State of Utah

Statewide Communications Interoperability Plan (SCIP)

Utah SIEC
2012

Record of Change

Change No.	Date	Description	Change Date	Signature
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Table of Contents

Table of Figures

List of Tables

Appendices

1. Introduction

This document establishes a Statewide Communications Interoperability Plan (SCIP) for the State of Utah. The Utah SCIP is a strategic planning document created and published by the Utah Statewide Interoperability Executive Committee (SIEC). The SCIP serves as a reference for all public safety entities operating in the state region by describing the status of statewide interoperable communications and documenting specific Goals and objectives to improve public safety communications. The SCIP is intended to facilitate regional and statewide collaboration in the development and adoption of common technology standards, Standard Operating Procedures (SOP), purchasing guidance, and implementation strategy. The Utah SIEC has broad support and representation from the public safety community operating in the state region. This is a living document that will be subject to ongoing review and revision as authorized by the State Chief Information Officer (CIO) and the Utah SIEC.

This SCIP is the product of a collaborative planning effort involving all public safety disciplines and is fully integrated with the statewide communications interoperability project authorized by Governor Jon Huntsman on March 08, 2007.

The Utah SCIP is intended to apply to the entire state region. Specifically, the plan is intended to be used by all public safety disciplines during day to day and emergency response situations. These public safety disciplines include:

- County and City Agencies
- Emergency Management
- Emergency Medical Services
- Federal and State Agencies
- Fire Service
- Government Administration
- HAZMAT
- Health Care
- Homeland Security
- Law Enforcement
- Military
- Non-government organizations
- Private Security
- Public and Private Transportation
- Public Health
- Public Safety Communications
- Public Service/Works
- School Districts

2. Background

The concept of a State Interoperability Executive Committee (SIEC) was first introduced by the Federal Communications Commission's (FCC) in Docket 96-86 Fourth Report and Order and Fifth Notice of Proposed Rule Making dated January 17, 2001. The Fourth R&O also facilitated the development of technical and operational parameters for interoperability designated spectrum in the 700 MHz public safety allocation. When the concept was first introduced each SIEC was to be established on a voluntary basis. FCC rules limited SIEC spectrum coordination management to the use of designated interoperability channels in the 700 MHz public safety allocation. FCC guidance also recommended that entities desiring to operate in the 700 MHz interoperability spectrum enter into a Memorandum of Understanding (MOU) with the SIEC which would require adherence to a Statewide Communications Interoperability Plan (SCIP) created specifically for use in the region. States failing to establish an SIEC, and an approved SCIP, would defer responsibility for interoperability coordination in the 700 MHz spectrum to the established 700 MHz Regional Planning Committee (RPC).

Almost immediately after the FCC approved the SIEC concept, national dialog between the commission and public safety advocacy groups determined that while the SIEC concept was originally not intended to manage spectrum utilization in frequency bands outside the 700 MHz allocation the concept was inadequate when addressing interoperability issues in the larger context of public safety operations. Comprehensive interoperability planning covering all public safety allocated spectrum is now a requirement in an approved SCIP.

The State of Utah recognized the importance of communications interoperability and notified the FCC in October 2001 with intent to establish an SIEC. Utah initially fulfilled the SIEC requirement by establishing the Utah Wireless Integrated Network (UWIN) by executive order on November 13, 2003. In addition to several other technology initiatives UWIN was specifically charged with administering communications interoperability coordination for all public safety spectrum allocations in the region. Due to the broad technology focus undertaken in UWIN the specific responsibilities of the SIEC were never fully administered. On March 8, 2007, Governor Jon Huntsman created the Utah SIEC by executive order and on April 6th, 2009 the Utah Legislature passed House Bill 411 codifying the roles and responsibilities of the SIEC.

The Utah SIEC is distinguished from UWIN in that it has a narrow focus involving the development and implementation of a SCIP, interoperability frequency coordination, and sustainable support from the public safety community. Participating agencies are expected to sign a Memorandum of Understanding between the entity and the Utah SIEC. The SIEC will also act as an information clearinghouse and promote emerging technology initiatives to facilitate common air interfaces and network infrastructure. As defined by State statute the Utah SIEC is organized as represented in *Figure 1*.

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Figure 1. Utah SIEC Organizational Chart

Specific SIEC objectives are defined in the committee charter as follows:

- Promote wireless technology information and interoperability among local, state, federal, and other agencies.
- Provide a mechanism for coordinating and resolving wireless communication issues among local, state, federal, and other agencies.
- Coordinate statewide efforts for implementation of interoperable statewide voice and data networks.

- Improve data and information sharing and coordination of multi-jurisdictional responses using the Utah SIEC.
- Leverage existing state resources and develop a network that will provide seamless, coordinated, and integrated communication for local, state, federal, and other agencies.
- Identify opportunities to consolidate infrastructures and technologies.
- Evaluate current technologies and determine if they are meeting the needs of agency personnel in their respective service areas.
- Develop and recommend short and long-term proposals for future communication needs.
- Form Memorandums of Understanding (MOU) between agencies in support of proactive planning efforts.
- Create and maintain procedures for requesting interoperability channels.
- Administer interoperability spectrum.
- Develop and maintain a statewide interoperability plan.

The Utah SIEC held its first meeting on May 15, 2007. In addition to the newly appointed executive board members, the State CIO, and Governor Jon Huntsman, thirty eight (38) representatives from state and local government departments were in attendance. During the initial meeting the Utah SIEC executive board created a project subcommittee tasked with the development of a Statewide Communications Interoperability Plan (SCIP). A work group subcommittee was also created by the executive board and tasked with interoperability frequency coordination. Both subcommittees are accountable and report to the executive board. Thirteen (13) individuals representing state, and local government agencies, including the State Division of Homeland Security were elected by the executive board to represent their respective agencies in the SCIP project subcommittee. Five (5) individuals were elected by the executive board to serve on the frequency coordination subcommittee. Subcommittee chairpersons for both workgroups were elected and approved by the executive board. A state interoperability coordinator and SCIP point of contact was also elected and approved by the executive board.

The Utah SIEC executive board is called into session by the SIEC executive committee. Utah SIEC general board meetings are typically held on the 3rd Thursday of each Month under the direction of the SIEC chairperson. Subcommittee meetings are open to the public and are held at discretion of the subcommittee chairperson. Interested parties should contact the SIEC interoperability coordinator for specific information relative to all SIEC activities. The Utah SIEC Interoperability Coordinator (IC) and SCIP Point of Contact (POC) is:

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State of Utah, Department of Technology Services
1 State Office Building, Floor 6
Salt Lake City, Utah 84114 (801) 538-3700
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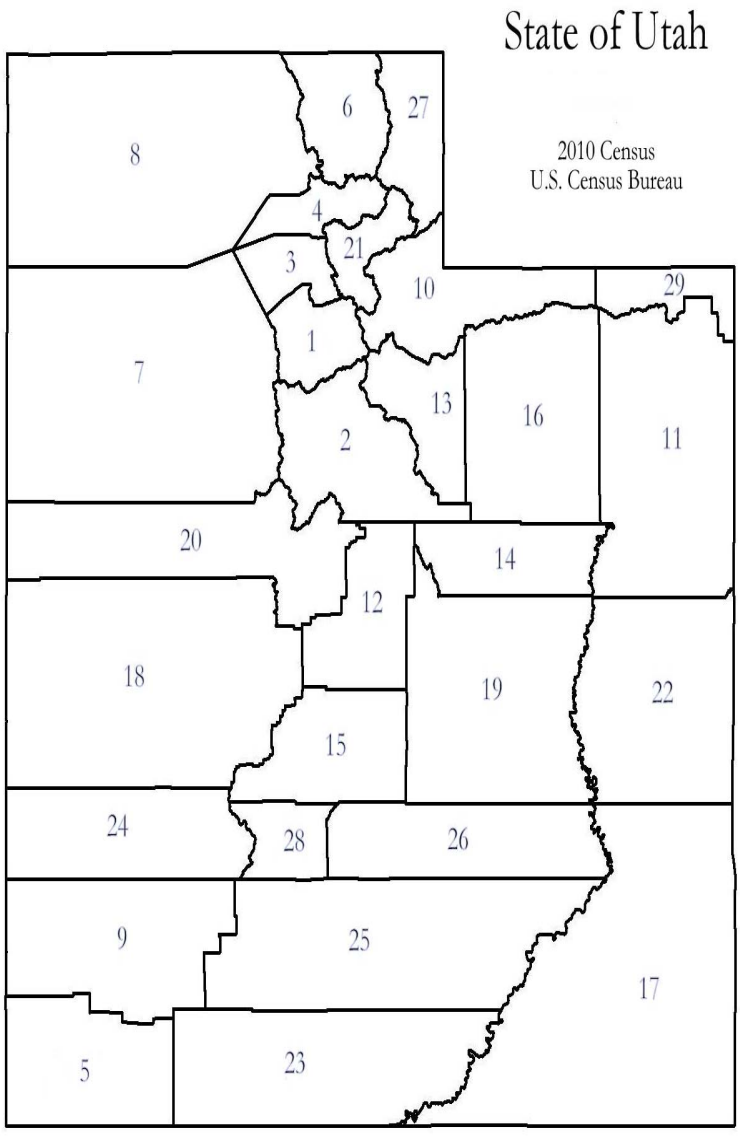
2.1 State Overview

The State of Utah is comprised of 29 counties within its boundaries. The geographic terrain in the region is varied with elevations ranging from 2,000 feet to over 12,000 feet above sea level. Metropolitan population centers are primarily concentrated along the Wasatch Front and in Cache and Washington Counties. Smaller population centers exist in each county region typically ranging from 1,000 to 30, 0000. County regions situation away from the Wasatch Front include vast areas of sparsely populated deserts and mountains. Salt Lake, Weber, Davis, Utah, Cache, and Washington Counties require the most spectrum and technology resources based on population density and public safety involvement in concentrated population centers. The total population of the state was placed at 2,763,885 by the 2010 census.



