains New Hampshire'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 divisions of NHDOS have robust training programs for recruits that include regular classes relating to a variety of communications processes and equipment. In addition, NHDOS hosted a series of workshops designed to elicit first responder feedback in order to design a strategic exercise plan that the State will use over the next several years. New Hampshire has also revised its homeland security strategy, which will be a guiding document for exercise design and training development.

New Hampshire recognizes that training for personnel does not end when a cadet leaves a service academy and that training should be for all levels of personnel. New Hampshire plans to integrate usage into training, with the main goal of increasing awareness of radio and data capabilities available on existing and future technologies. This includes being able to transition radios to the channels used by other jurisdictions when events cross local and State boundaries, which is common in the New England area.

Table 4 outlines New Hampshire'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
9.	Create a repeatable and systematic statewide training process for initial and recurring training on communications equipment/technology/SOPs	9.1 Implement interoperable radio training for public safety personnel, to include dispatchers and Emergency Support Functions (ESF) on radio usage and channel navigation	OPPWG	June 2016
		9.2 Develop refresher training course	OPPWG	June 2016
		9.3 Restart COMU Training after certification process is created	OPPWG	June 2015, ongoing

5.5 Usage

The Usage section of the SCIP outlines efforts to ensure responders adopt and familiarize themselves with interoperable and emergency communications technologies, systems, and operating procedures in the State. Regular usage ensures the

maintenance and establishment of interoperability in case of an incident. New Hampshire regularly uses communications equipment to support planned (e.g., election related events, sporting events) and unplanned (e.g., inclement weather) events. State Police personnel assigned to the Communications Maintenance Bureau regularly work on the statewide radio system and mobile two-way radio units to keep the equipment functioning at peak performance and interoperable. Additionally, New Hampshire maintains a common Frequency Matrix, which contains all the common channels programmed into radios statewide. This Matrix has been addressed in this SCIP and will be updated and maintained in order to coordinate radio channel programming.

Regular usage of common channels has occasionally led to some overlap in use. This is especially true in the northern areas of the State, where the borders with other New England States and Canada are in close proximity to each other. New Hampshire plans to introduce a policy that will guide the use of common channels to allow for responses to unplanned events and the continued daily operations of multiple agencies. This policy will examine best practices in regards to common hailing frequencies, dispatch notification, radio usage training to ensure troopers and all first responders know which channels are available, and coordination with federal partners and Canada to reduce the cross-border issues that may arise. First Responders from the northern New England States regularly provide each other with mutual aid due to the close physical proximity of the borders and New Hampshire recognizes it is essential for personnel to be able to use their radios to reach dispatch centers that are closest to them, which may be in another State. New Hampshire has adopted the strategy that usage should be included in all facets of its communications strategy, from advanced communications exercise tasks to basic training for police, fire and emergency medical personnel. Therefore the goals associated with usage have been incorporated into other sections of the SCIP.

Table 5 outlines New Hampshire's goals and initiatives for usage.

Table 5: Usage Goals and Initiatives

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
No Usage Goals Identified.				

5.6 Outreach and Information Sharing

The Outreach and Information Sharing section of the SCIP outlines New Hampshire'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. New Hampshire has created extensive connections with agencies at all levels of government as well as non-governmental organizations. The SIEC enjoys a high level of participation and interest among stakeholders and will utilize

SIEC members to advance interoperable communications in their respective organizations. New Hampshire is also taking advantage of the value of having filled the SWIC position, which was for a time vacant. New Hampshire is in a position to make strides in outreach on communications issues and facilitating information sharing among agencies and stakeholders now that the SWIC is in place and SIEC is operational.

New Hampshire is looking forward to adding broadband into the State's strategic planning process. Outreach to stakeholders is a critical part of planning for FirstNet. Additionally, New Hampshire has recognized that there is a need to explain the complexities of interoperability and its critical importance to public safety operations. This includes reaching out to legislators, State policy makers, and the private sector, such as the insurance field. New Hampshire is also dedicated to maintaining a relationship with OEC to facilitate technical assistance in support of SCIP goals. New Hampshire will also disseminate to local jurisdictions information about state bidding information to facilitate additional cost savings at the local level by leveraging bulk purchasing power.

Table 6 outlines New Hampshire's goals and initiatives for outreach and information sharing.

