Utah

Statewide Communication Interoperability Plan (SCIP)

~~June~~
~~2013January~~

EXECUTIVE SUMMARY

Utah's 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 Utah prioritize resources, strengthen governance, identify future investments, and address interoperability gaps.

The purpose of the Utah 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.

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

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

Vision:

Achieve shared, cost-effective Statewide operational and technological coordination for voice and data communications among all public safety interests.

Mission:

The mission of the State of Utah's Statewide Interoperability Executive Committee (SIEC) is to promote interoperable voice and data communications and information-sharing for a more effective incident response among public safety agencies in Utah.

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

- Governance –
    - Align strategies of the Utah 911 Committee, SIEC (including FirstNet), and Utah Communications Area Network (UCAN)

- Standard Operating Procedures (SOPs) –
    - Create, formalize, and maintain SOPs for statewide communications for multi-jurisdictional pursuits

- Technology –
    - Upgrade current radio technology
    - Implement a statewide Next Generation 911 (NG911) system

- <u>Training and Exercises</u> –

    o Incorporate communications processes into all training and exercises, including Public Safety Answering Points (PSAPs), Communications Unit Leaders (COMLs), Communications Unit Technicians (COMTs), and Auxiliary Emergency Communications (AUXComm)

    o Conduct National Incident Management System (NIMS) Communications Unit Training

- <u>Usage</u> –

    o Identify potential Nationwide Public Safety Broadband Network (NPSBN) users and applications

    o Address interstate interoperability

- <u>Outreach and Information Sharing</u> –

    o Provide outreach and education in support of public safety communications

    o Enhance statewide understanding and utilization of incident communications personnel and their defined roles

- <u>Life Cycle Funding</u> –

    o Identify and establish sustainable funding mechanisms to support public safety communications

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1. INTRODUCTION

Utah's 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 Utah 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 Utah.

- 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 Procedure (SOP), 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 documents that provide additional background directly supporting the SCIP or interoperable and emergency communications in Utah.

Figure 1 provides additional information about how these components of the SCIP interrelate to develop a comprehensive plan for improving interoperable and emergency communications.
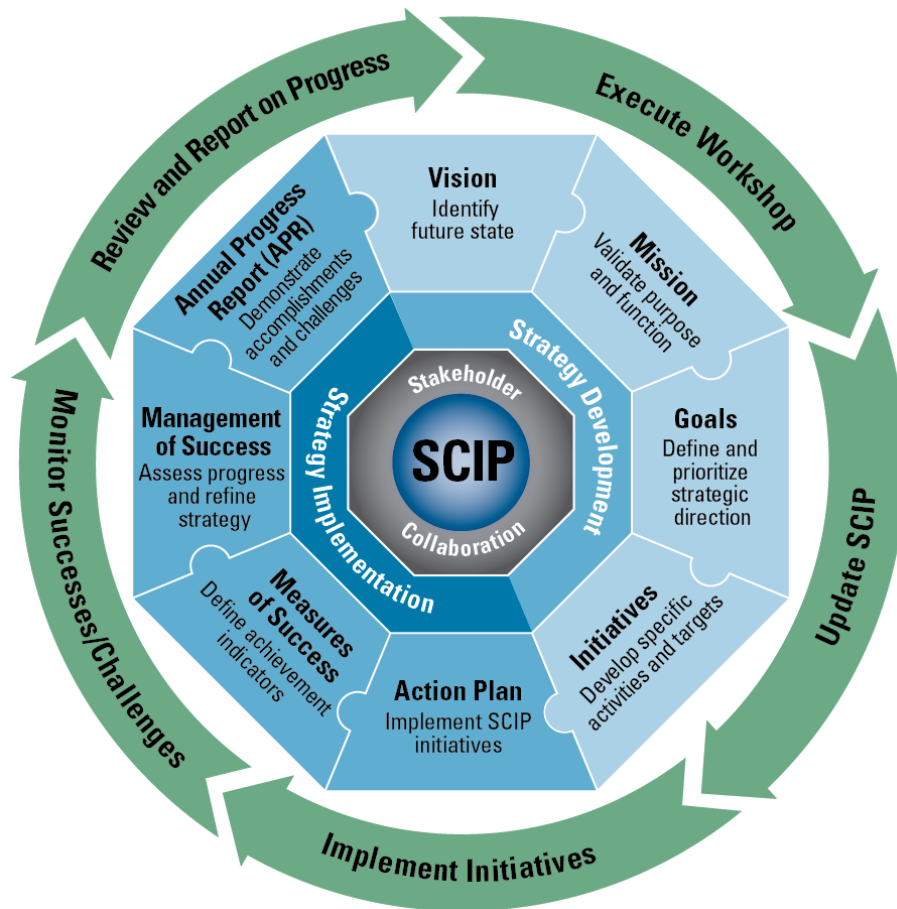
Figure 1: SCIP Strategic Plan and Implementation Components