1. Salt Lake County
2. Utah County
3. Davis County
4. Weber County
5. Washington County
6. Cache County
7. Tooele County
8. Box Elder County
9. Iron County
10. Summit County
11. Uintah County
12. Sanpete County
13. Wasatch County
14. Carbon County
15. Sevier County
16. Duchesne County
17. San Juan County
18. Millard County
19. Emery County
20. Juab County
21. Morgan County
22. Grand County
23. Kane County
24. Beaver County
25. Garfield County
26. Wayne County
27. Rich County
28. Piute County
29. Daggett County

Figure 2. Counties Ranked by Population 2010 Census

Rank	County Population	2010	2000	% Growth

*	Utah – Total Population	2,763,885	2,233,169	23.8
1	Salt Lake County	1,029,655	898,387	14.6
2	Utah County	516,564	368,536	40.2
3	Davis County	306,479	238,994	28.2
4	Weber County	231,236	196,533	17.7
5	Washington County	138,115	90,354	52.9
6	Cache County	112,656	91,391	23.3
7	Tooele County	58,218	40,735	42.9
8	Box Elder County	49,975	42,745	16.9
9	Iron County	46,163	33,779	36.7
10	Summit County	36,324	29,736	22.2
11	Uintah County	32,588	25,224	29.2
12	Sanpete County	27,822	22,763	22.2
13	Wasatch County	23,530	15,215	54.7
14	Carbon County	21,403	20,422	4.8
15	Sevier County	20,802	18,842	10.4
16	Duchesne County	18,607	14,371	29.5
17	San Juan County	14,746	14,413	2.3
18	Millard County	12,503	12,405	.8
19	Emery County	10,976	10,860	1.1
20	Juab County	10,246	8,238	24.4
21	Morgan County	9,469	7,129	32.8
22	Grand County	9,225	8,380	8.7
23	Kane County	7,125	6,046	17.8
24	Beaver County	6,629	6,005	10.4
25	Garfield County	5,172	4,735	9.2
26	Wayne County	2,778	2,509	10.7
27	Rich County	2,264	1,961	15.5
28	Piute County	1,556	1,435	8.4
29	Daggett County	1,059	921	15.0

Table 1. County Population 2010 Census

Information obtained from the U.S Census Bureau indicates the following demographics for the State of Utah:

People QuickFacts	**Utah**	**USA**
Population, 2011 estimate	2,817,222	311,591,917
Population, 2010	2,763,885	308,745,538
Population, percent change, 2000 to 2010	23.8%	9.7%
Population, 2000	2,233,169	281,421,906
Persons under 5 years, percent, 2010	9.5%	6.5%
Persons under 18 years, percent, 2010	31.5%	24.0%

Persons 65 years and over, percent, 2010	9.0%	13.0%
Female persons, percent, 2010	49.8%	50.8%
White persons, percent, 2010 (a)	86.1%	72.4%
Black persons, percent, 2010 (a)	1.1%	12.6%
American Indian and Alaska Native persons, percent, 2010 (a)	1.2%	0.9%
Asian persons, percent, 2010 (a)	2.0%	4.8%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	0.9%	0.2%
Persons reporting two or more races, percent, 2010	2.7%	2.9%
Persons of Hispanic or Latino origin, percent, 2010 (b)	13.0%	16.3%
White persons not Hispanic, percent, 2010	80.4%	63.7%
Living in same house 1 year & over, 2006-2010	81.4%	84.2%
Foreign born persons, percent, 2006-2010	8.2%	12.7%
Language other than English spoken at home, pct age 5+, 2006-2010	14.2%	20.1%
High school graduates, percent of persons age 25+, 2006-2010	90.6%	85.0%
Bachelor's degree or higher, pct of persons age 25+, 2006-2010	29.4%	27.9%
Veterans, 2006-2010	149,469	22,652,496
Mean travel time to work (minutes), workers age 16+, 2006-2010	21.2	25.2
Housing units, 2010	979,709	131,704,730
Homeownership rate, 2006-2010	71.2%	66.6%
Housing units in multi-unit structures, percent, 2006-2010	21.4%	25.9%
Median value of owner-occupied housing units, 2006-2010	$218,100	$188,400
Households, 2006-2010	859,158	114,235,996

Geography QuickFacts	**Utah**	**USA**
Land area, 2000 (square miles)	82,169.62	3,531,905.43
Persons per square mile, 2000	33.6	87.4

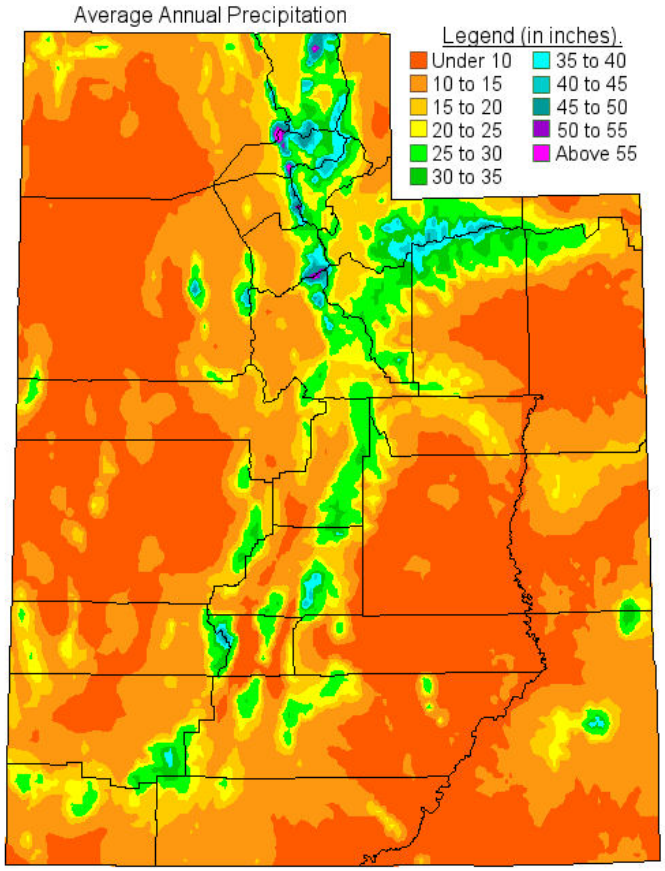
Topographical Features – The topography of Utah is extremely varied, with most of the State being mountainous. A series of mountains (including the Wasatch Range), which runs generally north and south through the middle of Utah, and the Uinta Mountains, which extend east and west through the northeast portion, are the principal ranges. Crest lines of these mountains are mostly above 10,000 feet. Less extensive ranges are scattered over the remainder of the State. The lowest area is the Virgin River Valley in the southwestern part with elevations between 2,500 and 3,500 feet, while the highest point is Kings Peak in the Uinta Mountains, which rises to 13,498 feet.

Practically all of eastern Utah is drained by the Colorado River and its principal tributary within the State, the Green River, although neither rises within its borders. Western Utah is almost entirely within the Great Basin, with no outlet to the sea. The largest rivers in this area are the Bear, Weber, Jordan, Provo, and Sevier, the first three of which empty into Great Salt Lake, The Sevier River drains the west-central area and empties into Sevier Lake, a brackish saline basin in southwest Utah.

Streams in the eastern portion of the State flow through canyons or very narrow confined mountain valleys and finally into desert canyons. Some meadows, usually in native grass, and only a few small local areas of farmland are subject to overflow. Nearly all the main highways and railroads, as well as residential areas, are above flood levels. Highest flow occurs in the steams in this region in May and June during spring runoff from melting snow.

Western Regional Climate Center http://www.wrcc.dri.edu/narratives/UTAH.htm

Climate of Utah – Essentially, Utah's climate is determined by its distance from the equator; its elevation above sea level; the location of the State with respect to the average storm paths over the Intermountain Region; and its distance from the principal moisture sources of the area, namely, the Pacific Ocean and the Gulf of Mexico. Also, the mountain ranges over the western United States, particularly the Sierra Nevada and Cascade Ranges and the Rocky Mountains, have a marked influence on the climate of the State. Pacific storms, before reaching Utah, must first cross the Sierras or Cascades. As the moist air is forced to rise over these high mountains, a large portion of the original moisture falls as precipitation. Thus, the prevailing westerly air currents reaching Utah are comparatively dry, resulting in light precipitation over most of the State.