Table 6: Outreach and Information Sharing Goals and Initiatives

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
10.	Create and utilize a statewide Outreach and Information Sharing Plan	10.1 Create and disseminate consistent messaging highlighting the need for interoperability for nontechnical audiences and key stakeholders	OPPWG	March 2015 (dependent upon approval of SCIP)
		10.2 Coordinate public-private partnerships to promote the case for interoperability	SIEC, SWIC	December 2015 ongoing
11.	Leverage Federal partners and other States on upcoming equipment purchases, planned training, etc.	11.1 Maintain relationship with DHS OEC for TA engagements in the future	SWIC	November 2014, ongoing
		11.2 Disseminate information regarding the state bid list	SWIC / Grants Coordinator	December 2014, ongoing
		11.3 Identify possible group purchases to meet objectives and realize economies of scale	SWIC / SIEC	December 2014, ongoing

5.7 Life Cycle Funding

The Life Cycle Funding section of the SCIP outlines New Hampshire's plan to fund existing and future interoperable and emergency communications priorities. Historically grants and funding from the NHDOS have allowed the State to purchase state of the art equipment that is interoperable. As that equipment ages out of service, the current fiscal environment is necessitating changes in how communications interoperability is funded in the State. New Hampshire's goal is to create a strategic funding plan that takes the development and build-out of FirstNet into consideration while also continuing to fund current systems and replace equipment such as old mobile response radio units.

New Hampshire recognizes the need to identify sources of future funding to sustain current and implement future interoperable equipment and systems. Concurrently the State needs to implement a succession plan to account for personnel changes, identified human resources needs and to identify future expenditures based on the strategic plan for State communications. New Hampshire is committed to working with the State legislature to implement the portion of funding that comes from the State level in accordance with the two year State budget cycle.

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

Table 7: Life Cycle Funding Goals and Initiatives

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
12.	Identify local, State, and federal resources for sustainable funding to maintain current and future interoperability levels	12.1 Identify local, State, and federal resources for sustainable funding to maintain current and future interoperability levels	OPPWG	December 2016
		12.2 Coordinate public-private partnerships to promote the case for interoperability	OPPWG	December 2016

6. IMPLEMENTATION

6.1 Action Plan

The Action Plan section of the SCIP describes the process New Hampshire will use to determine a plan to execute the initiatives in the SCIP. New Hampshire will utilize its SIEC Working Groups and the office of the SWIC to accomplish the goals and initiatives of this plan. The Working Group Chairs will provide updates to the entire SIEC at regular meetings. The Working Groups will meet in between the SIEC meetings to conduct specific group business. The SWIC is in charge of presenting issues and updates to the SIEC as needed.

6.2 Measures of Success

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

Table 8: SCIP Measures of Success

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
1.	Establish and maintain meaningful relationships that allow information sharing and coordination	Information sharing occurs on an ad-hoc basis and equipment standards and the Frequency Matrix exist but are not regularly updated or disseminated.	Updates to the Frequency Matrix are regularly disseminated to jurisdiction points of contact.	March 2015, quarterly thereafter	SWIC, IFWG
2.	Establish a COML/COMT Certification Authority	COML/COMT classes have occurred in the past but there is no current signing authority to sign task books.	An identified signing authority regularly holds COML/COMT classes and certifies the task books to keep training up-to-date	June 2015	SWIC, OPPWG
3.	Identify best practices for, and current users of technology	There is little to no use of the MDST	Jurisdictions at all levels statewide receive and utilize information to populate the MDST	December 2014	BFWG
4.	Establish regional TICPs in support of the development of a statewide TICP	There is one TICP for the Capital Region that needs to be refreshed	Regional TICPs are developed in compliance with data gathered and identified regions	December 2018	IFWG

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
5.	Provide standards for common interoperability channels	No consistent conventions are used.	Consistent conventions are developed and regularly disseminated to professional associations and private vendors	January 2016	OPPWG
6.	Maintain current, establish where needed, and promote future interoperability efforts	No statewide guidance exists for purchasing equipment in support of interoperability	Equipment purchase guidance has been developed and disseminated	June 2016, ongoing	IFWG/ OPPWG
7.	Identify a statewide hailing frequency that can be monitored 24/7/365	No channel is used statewide as an emergency channel	A channel is identified with coverage statewide	March 2015	IFWG
9.	Create a repeatable and systematic statewide training process for initial and recurring training on communications equipment/technology/S OPs	Training exists at the service academies but does not regularly continue in-service or for dispatchers	Training regularly occurs across all disciplines and at all levels, including COML and COMT courses.	June 2016	OPPWG
10.	Create and utilize a statewide Outreach and Information Sharing Plan	No statewide outreach and information sharing plan is utilized.	A statewide plan has been created and implemented based on SCIP approval.	March 2015 (dependent upon approval of SCIP)	OPPWG
11.	Leverage Federal partners and other States on upcoming equipment purchases, planned training, etc.	Group purchasing is used by some agencies and jurisdictions but is not uniformly used statewide	Information about state group purchasing is disseminated and understood by agencies statewide	December 2016	OPPWG

6.3 Management of Success

The Management of Success section describes the iterative, repeatable method New Hampshire will follow to add, update and refine the measures of success. The Working

Group Chairs will be responsible for updating the SIEC on the status of the goals assigned to the working group. These updates will be provided at regular SIEC meetings.