The Utah SCIP is based on an understanding of the current and mid-range interoperable and emergency communications environment. Utah has taken significant steps towards enhancing interoperable and emergency communications, including leveraging available opportunities such as grant funding, expanding and extending the State's existing 800 megahertz (MHz) trunked radio system to Utah's rural regions, establishing a committee to address sustainable funding, consolidating oversight groups for a common mission and vision, and improving Standard Operating Procedures (SOPs).

However, more remains to be done to achieve Utah's vision. It is also important to note that this work is part of a continuous cycle as Utah 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, Utah 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.
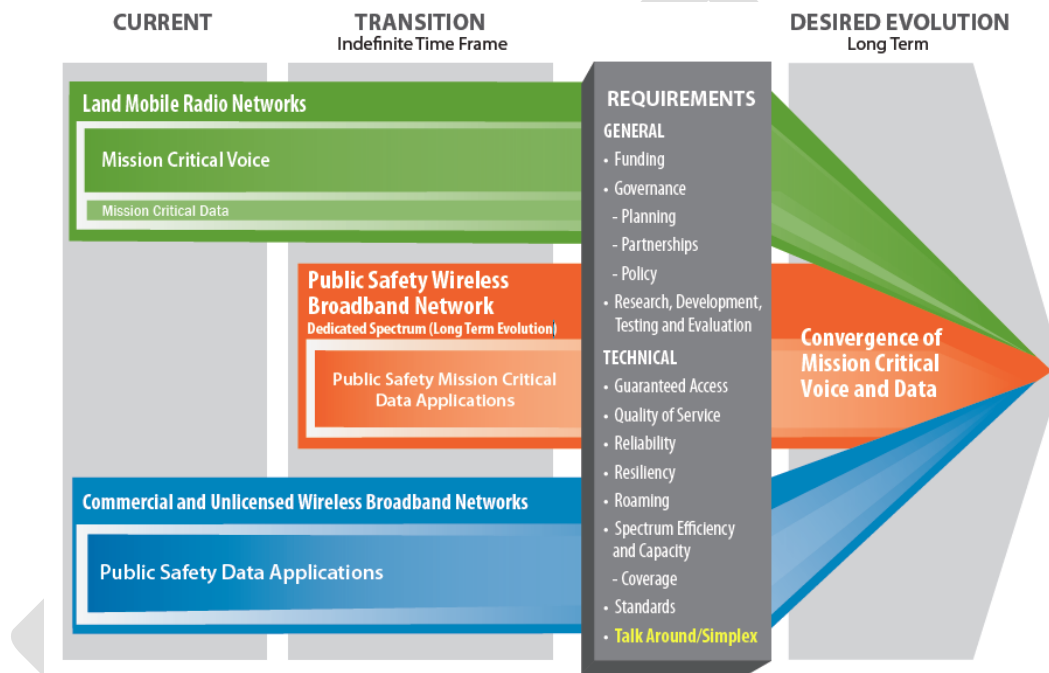
Figure 2: Public Safety Communications Evolution

Integrating capabilities such as broadband provide an unparalleled opportunity for the future of interoperable communications in Utah. 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, Utah 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] Utah has taken significant steps to prepare for consultation with FirstNet, including forming a subcommittee to manage network implementation. The Statewide Interoperability Coordinator (SWIC) serves as chairperson, as well as point-of-contact for FirstNet. The Broadband Subcommittee is comprised of representatives from tribes, each public safety discipline, urban and rural areas, radio technical engineers, PSAPs, and other related stakeholder groups. The group meets regularly, and is developing an outreach and educations plan. In the future, the Broadband Subcommittee plans to coordinate with neighboring States.