Precipitation – Precipitation varies greatly, from an average of less than five inches annually over the Great Salt Lake Desert (west of Great Salt Lake), to more than 40 inches in some parts of the Wasatch Mountains. The average annual precipitation in the leading agricultural areas is between 10 to 15 inches, necessitating irrigation for the economic production of most crops. However, the mountains, where winter snows form the chief reservoirs of moisture, are conveniently adjacent to practically all farming areas, and there is usually sufficient water for most land under irrigation. The areas of the State below an elevation of 4,000 feet, all in the southern part, generally receive less than 10 inches of moisture annually.

Northwestern Utah, over and along the mountains, receives appreciably more precipitation in a year than is received at similar elevations over the rest of the State, primarily due to terrain and the direction of normal storm tracks. The bulk of the moisture falling over that area can be attributed to the movement of Pacific storms through the region during the winter and spring months. In summer northwestern Utah is comparatively dry. The eastern portion receives appreciable rain from summer thunderstorms, which are usually associated with moisture-laden air masses from the Gulf of Mexico.

Snowfall is moderately heavy in the mountains, especially over the northern part. Runoff from melting mountain snow usually reaches a peak in April, May or early June, and sometimes causes flooding along the lower streams. However, damaging floods of this kind are infrequent. Flash floods from summer thunderstorms are more frequent, but they affect only small, local areas.

Western Regional Climate Center http://www.wrcc.dri.edu/narratives/UTAH.htm

2.1.1 NIMS/Multi-Agency Coordination System (MCS) Incorporation

The Salt Lake Urban Area, in accordance with federal Urban Area Strategic Initiative (UASI) grant requirements, developed the Salt Lake Urban Area Tactical Interoperability Communications Plan (SLUA-TICP) in 2005. This TICP was evaluated and exercised in August 2006 . This process resulted in both an After Action Report/Improvement Plan (AAR/IP) and the resulting TIC Scorecard. Information from these assessment documents was used as source material during development of the strategic initiatives in this SCIP.

In response to incidents that cross over political jurisdictions, there will potentially be competing demands and priorities for interoperable communications assets. Until such time as an Incident Command is established, the lead agency designee (i.e., communications supervisor/command personnel), in cooperation with their counterparts in other involved agencies, will have the authority to designate the use of interoperable assets. Events occurring within the Salt Lake County region requiring multi agency interoperability response will follow directives published in the SLUA-TICP and the area's Emergency Operations Plan (EOP). Incidents outside of the Salt Lake Urban area will follow the procedures in both EOPs and the operational manual (once developed). If an event escalates to a situation where a National Incident Management System (NIMS) compliant Incident Command System (ICS) is established, an appropriate Communication Unit Leader (COML) will be contacted for further coordination and delegation of interoperable communications assets.

When multiple requests are made for the same communications resources assignments shall be based on the priority levels below:

1. Large scale regional incident, disaster, or extreme emergency requiring mutual aid or interagency communication.
2. Incidents where imminent danger exists to life or property
3. Incidents requiring the response of multiple agencies
4. Pre-planned events requiring mutual aid or interagency communications
5. Incidents involving a single agency where supplemental communications are needed for agency use.
6. Drills, tests and exercises

In the event of multiple simultaneous incidents with the same priority, the resources shall be allocated according to the following:

- Incidents with the greatest level of exigency (e.g., greater threat to life or property, more immediate need...) have priority over less exigent incidents.
- Agencies with single/limited interoperable options have priority use of those options over agencies with multiple interoperable options.
- When at all possible, agencies already using an interoperable asset during an event should not be redirected to another resource.

In response to an event, the local and regional functional disciplines involved in the initial incident-scene response are expected to include the disciplines identified in the following list:

- Communications
- Emergency Management
- Finance
- Fire/Rescue
- Health/Medical
- Information Technology
- Investigations and Intelligence
- Law Enforcement Response
- Training
- Public Works/Utilities

The following diagram shows a hypothetical Incident Command System structure that would be generally appropriate for the level of incident addressed by this plan.

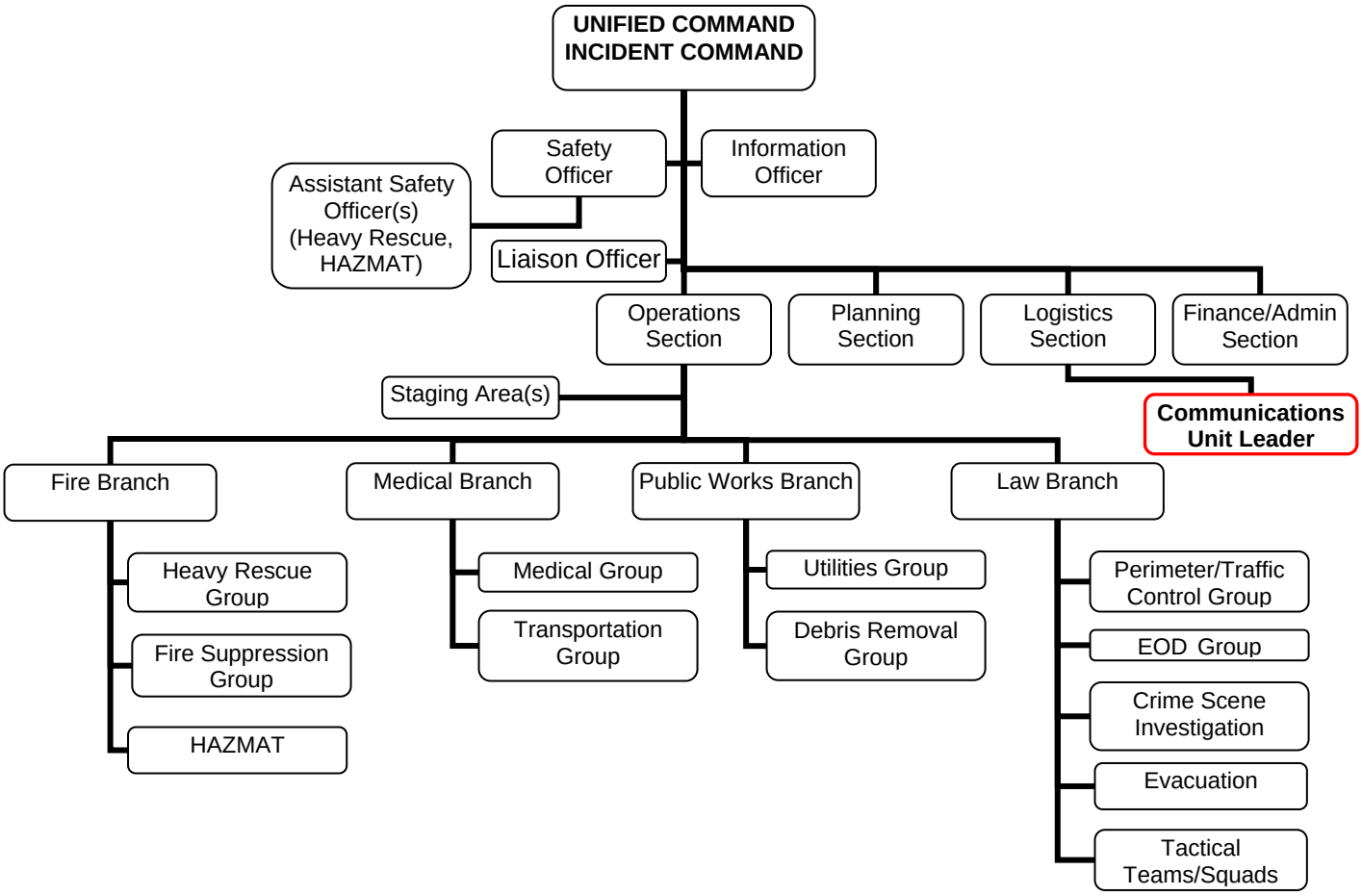


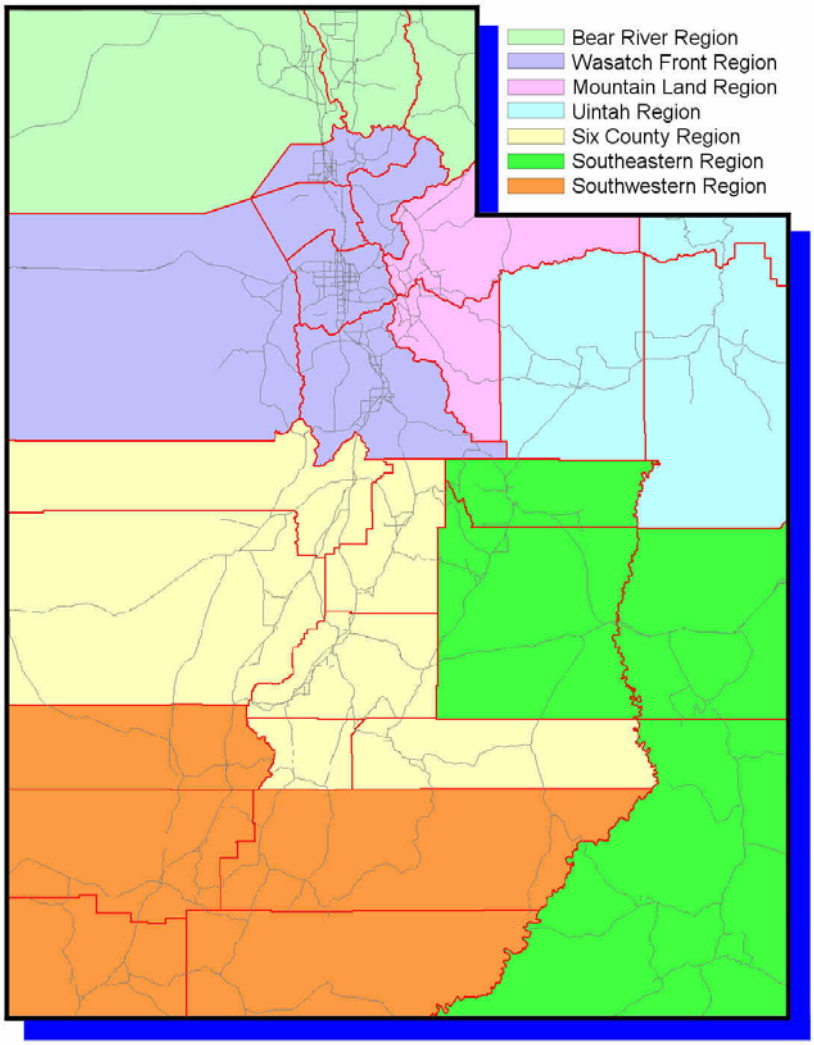
Figure 3. Hypothetical Event ICS Structure