6.4 Strategic Plan Review

The Strategic Plan Review section outlines the process New Hampshire will use to conduct reviews of the SCIP to ensure it is up to date and aligned with the changing internal and external interoperable and emergency communications environment as well as to track and report progress against the defined initiatives and measures of success. The SCIP will be reviewed annually to review the progress made on each goal and the overall strategic plan. An analysis will be performed to identify new trends that may need to be incorporated. The SWIC will present an update to the SIEC and the Commissioner of Safety at a determined time.

7. REFERENCE MATERIALS

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

Table 9: SCIP Reference Materials

Title	Description	Source/Location
SIEC Charter	Charter document of the New Hampshire SIEC	 New Hampshire Final Draft SIEC Charter - I
Training and Exercise Plans Workshop Memo	Memo outlining the process the State will use to develop a multi-year exercises plan.	http://www.nh.gov/safety/divisions/fstem/training/documents/tepw.pdf

APPENDIX A: MAJOR SYSTEMS

List all existing major interoperable and emergency communications systems in the table below. As the State updates the SCIP, note if and how major systems have been updated or if new systems have been developed. If this information is already documented elsewhere, the State may provide the source document or link instead of completing the table.

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

Major Systems Information						
System Type / Coverage Area	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
<p>From the drop down menu below, choose the item that most accurately describes the system type</p> <p>[This column should contain a drop down menu with the following options:</p> <ul style="list-style-type: none"> -Shared statewide system -State agency(ies) system -Regional system -Local system 	<p>Insert the name of the system</p> <p>[This column should contain a free form text box]</p>	<p>Insert the organization(s) or governing body responsible for the system</p> <p>New Hampshire State Police</p>	<p>From the drop-down menus below, choose all of the appropriate descriptions for the system</p> <p>[This column should contain the drop down menu and categories below]</p> <p>800MHz</p> <p>P25 Compatible</p> <p>Chose make</p> <p>Choose make</p> <p>Choose digital/analog</p> <p>Choose trunked/conventional</p> <p>Choose encryption level</p>	<p>Insert the estimated number of subscribers as well as the number of agencies on the system</p> <p>[This column should contain a free form text box]</p>	<p>From the drop down menu below, identify the levels of government for which there are users on the system</p> <p>[This column should contain a drop down menu with the following options:</p> <ul style="list-style-type: none"> -Federal -State -Regional -Local -Tribal] 	<p>From the drop down menu below, select the item that best describes the system's status</p> <p>[This column should contain a drop down menu with the following options:</p> <ul style="list-style-type: none"> -Decommissioned System -New System -No change -Updated System and a free form text box for the end user to enter additional information] <p>Additional Information:</p>
			<p>Choose Primary Usage: Voice</p>			
			<p>[This row in the system description column should contain a free form text box for other and number of sites]</p>			

Major Systems Information

System Type / Coverage Area	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
			Other: Number of Sites:			

APPENDIX B: LIST OF ACRONYMS

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

AAR	After Action Report
APR	Annual Progress Report
BFWG	Broadband/FirstNet Working Group
COML	Communications Unit Leader
COMT	Communications Unit Technician
DHS	U.S. Department of Homeland Security
ESF	Emergency Support Function
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
IFWG	Interoperability and Frequencies Working Group
MDST	Mobile Data Survey Tool
MHz	Megahertz
LMR	Land Mobile Radio
NECP	National Emergency Communications Plan
NHDOS	New Hampshire Department of Safety
NG911	Next Generation 911
NIMS	National Incident Management System
NPSBN	Nationwide Public Safety Broadband Network
NTIA	National Telecommunications and Information Administration
OEC	Office of Emergency Communications
OPPWG	Operations, Policy, and Programs Working Group
P25	Project 25
PPD	Presidential Policy Directive
PSAP	Public Safety Answering Point
SCIP	Statewide Communication Interoperability Plan
SIEC	Statewide Interoperability Executive Committee
SOP	Standard Operating Procedure
SWIC	Statewide Interoperability Coordinator
TICP	Tactical Interoperable Communications Plan
VHF	Very High Frequency