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

- Broadband implementation: the Broadband Subcommittee has submitted an application for the State and Local Implementation Grant Program (SLIGP) to drive Utah's broadband implementation.

- Maintenance and upgrades for the State trunked radio system, Utah Communications Agency Network (UCAN): the system currently collects user fees, but the user fees are insufficient to cover the upgrades and systems expansion costs. Upgrades are necessary in order to have UCAN reach rural areas, thus serving as a truly statewide system.

- Statewide Interoperability Executive Committee (SIEC) activities: a funding strategy for SIEC priorities has been submitted to the Utah Legislature

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]

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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
[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

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.
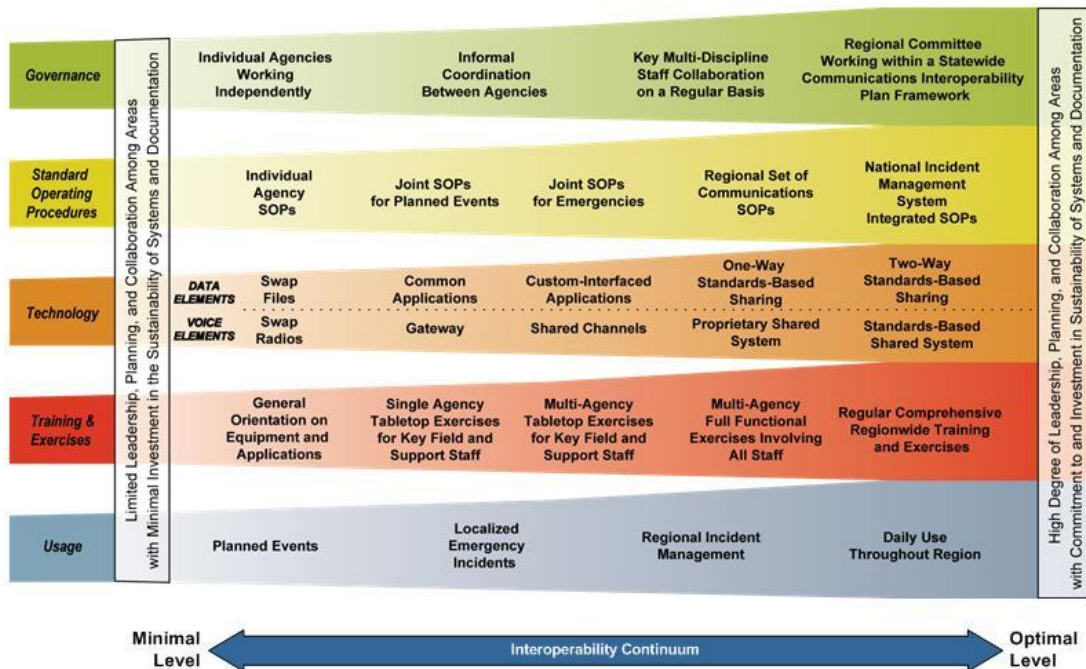
Figure 3: The Interoperability Continuum

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 *[Insert State Name]* 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 Utah and Utah's plans to enhance interoperable and emergency communications.

2. PURPOSE

The purpose of the Utah 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.

The development and execution of the SCIP assists Utah 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, Utah 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 owned and managed by the SWIC in coordination with the Utah SIEC, as delineated by House Bill 411, codifying the roles and responsibilities of the SIEC (see Section 7). The SWIC 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, including maintaining a complete list of interoperability stakeholders statewide. In addition to the regular SIEC meetings, the SWIC directly contacts all stakeholder agencies bi-annually to receive local input and coordinate common objectives under statewide communication interoperability efforts. The SCIP was originally developed in 2007 as a stakeholder-driven, statewide strategy to prioritize resources, strengthen governance, and coordinate interoperability frequencies.

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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.

In June 2013, the State hosted a SCIP Revision Workshop to bring together key decision makers across disciplines from State, local, and tribal agencies to update the SCIP based on revised criteria, national-level objectives, emerging technologies, and lessons learned. The group emphasized the necessity of coordination across disciplines and jurisdictions, especially aligning the goals and activities of Utah's public safety and emergency communications committees.