Appendix J includes sample ICS forms (ICS 201, ICS 202, etc.) for functional assignments of resources such as:

Incident Command Staff **Operations Section** **Finance Section**
Planning Section **Logistics Section**

2.1.2 Regions/Jurisdictions

Figure 4. Map of Planning Regions



The state's population centers are supported by regions that have formed associations of government. These regional associations represent jurisdictional entities that share common objectives and deal with similar issues. Those regions are further defined as the following.

The Bear River Region consists of Box Elder, Rich and Cache Counties. The Bear River area covers approximately 7,917 square miles. This area has a diverse geography from the Salt Flats to high mountain peaks. The total population for the Bear River Region is 166,895.

The Wasatch Front Region consists of Davis, Morgan, Salt Lake, Tooele, Utah, and Weber Counties. This Region hosts the most urbanized areas of the state. The total square miles of the combined region is 10,546. With a total population of 2,151,621, this region represents 77% of the state's population.

The Mountain Land Region consists of Summit and Wasatch counties with a total population of 59,854. The total square miles of the region is 3,048 with most of the population confined to incorporated areas. As the name implies most of this region is mountainous with heavily forested valleys. Interstate 80 runs through this region from the Wyoming border near Evanston to the Weber basin in northern Utah.

The Uintah Region includes the counties of Daggett, Duchesne and Uintah. The total population of the Uintah Region is only 52,254. The total square miles of this region is 8,413. This mountainous area ranges in elevation from 4,600 to 13,528 at Kings Peak in the Uintah

Mountains. This mountain range is unique as it is the only range in the United States that runs east to west, with high mountain valleys and glaciated mountain peaks.

The Six County Region: This region includes Juab, Millard, Piute, Sanpete, Sevier and Wayne Counties. The Piute Indian Tribe of Utah has a large presence in the Six County Region that is situated in the central part of the state. The Six County Region contains 16,697 square miles. With a population base of 75,707 it is sparsely populated. Most of this region is arid desert.

The Southeastern Region consists of Carbon, Emery, Grand, and San Juan Counties. This region is also known as Canyon Country and includes the "four corners"- the only area in the United States where four states meet. This region is known for its extreme elevation changes from deep river gorges to high mountain peaks. The total square miles of the combined region is 54,180 square miles. The total population of the Southeastern Region is 56,350.

The Southwestern Region includes the counties of Beaver, Garfield, Iron, Kane and Washington. The southwest region includes two national parks within its boundaries and borders near the Grand Canyon to the south. Zion National Park is located in Washington County while Bryce Canyon National Park is located in Garfield County. This region includes high mountain vistas and the lowest elevations in the state. Washington county ranks 5th in the states population with a sustained growth rate at close to 40% annually. The total square miles of the combined region is 17,480. Total population in the region is 203,204.

Utah Native American Tribes: There are five major Native American tribes that inhabit Utah:

1. Ute
2. Dine (Navajo)
3. Piute
4. Goshute
5. Shoshone

The Ute tribe has 3,300 members and control of 1.3 million acres of land. The Dine (Navajo) has 7,000 members. The Goshute, with two tribes, has 536 members and 112,085 acres of land to the west of Salt Lake City. The Shoshone tribe has 187 acres and 383 members. Most of the Native American lands are concentrated in the south and eastern part of the state.

Figure 5. Indian Tribal Lands

The following table provides a list of the regions within the state and lists the jurisdictions included in each region:

Table 2. Jurisdictions within each Region

Bear River Region	Wasatch Front Region	Mountain Land Region	Uintah Region
• Box Elder County • Cache County • Rich County o Brigham City o Tremonton o Logan o North Logan o Smithfield o Hyrum	• Davis County • Morgan County • Salt Lake County • Tooele County • Utah County • Weber County o Bountiful o North Salt Lake o Woods Cross o Centerville o Farmington o Fruit Heights o Kaysville o Layton o Clearfield o Sunset o Syracuse o Salt Lake City o South Salt Lake o Murray o Midvale o West Valley o Taylorsville o South Jordan o West Jordan o Sandy o Draper o Riverton o Bluffdale o Magna o Alta o University of Utah o Utah Transit Authority o Tooele o Wendover o Lehi o American Fork	• Summit County • Wasatch County o Coalville o Park City o Heber	• Daggett County • Duchesne County • Uintah County o Manila o Vernal o Roosevelt o Duchesne

	o Provo o Springville o Spanish Fork o Payson o Ogden o North Ogden o South Ogden o Riverdale o Roy o Huntsville o Weber State o Holladay o Copperton o Kearns o Herriman o Cottonwood Heights		
Six County Region	**Southeastern Region**	**Southwestern Region**	
• Juab County • Millard County • Piute County • Sanpete County • Sevier County • Wayne County o Nephi o Fillmore o Delta o Ephriam o Manti o Richfield o Loa	• Carbon County • Emery County • Grand County • San Juan County o Price o Huntington o Moab o Monticello	• Beaver County • Garfield County • Iron County • Kane County • Washington County o Beaver o Panguitch o Cedar City o Kanab o Hurricane o St George	

2.1.3 UASI Areas/TIC Plans

UASI Area	*Regions / Jurisdictions*	*TICP Title/ Completion Date*	*POC Name*	*POC Email*
Salt Lake	Salt Lake County	TICP - Utah Salt Lake Region April 2007	Kevin Rose	kevinrose@utah.gov

2.2 Participating Agencies

Representatives from the following agencies participated in the development of this plan

Utah Department of Technology Services
Salt Lake City
Logan City
Sanpete County
South Salt Lake City Fire Department
Utah Division of Emergency Management
Utah Communications Agency Network
St. George City
Utah Department of Health
Utah Department of Transportation
Utah Department of Public Safety

2.3 Statewide Plan Point of Contact

Kevin Rose
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kevinrose@utah.gov

2.4 Scope and Timeframe

The SCIP details voice-oriented strategic interoperable communications initiatives for the State of Utah. The SCIP is not currently intended to comprehensively address or detail;

- Data interoperability
- Interoperability with Federal military and non-military partners
- Interstate interoperability (i.e. interoperability with Colorado, Nevada, Idaho, Wyoming, Arizona, and New Mexico)

Timelines in this SCIP are divided into short, medium and long term. These terms begin once the SCIP is formally accepted and are defined as:

- Short Term = 0-6mo
- Medium Term = 6mo-3yrs
- Long Term = 3yrs-10yrs

Specific project timelines related to the Public Safety Interoperable Communications (PSIC) grant funding are included below:

Name	Duration	Start	Finish
Phase 1 - Project Initiation	**17.d**	**March 26, 2007**	**April 17, 2007**
1.0 Develop Project Charter	7.d	March 26, 2007	April 3, 2007
1.0.2 Identify Stakeholders	3.d	March 26, 2007	March 28, 2007
1.0.3 Identify DHS POC (Project Manager)	7.d	March 26, 2007	April 3, 2007
1.1 Develop Preliminary Scope Statement	10.d	April 4, 2007	April 17, 2007
1.1.0 State and Region Overview Report	2.d	April 4, 2007	April 5, 2007
1.1.1 Describe Current Interoperability Environment	2.d	April 6, 2007	April 9, 2007
1.1.2 Problem Definition and Possible Solutions	3.d	April 10, 2007	April 12, 2007
1.1.3 Identify TICP Plans in the State	1.d	April 12, 2007	April 12, 2007
1.1.4 Set Project Scope and Timeframe	3.d	April 13, 2007	April 17, 2007
Phase 2 - Project Planning	**37.d**	**April 18, 2007**	**June 7, 2007**
2.1 Strategic Vision, Goals, and Objectives	3.d	April 18, 2007	April 20, 2007
2.2 Strategic Plan - Coordination with Adjacent States	3.d	April 23, 2007	April 25, 2007
2.3 Strategic Plan - Data Interoperability	4.d	April 26, 2007	May 1, 2007
2.4 Catastrophic Loss of Communication Assets	2.d	May 2, 2007	May 3, 2007
2.5 NIMS and NRP Compliance	2.d	May 4, 2007	May 7, 2007
2.6 Strategic Plan - Mass Transit.	3.d	May 8, 2007	May 10, 2007
2.7 Strategic Plan - Funding	7.d	May 11, 2007	May 21, 2007
2.8 SOP Assessment & Development	6.d	May 22, 2007	May 29, 2007
2.8.1 SOP Development (Process)	2.d	May 22, 2007	May 23, 2007
2.8.1 SOP Development (Compliance)	2.d	May 24, 2007	May 25, 2007