3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW

In 2007, the Utah SIEC was established to determine a statewide emergency communications vision through the creation of a SCIP, and advocates a bottom-up planning approach. The SIEC serves to facilitate local, State and Tribal agency input to statewide planning and implementation. The Utah SIEC recognizes the independence of many agencies in the State to determine their own systems, and the SIEC strives to develop a system-of-systems approach to provide functional interconnectivity among disparate systems. Via statute, the SIEC is authorized to coordinate and manage standards for interoperability best practices, interoperability frequencies, and funding recommendations to the governor. The statute also authorizes the SIEC's Executive Board to sign a Memorandum of Understanding (MOU) with all Utah's participating agencies to promote common interoperability objectives.

At the local level, communications collaboration is managed by regional planning areas. Formed by the Utah Division of Emergency Management (DEM), the seven planning regions work in partnership with the SIEC to ensure planning continuity and to inform the statewide perspective.

In preparation for the 2002 Winter Olympics in Salt Lake City, the UCAN system was established, providing an 800 MHz trunked analog network covering the Wasatch Front. Through various Federal grant resources and State funding initiatives, the statewide system presently covers over 20,000 users, and connects to an additional 5,000 Very High Frequency (VHF) users in rural counties using the State's Omnilink system. UCAN was originally built using bonds, and user fees address operations, debt service, and maintenance (approximately $5 million per year). The system has doubled in size since it went online in 2001 and the demand to join the system has surpassed expectations, though many rural agencies remain unable to migrate to 800 MHz radios due to associated costs. Additionally, the system infrastructure build-out cost is extensive due to low population density in many rural areas. All system decisions are governed by the Board of Directors. A full list of Utah's radio systems can be found in Appendix A.

4. VISION AND MISSION

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

> **Utah Interoperable and Emergency Communications Vision:**
>
> Achieve shared, cost-effective Statewide operational and technological coordination for voice and data communications among all public safety interests.

> **Utah Interoperable and Emergency Communications Mission:**
>
> The mission of the State of Utah's Statewide Interoperability Executive Committee (SIEC) is to promote interoperable voice and data communications and information-sharing for a more effective incident response among public safety agencies in Utah.

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

This section outlines the future direction of the Utah's governance structure for interoperable and emergency communications. Utah enjoys a strong governance structure focused on facilitating collaboration through the SIEC, planning regions, and participation from local agencies. In order to plan for emerging technologies and ensure the SIEC's sustainability, the State seeks to further strengthen its governance structure by synchronizing strategies among the groups addressing NG911, NPSBN development, maintaining LMR, the professionalization of public safety telecommunications careers, and integrating key stakeholder recommendations.

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

Table 1: Governance Goals and Initiatives

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
1.	*Align strategies of the Utah 911 Committee, SIEC (including FirstNet), and UCAN*	1.1 Present the SCIP to Utah 911 Committee and UCAN to promote adoption	SWIC	~~December 2013~~Complete
		1.2 Add Utah 911 Committee representation to SIEC	Nomination by the 911	March 2015

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		membership	Committee to the Governor	
		1.3 Modify the SIEC statute to incorporate emerging updates to mission, membership, and outcomes from the Legislative Task Force	SIEC Chair	March 2015

5.2 Standard Operating Procedures (SOPs)

This section identifies the framework and processes for developing and managing SOPs statewide. The SIEC SCIP planning subcommittee, in partnership with the Utah Department of Public Safety, UCAN, and DEM, has prioritized developing statewide SOPs for statewide interoperable communications. These SOPs are envisioned to address interagency communications across a series of issues, and will require SIEC approval prior to implementation and dissemination.

The SIEC recognizes statewide SOPs are effective when utilized as widely as possible, and as such, prioritizes local stakeholder input and adoption in the development process. Developing SOPs to address multi-jurisdictional pursuits will be the initial effort, and once it is defined and adopted, the process will be replicated for the development of further SOPs.

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

Table 2: Standard Operating Procedures Goals and Initiatives

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Planned Completion
2.	Create, formalize, and maintain SOPs for statewide communications for multi-jurisdictional pursuits	2.1 Identify requirements	SWIC	*Completed*
		2.2 Gather stakeholder input from all dispatch centers/PSAPs and seek buy-in	SWIC	01/2014
		2.3 Draft proposed SOPs and review cycle	SWIC	03/2014
		2.4 Approve SOPs and publish	SIEC	06/2014
		2.5 Seek adoption from local stakeholders	SWIC/SIEC	09/2014

Standard Operating Procedures Goals and Initiatives			
		2.6 Support training for new SOPs	SWIC/SIEC	05/2015

5.3 Technology

This section outlines Utah'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. Most public safety users in Utah use the UCAN 800 MHz network or patch through using the Omnilink system. The UCAN system has completed several significant expansions, creating overlapping 800 MHz and VHF networks throughout the State and is expanding further, including migrating to a standards based P25 Internet Protocol (IP) based system.

In March 2013, the Utah Legislature authorized a Task Force to review and make recommendations on statewide public safety communications, including current capacity, technologies, projected needs and upgrades, opportunities to increase operational efficiency, and sustainable funding alternatives. The Task Force will deliver a final report in December 2014, which will drive the Utah SCIP's technology goals and initiatives.

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

Table 3: Technology Goals and Initiatives

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Planned Completion
3.	Upgrade current radio technology	3.1 Update UCAN/Salt Lake City controllers to 7x system platform	UCAN/Salt Lake City	~~12/2013~~Complete
		3.2 Update UCAN/Salt Lake City sites to P25 IP technology	UCAN/Salt Lake City	*Contingent on Legislative Task Force outcomes* Estimated 12/2018
		3.3 Upgrade PSAP technology and end user devices consistent with infrastructure upgrades	*Contingent on Legislative Task Force outcomes*	*Contingent on Legislative Task Force outcomes* Estimated 12/2018
4.	Implement a statewide NG911 system	4.1 Develop a strategic plan for NG911 deployment statewide	Utah 911 Committee	06/2014

5.4 Training and Exercises

This section explains Utah'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 SIEC recognizes the importance of incorporating communications components into existing public safety emergency communications training and exercises, to appropriately prepare users for comprehensive incident response effectively using all of the available interoperability tools that are at their disposal.

The NIMS Incident Command System (ICS) Communications Unit roles and responsibilities are highly valued in Utah, and the SIEC continues to support the program through training and exercises (also see Outreach and Information Sharing).

Table 4 outlines Utah'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	Planned Completion
5.	Incorporate communications processes into all training and exercises, including PSAPs, COMLs, COMTs, and AUXComm	5.1 Conduct OEC's "Incorporating Communications into Public Safety Exercises" Technical Assistance course to promote the implementation of communications planning in training	SWIC	09/2014
		5.2 Develop web-based training on radio operations	SWIC	07/2014
		5.3 Review current POST and fire/EMS communications curriculum	SWIC	06/2015
		5.4 Execute a formal agreement with Utah Division of Emergency Management to incorporate communications methods/processes in exercise guidelines	SWIC/Bob Craven	12~~12~~/201~~43~~4
6.	Conduct ICS Communications Unit Training	6.1 Conduct a statewide COML full-scale exercise	Bob Craven	~~10/2013~~Complete

5.5 Usage

This section outlines the steps, plans, and policies to ensure responders adopt, utilize, and remain familiar with the interoperable and emergency communications

technologies, systems, and operating procedures that ensure the establishment and maintenance of interoperability in case of an incident. The Utah SIEC recognizes that communications interoperability is utilized statewide on a daily basis by local and regional first responders. Less frequent large-scale incidents such as Wildland fires, floods, earthquakes or large sporting events also require seamless communications interoperability. In addition to existing interoperability systems and procedures, the SIEC is preparing for NPSBN development by identifying potential users as well as understanding their needs and the cost of implementation.

Incident response also requires interoperability across State borders, and over the coming years, the SIEC hopes to develop solutions to advance communications among Utah and its neighbors.

Table 5 outlines Utah's goals and initiatives for usage.

Table 5: Usage Goals and Initiatives

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Planned Completion
7.	Identify potential NPSBN users and applications	7.1 Survey current and potential broadband usage, applications, and cost	SWIC	06/2016
		7.2 Develop a statewide definition of primary and secondary users	SIEC Broadband Subcommittee	06/2016
8.	Address interstate interoperability	8.1 Implement solutions to identified interoperability gaps between Summit County and Wyoming.	SWIC	06/2014

5.6 Outreach and Information Sharing

This section outlines Utah'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. Currently, information is shared as needed and by SIEC members and other representatives to local agencies. With the advent of emerging technologies such as the NPSBN and NG911, as well as a challenging fiscal environment, the SIEC is committed to more efficiently sharing information statewide and receiving input from all stakeholders.