2.8.3 SOP Development (NIMS)	2.d	May 28, 2007	May 29, 2007
2.9 Training and Exercise Plan	7.d	May 30, 2007	June 7, 2007
2.9.1 Training and Exercise	5.d	May 30, 2007	June 5, 2007
2.9.2 Cross-Disciplinary Compliance	2.d	June 6, 2007	June 7, 2007
Phase 3 - Project Execution	**60.d**	**June 8, 2007**	**August 30, 2007**
3.1 Regional Collaboration	11.d	June 8, 2007	June 22, 2007
3.2 Regional Support	5.d	July 16, 2007	July 20, 2007
3.3 TICP Integration	10.d	July 23, 2007	August 3, 2007
3.4 Implementation Strategy	7.d	August 6, 2007	August 14, 2007
3.5 Performance Tracking	1.d	August 15, 2007	August 15, 2007
3.6 Periodic Review and Revision	1.d	August 16, 2007	August 16, 2007
3.7 Statewide Plan - 1st Draft	**10.d**	**August 17, 2007**	**August 30, 2007**
Phase 4 - Project Control	**10.d**	**June 8, 2007**	**June 21, 2007**
4.1 SIEC Authority	1.d	June 8, 2007	June 8, 2007
4.2 Governance Structure	2.d	June 11, 2007	June 12, 2007
4.3 SIEC Charter and Responsibilities	2.d	June 13, 2007	June 14, 2007
4.4 Identify the members of the governing body and any of its committees	1.d	June 15, 2007	June 15, 2007
4.5 SIEC Meeting Schedule	1.d	June 18, 2007	June 18, 2007
4.6 MOU Development	3.d	June 19, 2007	June 21, 2007
Phase 5 - Project Completion	**45.d**	**August 31, 2007**	**November 1, 2007**
5.1 Statewide Capabilities Statement	14.d	August 31, 2007	September 19, 2007
5.2 Legacy Systems Support	10.d	September 20, 2007	October 3, 2007
5.2.1 Migration Strategy	7.d	September 20, 2007	September 28, 2007
5.2.2 Purchasing Compliance	3.d	October 1, 2007	October 3, 2007
5.3 Critical Success Factors	2.d	October 4, 2007	October 5, 2007
5.4 Educating Policy Makers	3.d	October 8, 2007	October 10, 2007
5.5 Involvement	2.d	October 11, 2007	October 12, 2007
5.6 Operational Plan	2.d	October 15, 2007	October 16, 2007
5.7 Funding Strategy	2.d	October 17, 2007	October 18, 2007
5.8 Statewide Plan - Final Draft	**10.d**	**October 19, 2007**	**November 1, 2007**
Phase 6 - Project Close	**9.d**	**November 2, 2007**	**November 14, 2007**
6.1 Plan Implementation Report	7.d	November 2, 2007	November 12, 2007
6.2 Project Review Meeting	2.d	November 13, 2007	November 14, 2007

3. Methodology

Long term success of the statewide communications interoperability project will be measured by the extent to which it is utilized by first responder agencies in day to day operations. PSAP dispatch centers and local government first responders have a unique perspective on the problems associated with communications interoperability. First responders and dispatch centers are forced to deal with the challenges of multi-agency incident management every day.

The Utah SIEC advocates an approach to planning statewide communications interoperability solutions as depicted in *Figure 4.* Local agency input into the planning process is essential to the successful implementation of the statewide project. The Utah SIEC plays an important leadership role in facilitating collaboration among public safety agencies statewide.

Broad announcements were made to all 368 public safety agencies operating in the state prior to the first SIEC meeting. Participation from all levels of public safety response including all disciplines was encouraged.

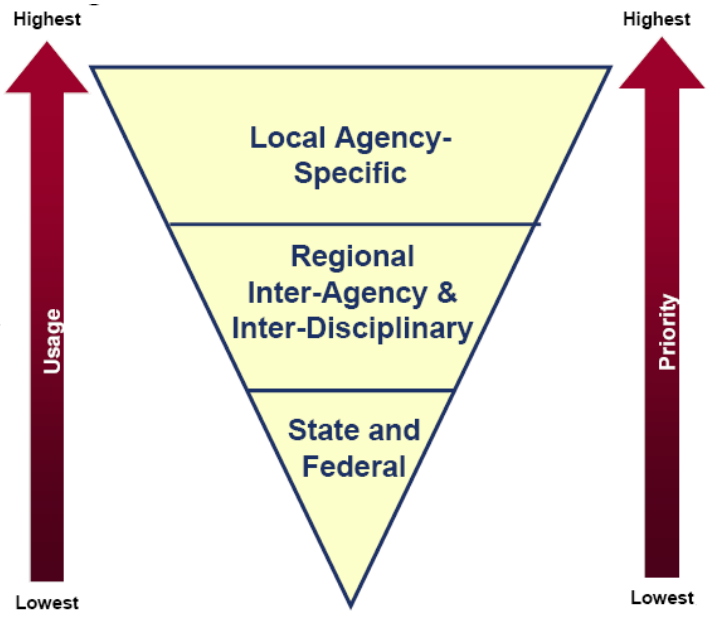


Figure 6. Planning Priorities

The Utah SIEC is an extension of a working committee previously tasked with statewide communications interoperability. Simultaneous with the establishment of the Utah SIEC, announcements were sent to the Utah Sheriff's Association, Utah Police Chief's Association, Utah Fire Chief's Association, Utah Communications Agency Network, and a number of smaller public safety advocacy groups operating in Utah. 368 public safety entities were contacted by direct mail and/or electronically with an invitation to participate in the development of a statewide communications interoperability plan. Numerous responses were received by the SCIP project team with recommendations and agency concerns. The Utah SIEC maintains a contact database for local government public safety entities operating in the state region (Appendix C). During the first meeting the Utah SIEC agreed to adopt seven existing planning regions within the state currently defined by the Division of Homeland Security in regional planning for emergency services. Each region is specifically tasked with regional communications interoperability collaboration in the development of standard operating procedures for their respective regions. The SIEC agreed to work in partnership with each of the seven planning regions to provide planning continuity and a statewide perspective.

The Utah SIEC understands that a large strategic planning document serves a necessary purpose in the development of statewide interoperability solutions, but is impractical for utilization by

first responders and dispatch centers involved in a regional or statewide multi-agency incident response. Effective implementation of a statewide plan requires operational availability of critical information in the hands of first responders and dispatch centers. With this understanding, the Utah SIEC has determined that the SCIP must be supported by an operational manual to be published separately to support incident management in a field environment.

1. The Strategic Plan (the SCIP) is a high-level planning document involving statewide public safety agency collaboration. The SCIP identifies all public safety agencies in the state and identifies communications infrastructure currently utilized by those agencies. The Utah SIEC membership will actively maintain the SCIP, in collaboration with federal advisory groups, to facilitate statewide interoperability objectives.

2. The Utah SIEC will develop the Operational Manual (OM) within six months of the approval of the SCIP (see Section 6). The OM will be a concise reference document published in a format ideal for use in a dispatch center or field environment. The OM will contain information pertinent to communications interoperability management during an incident including frequency assignments, standard operating procedures, and ICS forms required under NIMS directives. The OM will neither require, nor include, higher level strategic planning language more appropriately published in the SCIP. Each of the seven emergency planning regions in the state will have separate operational manuals.

The Utah SIEC will continue collaboration efforts with public safety entities statewide to ensure the information published in the SCIP and operational manuals remains relevant and accurate. Regional Homeland Security planning meetings including required communications interoperability agenda components are hosted in each of the seven regions quarterly to facilitate local input and operational updates to the SCIP. The State Interoperability Coordinator will attend all regional planning meetings and will function as an SIEC liaison to local agencies in each of the seven planning regions. Local agencies will therefore be able to raise information, needs, and concerns to the SIEC through both their regional and/or agency representatives and the State Interoperability Coordinator.

The Utah State Administrative Agency SAA is the Director of Homeland Security and a direct supervisor to the State Interoperability Coordinator. This organizational structure allows the Utah SIEC, through the State Interoperability Coordinator, to work directly with the SAA and State Purchasing to identify project funding opportunities and to ensure compliance with Federal, State, and local agency grant requirements. The SIEC will review all state and local government grant applications pertaining to communications interoperability and make recommendations to the SAA prior to an award.

The State Interoperability Coordinator is tasked with the creation and maintenance of a complete list of interoperability stakeholders statewide including tribal entities and non-government organizations. In addition to the quarterly meetings and local SIEC representation described above, the State Interoperability Coordinator will directly contact all stakeholder agencies and organizations bi-annually to receive local input and coordinate common objectives under the

statewide communications interoperability project. The State Interoperability Coordinator will report local and regional input to the SIEC quarterly.

Local and regional support for the SCIP and statewide communications interoperability project are critical to the successful implementation of SIEC objectives. The Utah SIEC encourages all stakeholders to actively participate in ongoing planning efforts both regionally and statewide.

4. Current Statewide Assessment

4.1 Governance Structure

The Utah SIEC was established by executive order on March 8, 2007 (*Appendix A*). The SIEC executive board is organized with the State CIO serving as chairperson and broad representation from state and local government agencies. The Utah SIEC is authorized, by the Governor, to establish standards for interoperability best practices statewide and is responsible for the development and implementation of a SCIP. The SIEC is also responsible for 700 MHz interoperability frequency coordination and spectrum management in the state. The order establishing the Utah SIEC authorizes the executive board to sign an MOU with all participating agencies in the state relative to the promotion of common interoperability objectives. The Utah SIEC also facilitates technical collaboration and makes funding recommendations to state and local government agencies.

The Utah SIEC executive board is called into session by the SIEC executive committee. Utah SIEC general board meetings are typically held on the 3rd Thursday of each Month under the direction of the SIEC chairperson. SIEC executive board membership and staff positions are included in Appendix B. General Board meetings are open to the public. Additional information can be obtained at:

http://siec.utah.gov/index.html

Responsibilities of the Utah SIEC

- Establish and manage a Statewide Communications Interoperability Plan (SCIP).
- Maintain and update this Statewide Communications Interoperability Plan (SCIP).
- Adopt final solutions and direct implementation.
- Establish training requirements in support of this Statewide Communications Interoperability Plan (SCIP).
- Create chains of command for interoperable communications including trained Communications Unit Leaders.
- Facilitate the development of Standard Operating Procedures across all regions and disciplines.
- Execute Memoranda of Understanding (MOUs) and Sharing Agreements for interoperable communications.

- Notify agencies of regular interoperable equipment/solutions testing and assist agencies with test evaluation and the dissemination of results.
- Continually re-evaluate regional requirements as technology evolves and circumstances dictate.

Agencies will retain the following rights and responsibilities:

- Agencies are responsible for agreeing to and complying with MOUs and Sharing Agreements developed by the SIEC.
- Agencies agreeing to this plan have the authority to request use of systems in accordance with Standard Operating Procedures (SOPs). Agencies and incident commanders are responsible for initiating support requests as prescribed by the appropriate SOP.
- Dispatch agencies and Emergency Communication Centers (ECC) of participating agencies have the authorization to request use of the systems. Dispatch agencies and ECC are responsible for initiating support requests as prescribed by the appropriate SOP.
- Where applicable, agencies will be responsible for maintaining, testing and exercising connectivity to interoperable communication systems.
- Agencies retain the right to decide when and where to participate in interoperable communications.
- Agencies retain the right to accept or decline a patch to a gateway system to provide interoperable communications during an incident.
- Agencies have the right to accept, or reject technology standards and funding recommendations proposed by the SIEC.

4.2 Technology

Wireless voice and data communications systems, utilized by public safety entities in the state, are generally divided into five separate technology components.

1. Public safety entities operating in the urbanized regions of the state utilize trunked 800 MHz systems for voice communications almost exclusively. The state provides VHF analog conventional radio coverage in the same areas for purposes of interoperability between VHF and 800 MHz systems.
2. All other areas of the state primarily utilize conventional technology in the VHF 150 – 174 MHz spectrum for wireless voice communications. The state provides 800 MHz analog trunked and conventional radio overlapping coverage for purposes of interoperability between 800 MHz and VHF systems.
3. Interoperability with the National Guard, and local federal agencies, is accomplished by bridging audio paths from agency communications resources with state and local government resources. Portable gateways are the primary technology utilized for this

purpose although some communications resources operated by the Utah National Guard are permanently interconnected with state resources.

4. The majority of PSAP dispatch centers in the state are interconnected to each other utilizing a centralized audio bridging technology which allows communications resource sharing between centers. For example a dispatch center operating on the shared network can bridge, or patch, a communication resource (base station, repeater, talkgroup) on one system with a communication resource (base station, repeater, talkgroup) on the other system.
5. The majority of public safety entities in the state contract with commercial carriers for wireless data network mobility services near population centers. The State of Utah operates a 33 kbps narrowband mobile data network in less populated regions of the state utilizing spectrum in the 700 MHz public safety allocation.

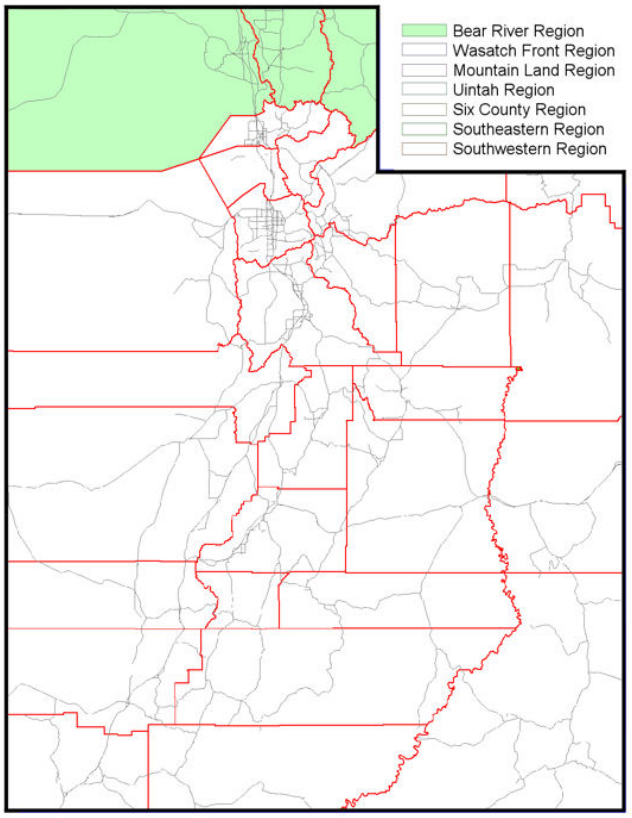
Interoperability between public safety entities operating in the 800 MHz spectrum is easily facilitated by the fact that virtually all agencies use a common air interface technology on one of two interconnected trunked radio systems. System wide "event" talkgroups are designated and programmed into all 800 MHz radios utilizing a standard naming convention. Interoperability between agencies operating on either one of the two 800 MHz trunked systems is achieved through the utilization of an audio bridge which interconnects between both networks. Radio coverage between both systems is overlapping. Public safety entities may operate on either system while maintaining connectivity to resources on their home system network. Interoperability between public safety entities operating on one of the 800 MHz systems in the region and entities temporarily traveling into the Wasatch Front area is facilitated using duplicate 800 MHz and VHF radio coverage in combination with resource audio bridging. Currently available spectrum in the 700/800 MHz allocation is adequate for system implementation and future expansion in the Wasatch Front and Mountain Land regions.

Interoperability between public safety entities operating outside the 800 MHz spectrum is technically facilitated by the fact that virtually all agencies use a common air interface technology on multiple VHF conventional systems. These areas primarily utilize conventional wireless analog voice communications technology operating in the 150 – 174 MHz VHF spectrum. Unfortunately there is currently no Memorandum of Understanding, between agencies in different regions that would facilitate uniform radio programming. Even in areas where radio programming is similar between agencies the development of a Standard Operating Procedure (SOP) has not typically been undertaken that could facilitate common channel designation and channel interoperability. An event requiring multiple agency, or multi regional response, typically creates an interoperability problem due to the fact that while all responding agencies have similar VHF radios they usually don't have the same frequencies programmed. Sometimes they have the right frequency, but are unable to coordinate interoperability communication because each responding agency uses a different channel naming standard which creates confusion for first responders. Spectrum congestion in the VHF spectrum combined with the inability to secure additional frequencies required for system expansion compounds an ever increasing interoperability problem in the state. This is especially true near population centers where existing spectrum resources are already overloaded. The state provides 800 MHz trunked and conventional analog radio coverage in these areas

Mobile data network mobility is largely facilitated through the utilization of services provided by commercial carriers in limited coverage areas. Several agencies in the state have implemented 802.11x and other similar technologies in very limited areas with no attempt to establish an appropriate MOU and SOPs to facilitate multiple agency network utilization. The state operates a narrowband 33kbps mobile data network based on proprietary air interface technology that offers limited coverage statewide and typically fails to meet agency bandwidth requirements. Interoperability between mobile data systems has not been addressed prior to the development of a SCIP under direction from the Utah SIEC.

Collaborative interoperability efforts have previously been undertaken in Utah, including the Salt Lake Area TIC Plan, with some measure of success. Unfortunately communication systems are usually planned and implemented around available funding, situational expediency, technology bias, and political interest. These efforts rarely yield long term success in the context of solving statewide interoperability issues. Compounding the problem is the fact that with so many technology opportunities available, each having particular cost benefits and functionality, the decision process often becomes competitive between agencies. A technology feature imperative for one agency may represent an unjustifiable expense to another agency. Statewide communications interoperability planning is a challenge that requires multiple agency cooperation often difficult to achieve between independent agencies seeking to promote and protect their own internal interests.

The Utah SIEC plays a vital role in the effort to unite collaborative efforts and provide regional leadership. The development of common technology standards, memorandum of understanding, and standard operating procedures, are primary objectives of the Utah SIEC. The following table represents all first responder agencies operating in the state with information summarizing the communications technology currently utilized by the agency in each region:



Bear River Regional Statistics

- 7,917 Square miles.
- Population: 166,895.