Table 6 outlines Utah'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	Planned Completion
9.	Provide outreach and education in support of public safety communications	9.1 Develop an outreach and education plan to share information with stakeholders regarding emerging technologies (including FirstNet), possible funding mechanisms, and SIEC activities	SIEC Broadband Subcommittee	~~12/2013~~Complete
10.	Enhance statewide understanding and utilization of incident communications personnel and roles	10.1 Create a plan for implementing the COML certification program statewide	SIEC Communications Unit Subcommittee	12~~01~~/2014
		10.2 Provide a progressive and recurring training program for tactical dispatchers to prepare for day-to-day Incident Command System (ICS) operations involving multiple jurisdictions or disciples	Bob Craven	Phase 1 06/2014

5.7 Life Cycle Funding

This section outlines Utah's plan to fund existing and future interoperable and emergency communications priorities. Utah's successful 911 funding program has ensured the public can reach 911 dispatch centers, however identifying a funding mechanism to ensure dispatch centers are able to connect with first responders continues to be a challenge. Additionally, some local agencies are unable to connect to UCAN due to the startup and migration costs, maintenance, and differing communications needs between urban and rural areas. The SIEC emphasizes a life cycle approach in order to sustain the life of Utah's public safety communications infrastructure.

Table 7 outlines Utah'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	Planned Completion
11.	Identify and establish sustainable funding mechanisms to support public safety communications	11.1 Develop cost models for infrastructure, user equipment, and life cycle maintenance	Legislative Task Force	12/2014
		11.2 Identify then address the operational needs, capabilities, and geographical challenges of urban vs. rural jurisdictions	Legislative Task Force	12/2014

6. IMPLEMENTATION

6.1 Action Plan

This section describes the process Utah will use to determine a plan to execute the initiatives in the SCIP. The SIEC will use the strategic goals, the corresponding initiatives, and measures of success to guide quarterly updates to members' and subcommittees' activities during SIEC meetings.

To initially refine the SCIP, the SWIC will meet with representatives of disciplines not present during the SCIP Revision Workshop. Once these perspectives are integrated into the document, the SIEC will review the final draft and provide feedback. A simple majority vote will determine the SIEC's adoption of the revised Utah SCIP.

6.2 Measures of Success

This section defines the measures that Utah will use to monitor progress and indicate accomplishments toward achieving the vision for interoperable and emergency communications. Table 8 outlines these measures for Utah. 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 Supported	Strategic Initiative Supported	Current State	Target End State	Owner or Source
1.	Align strategies of the Utah 911 Committee, SIEC (including FirstNet), and UCAN	1.1 Present the SCIP to Utah 911 Committee and UCAN to promote adoption	*Not started/no coordination*	All committees adopt the SCIP	SWIC
		1.2 Add Utah 911 Committee representation to SIEC membership	No representation	Added representation	SWIC
		1.3 Modify the SIEC statute to incorporate emerging updates to mission, membership, and outcomes from the Legislative Task Force	Statute out of date	Changed statute to reflect current state of Utah's emergency communications	SWIC
2.	Create, formalize, and maintain SOPs for statewide communications for multi-jurisdictional pursuits.	2.1 Identify requirements		*Complete*	SWIC
		2.2 Gather stakeholder input from all dispatch centers/PSAPs and seek buy-in	In process of developing assessment tool	Input from 38 dispatch centers/PSAPs	SWIC
		2.3 Draft proposed SOPs and review cycle	Not started	Drafted SOPs completed and submitted for SIEC review	SWIC
		2.4 Approve SOPs and publish	Not started	Formal approval by SIEC	SWIC