Technology Standards

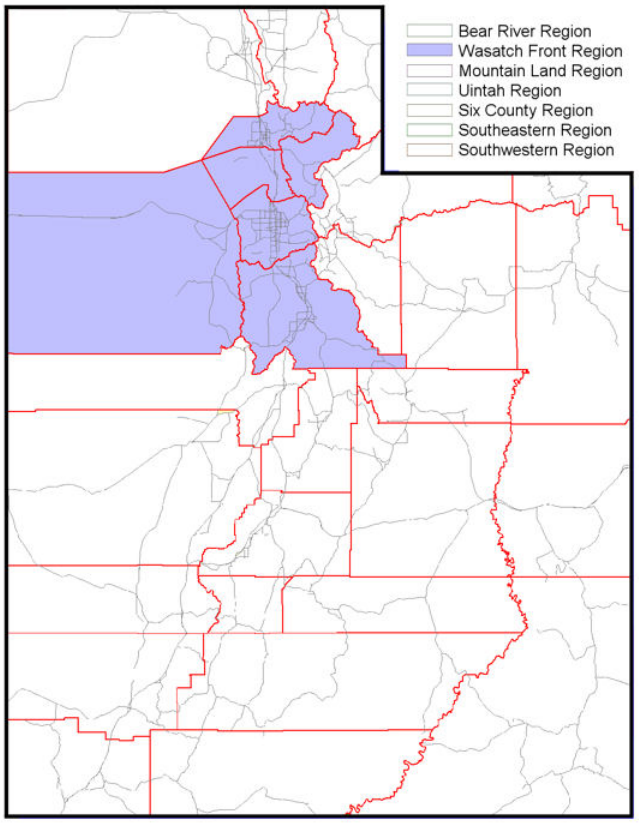
- VHF Analog Conventional (Voice)
- 800 MHz Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- GSM / EVDO (Data)
- 98 VHF channels in use (150 – 160 MHz)

- 3 Channels in Use (800 MHz Analog Conventional)

Table 3. Bear River Region

County	Agency	Voice	Data
	Bear River Region		
Box Elder	Box Elder County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Brigham City Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Garland Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Mantua Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Perry Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Tremonton Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Willard Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Brigham City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Fielding Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Garland Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Honeyville Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Mantua Volunteer Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Plymouth Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Portage Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Tremonton Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Thatcher - Penrose Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Box Elder	Willard City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Cache County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Logan Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	North Park Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Smithfield Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Hyrum City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Logan City Fire Department	800 MHz Trunked	GSM / EVDO

		(UCAN)	
Cache	Mendon Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Newton Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Paradise Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Richmond Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Smithfield Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Wellsville Fire and Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	Trenton Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Cache	North Logan Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Rich	Rich County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Rich	Garden City Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Rich	Laketown Fire District	800 MHz Trunked (UCAN)	GSM / EVDO
Rich	Randolph Fire District	800 MHz Trunked (UCAN)	GSM / EVDO
Rich	Woodruff Fire District	800 MHz Trunked (UCAN)	GSM / EVDO



Wasatch Front Regional Statistics

- 10,546 Square Miles.
- Population: 2,151,621.

Technology Standards

- VHF Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- 800 MHz Analog Trunked (Voice) (Salt Lake City Network)
- GSM / EVDO (Data)
- 108 VHF channels in use (150 – 160 MHz)

Table 4. Wasatch Front Region

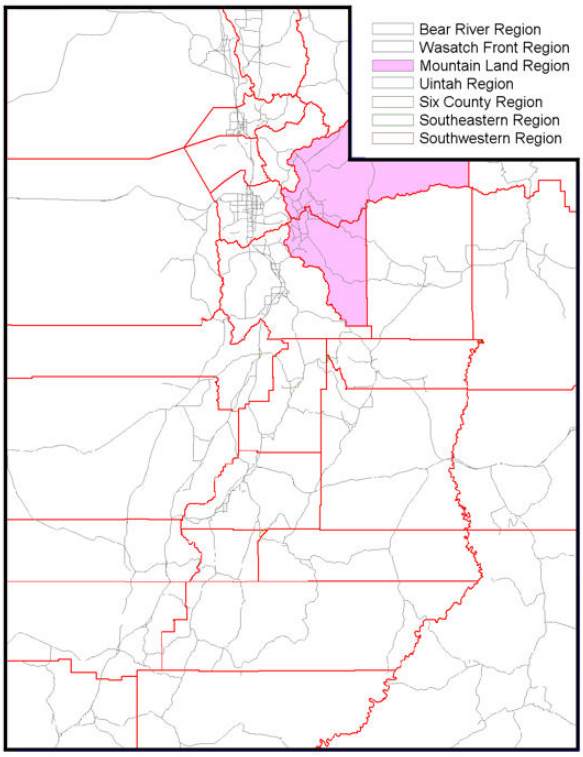
County	Agency	Voice	Data
	Wasatch Front Region		
Davis	Davis County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Bountiful Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Centerville Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Clearfield Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Clinton Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Farmington Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Kaysville Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Layton Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Sunset Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Syracuse Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	West Bountiful Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	North Salt Lake Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Woods Cross Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	North Davis Fire District	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Clinton City Fire/ Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Farmington City Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Hill Air Force Base Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Kaysville City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Layton City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Sunset City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	Syracuse Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Davis	South Davis Metro Fire	800 MHz Trunked (UCAN)	GSM / EVDO
Morgan	Morgan County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Morgan	Morgan County Fire Department	800 MHz Trunked	GSM / EVDO

		(UCAN)	
Morgan	Mountain Green Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Salt Lake County Sheriff/Unified Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Alta Town Public Safety	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Draper Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Murray Police Department	800 MHz Analog Conventional	GSM / EVDO
Salt Lake	Salt Lake Airport Police Department	800 MHz Trunked (Salt Lake System)	GSM / EVDO
Salt Lake	Salt Lake City Police Department	800 MHz Trunked (Salt Lake System)	GSM / EVDO
Salt Lake	Sandy Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	South Jordan Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	South Salt Lake Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Taylorsville Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Utah Transit Authority Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	West Jordan Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	West Valley City Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Cottonwood Heights Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Bluffdale City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Alliant Techsystem Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Murray City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	151 CES/CEF Utah ANG Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Salt Lake City Fire Department	800 MHz Trunked (Salt Lake System)	GSM / EVDO
Salt Lake	Unified Fire Authority	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	South Salt Lake City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	Sandy City Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	South Jordan City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	W.Jordan Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Salt Lake	West Valley City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Tooele County Sheriff	800 MHz Trunked	GSM / EVDO

		(UCAN)	
Tooele	Grantsville Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Stockton Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Tooele City Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Wendover Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Terra Volunteer Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Dugway Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	North Tooele County Fire District	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Stockton Volunteer Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Vernon Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Tooele	Wendover Airport Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Utah County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Alpine Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	American Fork Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Lone Peak Public Safety District	800 MHz Trunked (UCAN)	GSM/EVDO
Utah	Lehi Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Mapleton Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Orem Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Payson Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Pleasant Grove Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Provo Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Salem Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Santaquin Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Saratoga Springs Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Spanish Fork Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Spring City Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Springville Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Cedar Fort Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO

Utah	Elk Ridge Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Genola Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Goshen Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	American Fork Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Cedar Hills Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Lehi Fire/EMS Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Orem Dept. of Public Safety, Fire Division	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Payson Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Pleasant Grove City Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Provo Fire Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Utah County Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Salem City Volunteer Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Santaquin Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Saratoga Springs Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Spanish Fork Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Utah	Springville Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Weber County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Harrisville Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	North Ogden Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Ogden Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Pleasant View Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Riverdale Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Roy Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	South Ogden Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	North View Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Odgen Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Weber Fire District	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Plain City Fire Department	800 MHz Trunked	GSM / EVDO

		(UCAN)	
Weber	Riverdale Department of Public Safety	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Roy City Fire & Rescue Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	South Ogden Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Uintah City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Weber	Washington Terrace Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO



Mountain Land Regional Statistics

- 3,048 Square Miles.
- Population: 59,854.

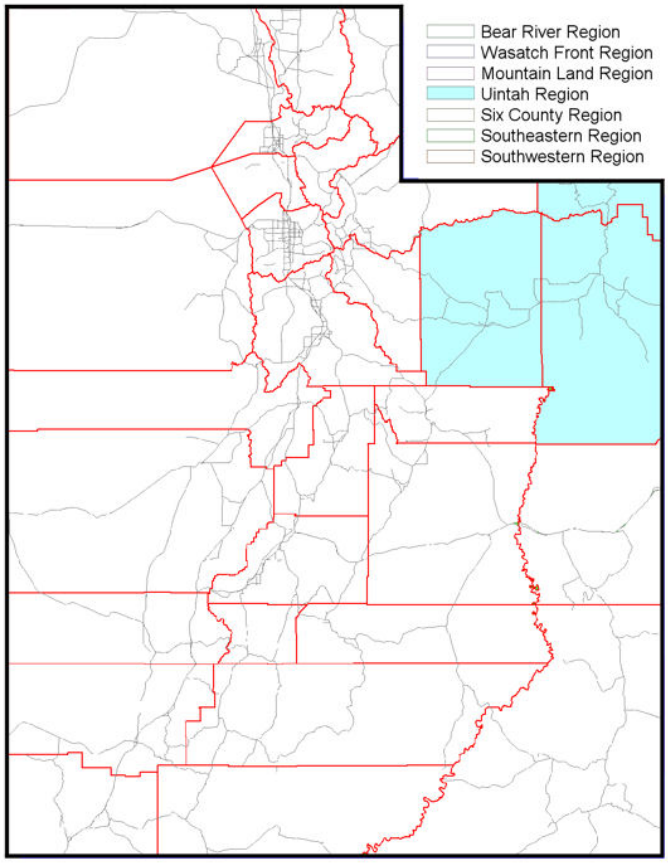
Technology Standards

- VHF Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- GSM / EVDO (Data)
- 38 VHF channels in use (150 – 160 MHz)

Table 5. Mountain Land Region

County	Agency	Voice	Data
	Mountain Land Region		
Summit	Summit County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Summit	Kamas Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Summit	Park City Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Summit	Wanship Volunteer Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Summit	South Summit Fire Protection District	800 MHz Trunked (UCAN)	GSM / EVDO

Summit	Park City Fire Service District	800 MHz Trunked (UCAN)	GSM / EVDO
Wasatch	Wasatch County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Wasatch	Heber Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Wasatch	Heber City Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO



Uintah Regional Statistics

- 8,413 Square Miles.
- Population: 52,254.