Measures of Success

Goal #	Strategic Goal Supported	Strategic Initiative Supported	Current State	Target End State	Owner or Source
		2.5 Seek adoption from local stakeholders	Not started	SOPs disseminated to all affected stakeholders, and either adoption or rejection response	SWIC
		2.6 Support training for new SOPs	Not started	Add SOPs training to POST and other training venue curriculum	SWIC
3.	Upgrade current radio technology.	3.1 Update UCAN/Salt Lake City controllers to 7x system platform	90% complete	100% implementation	Steve Proctor/ UCAN
		3.2 Update UCAN/Salt Lake City sites to P25 IP based technology	Planning, identifying funding sources	100% implementation	Steve Proctor/ UCAN
		3.3 Upgrade PSAP technology and end user devices consistent with infrastructure upgrades	[x]% upgraded	100% implementation	Steve Proctor/ UCAN
4.	Implement a statewide NG911 system.	4.1 Develop a strategic plan for NG911 deployment statewide	Developing cost figures – 75% complete	Adopt strategic plan (100%)	SWIC

Measures of Success

Goal #	Strategic Goal Supported	Strategic Initiative Supported	Current State	Target End State	Owner or Source
5.	Incorporate communications processes into all training and exercises, including PSAPs, COMLs, COMTs, and AUXComm.	5.1 Conduct OEC's "Incorporating Communications into Public Safety Exercises" Technical Assistance offering to promote the implementation of communications planning in training	Request not submitted	TA completed	SWIC
		5.2 Develop web-based training on radio operations	50%	100% developed	SWIC
		5.3 Review current POST and fire/EMS communications curriculum	10%	100% completed review	SWIC
		5.4 Execute a formal agreement with Utah Division of Emergency Management to incorporate communications methods/ processes in exercise guidelines	Not started	Formal agreement in place	SWIC
6.	Conduct ICS Communications Unit Training.	6.1 Conduct a statewide COML full-scale exercise	In planning phase for COML training	Successfully conduct statewide exercise utilizing COMLs	Bob Craven/ SWIC

Measures of Success

Goal #	Strategic Goal Supported	Strategic Initiative Supported	Current State	Target End State	Owner or Source
7.	Identify potential NPSBN users and applications.	7.1 Survey current and potential broadband usage, applications, and cost	Identified high level plan in SLIGP Grant (5%)	70% responses collected and aggregated	SWIC
		7.2 Develop a statewide definition of primary and secondary users	25% - initial definition drafted	Definition of primary and secondary users	SWIC
8.	Address interstate interoperability.	8.1 Implement solutions to identified interoperability gaps between Summit County and Wyoming	Gaps identified	Real-time Interoperability provided between Summit County and Wyoming	SWIC
9.	Provide outreach and education in support of public safety communications.	9.1 Develop an outreach and education plan to share information with stakeholders regarding emerging technologies (including FirstNet), possible funding mechanisms, and SIEC activities	75%	Plan completed and adopted by SIEC (100%)	SWIC
10.	Enhance statewide understanding and utilization of incident communications personnel and roles.	10.1 Create a plan for implementing the COML certification program statewide	50%	Plan completed and adopted by SIEC	SIEC Communications Unit Sub-committee

	Measures of Success				
Goal #	Strategic Goal Supported	Strategic Initiative Supported	Current State	Target End State	Owner or Source
		10.2 Provide a progressive and recurring training program for tactical dispatchers to prepare for day-to-day ICS operations involving multiple jurisdictions or disciplines	In planning stages	Training program is fully developed (100%)	Bob Craven/ SWIC
11.	Identify and establish sustainable funding mechanisms to support public safety communications.	11.1 Develop cost models for infrastructure, user equipment, and life cycle maintenance	In initial stages	Cost models reviewed by SIEC	SWIC/SCIP Chair
		11.2 Identify then address the operational needs, capabilities, and geographical challenges of urban vs. rural jurisdictions	In initial stages	Developed plan that accounts for the differences between the varied operational requirements of rural and urban jurisdictions	SWIC

6.3 Management of Success

This section describes the iterative, repeatable method Utah will follow to add, update and refine the measures of success. At least 15 days prior to quarterly SIEC meetings, initiative owners will submit their progress to the SWIC. During the SIEC meeting, members will review and modify the measures of success to reflect current progress and expectations.

6.4 Strategic Plan Review

This section outlines the process Utah 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 Utah SCIP will be completed reviewed and updated annually during the fourth quarter by the SIEC. The SWIC is responsible for the development of the APR and the Utah SIEC Annual Report. These documents will be posted to the SIEC website.

7. REFERENCE MATERIALS

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

Table 9: SCIP Reference Materials

Title	Description	Source/Location
Utah Code 63F-1-801 & 63F-1-802	Establishes the SIEC and its roles and responsibilities	http://le.utah.gov/code/TITLE63F/htm/63F01_080100.htm http://le.utah.gov/code/TITLE63F/htm/63F01_080200.htm
Statewide SOPs	Standard Operating Procedures for Statewide use	*[insert]*
UFOG	Utah Field Operations Guide	*[insert]*
Utah Broadband Plan		*[insert]*
SIEC Website	Important information and documents of the SIEC	http://SIEC.utah.gov
UCAN Website	Important information about UCAN	UCAN800.org
Utah 911 Committee Website	Important information about the Utah 911 Committee	E911.utah.gov
Utah Division of Emergency Management Website	Important information about the Utah DEM	Publicsafety.utah.gov/emergencymanagement
Utah Technology Services Website	Important information about the Utah DTS	Dts.utah.gov

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	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
Shared Statewide System	UCAN	UCAN Program Office	800MHz Non-P25 Choose an item. Analog Trunked Choose encryption level *[Check the box that describes the primary usage of the system (e.g., voice, data, or voice and data)]* Choose primary usage *[Identify the number of system sites]* *Provides statewide interoperable voice capability* *121 sites* *[Check the box that describes the primary usage of the system (e.g., voice, data, or voice and data)]*	*[Insert the estimated number of subscribers as well as the number of agencies on the system]*	Local State	Existing System *Existing, though not fully used statewide. Plans to migrate to digital P25 standards based system is in progress.*

Major Systems Information

System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
			Choose primary usage			
			[Identify the number of system sites]			
			Provides statewide interoperable voice capability			
			121 sites			
[Choose the drop-down menu item that most accurately describes the system type (e.g. Shared Statewide System, State Agency(ies) System, Multi-County/Parish System, Multi-City System, City/County System, or Local System)] Choose system type	[Insert name of the system]	[Insert the name of the person(s)/ organization(s) responsible for the system]	[Choose the appropriate descriptors for the major system] Choose frequency Choose P25 description Choose make Choose digital/analog Choose trunked/conventional Choose encryption level [Check the box that describes the primary usage of the system (e.g., voice, data, or voice and data)] Choose primary usage [Identify the number of system sites]	[Insert the estimated number of subscribers as well as the number of agencies on the system]	[Check the box(es) that Identifies all levels of government for which there are users on the system] Choose level	[Choose the drop-down menu item that describes the system's status. If the status is "Updated," describe the changes or updates to the system in the space below (e.g., expansion or decrease in terms of infrastructure or user base)] Choose status _____ _____ _____ _____
Example: Shared Statewide Radio System	Statewide Interoperability Radio Network (SIRN)	State Office of Information Technology	Digital trunked 700 MHz	1,700 subscribers 7 agencies	State, Local, Regional, and Tribal	New system

APPENDIX B: LIST OF ACRONYMS

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

AAR	After Action Report
APR	Annual Progress Report
AUXCOMM	Auxiliary Communications
COML	Communications Unit Leader
COMT	Communications Unit Technician
DEM	Utah Division of Emergency Management
DHS	U.S. Department of Homeland Security
DTS	Utah Department of Technology Services
EMA	Emergency Management Agency
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
FOG	Field Operations Guide
ICS	Incident Command System
IP	Internet Protocol
MHz	Megahertz
LMR	Land Mobile Radio
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NCSWIC	National Council of Statewide Interoperability Coordinators
NECP	National Emergency Communications Plan
NG911	Next Generation 911
NIMS	National Incident Management System
NPSBN	Nationwide Public Safety Broadband Network
NRF	National Response Framework
NTIA	National Telecommunications and Information Administration
OEC	Office of Emergency Communications
PIO	Public Information Officer
PPD	Presidential Policy Directive
PSAP	Public Safety Answering Point

RECCWG	Regional Emergency Communications Coordination Working Group
RIC	Regional Interoperability Council
RPC	Regional Planning Committee
SAA	State Administering Agency
SCIP	Statewide Communication Interoperability Plan
SIEC	Statewide Interoperability Executive Committee
SIGB	Statewide Interoperability Governing Body
SOP	Standard Operating Procedure
SWIC	Statewide Interoperability Coordinator
TICP	Tactical Interoperable Communications Plan
VHF	Very High Frequency
UCAN	Utah Communications Area Network
UHF	Ultra High Frequency