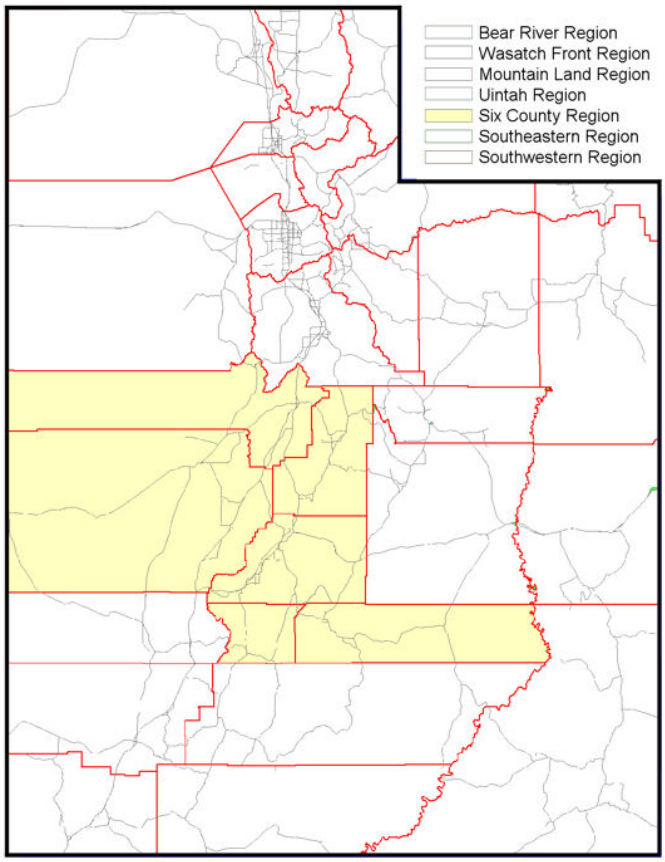
Technology Standards

- VHF Analog Conventional (Voice)
- 800 MHz Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- GSM / EVDO and 700 MHz Mobile Data (Data)
- 64 channels in use (150 – 160 MHz)
- 6 Channels in use (700 MHz)
- 4 Channels in Use (800 MHz)

Table 6. Uintah Region

County	Agency	Voice	Data
	Uintah Region		
Daggett	Daggett County Sheriff	VHF Analog Conventional	700 MHz MDN
Daggett	Town of Manila Fire Department	VHF Analog Conventional	700 MHz MDN
Duchesne	Duchesne County Sheriff	VHF Analog Conventional	700 MHz MDN
Duchesne	Duchesne Volunteer Fire Department	VHF Analog Conventional	700 MHz MDN
Duchesne	Tabiona/Hanna Volunteer Fire	VHF Analog	700 MHz MDN

	Department	Conventional	
Duchesne	Fruitland Volunteer Fire Department	VHF Analog Conventional	700 MHz MDN
Uintah	Uintah County Sheriff	VHF Analog Conventional	700 MHz MDN
Uintah	Naples Police Department	VHF Analog Conventional	700 MHz MDN
Uintah	Roosevelt Police Department	VHF Analog Conventional	700 MHz MDN
Uintah	Vernal Police Department	VHF Analog Conventional	700 MHz MDN
Uintah	Roosevelt City Fire Department	VHF Analog Conventional	700 MHz MDN
Uintah	Lapoint - Tridell Fire Dept	VHF Analog Conventional	700 MHz MDN



Six County Regional Statistics

- 16,697 Square miles.
- Population: 75,707.

Technology Standards

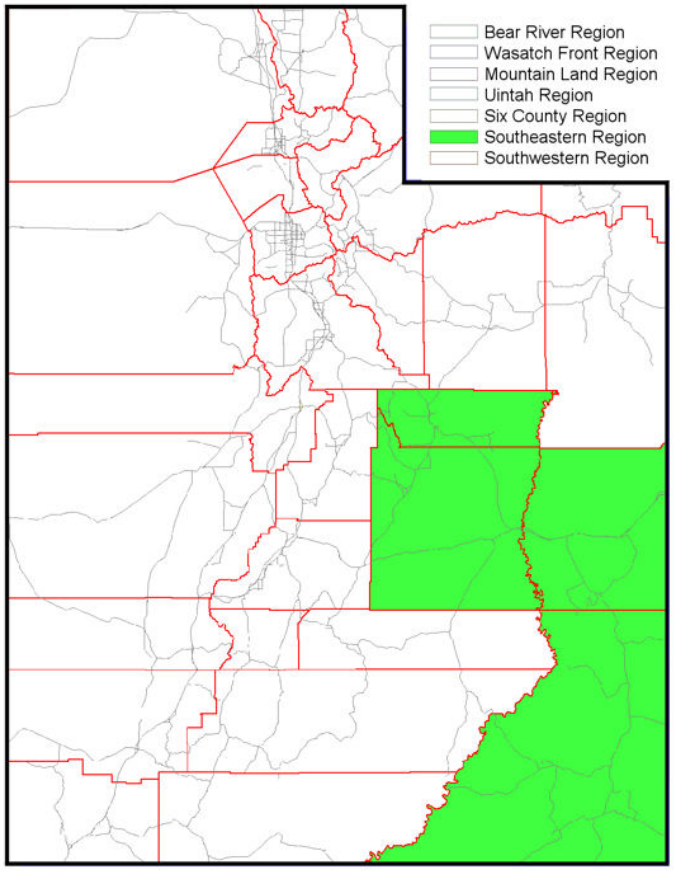
- VHF Analog Conventional (Voice)
- 800 MHz Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- GSM / EVDO and 700 MHz Mobile Data (Data)
- 71 VHF channels in use (150 – 160 MHz)
- 6 Channels in use (700 MHz)
- 2 Channels in Use (800 MHz Analog Conventional)

Table 7. Six County Region

County	Agency	Voice	Data
	Six County Region		
Juab	Juab County Sheriff	VHF Analog Conventional	GSM / EVDO

Juab	Nephi Police Department	VHF Analog Conventional	GSM / EVDO
Juab	Eureka Fire Dept	VHF Analog Conventional	GSM / EVDO
Juab	Nephi Fire Department	VHF Analog Conventional	GSM / EVDO
Millard	Millard County Sheriff	VHF Analog Conventional	700 MHz MDN
Millard	Delta Police Department	VHF Analog Conventional	700 MHz MDN
Millard	Garrison Volunteer Fire Department	VHF Analog Conventional	700 MHz MDN
Millard	Lynndyl Volunteer Fire Department	VHF Analog Conventional	700 MHz MDN
Millard	Delta Fire Department	VHF Analog Conventional	700 MHz MDN
Millard	Fillmore Volunteer Fire Department	VHF Analog Conventional	700 MHz MDN
Millard	Holden Fire Dept	VHF Analog Conventional	700 MHz MDN
Millard	Kanosh Fire Department	VHF Analog Conventional	700 MHz MDN
Piute	Piute County Sheriff	VHF Analog Conventional	N/A
Piute	Junction Town Fire Department	VHF Analog Conventional	N/A
Sanpete	Sanpete County Sheriff	VHF Analog Conventional	GSM / EVDO
Sanpete	Centerfield Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Ephraim Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Fairview Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Fountain Green Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Gunnison Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Moroni Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Mt. Pleasant Police Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Gunnison Valley Fire Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Ephraim Fire Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Manti Fire Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Oak City Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
Sanpete	Wales Fire Department	VHF Analog Conventional	GSM / EVDO
Sevier	Sevier County Sheriff	VHF Analog Conventional	GSM / EVDO
Sevier	Aurora Police Department	VHF Analog	GSM / EVDO

		Conventional	
Sevier	Richfield Police Department	VHF Analog Conventional	GSM / EVDO
Sevier	Salina Police Department	VHF Analog Conventional	GSM / EVDO
Sevier	Aurora Fire Department	VHF Analog Conventional	GSM / EVDO
Sevier	Elsinore Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
Sevier	Monroe City Fire Department	VHF Analog Conventional	GSM / EVDO
Sevier	Salina Fire Dept	VHF Analog Conventional	N/A
Wayne	Wayne County Sheriff	VHF Analog Conventional	N/A
Wayne	Bicknell Volunteer Fire Department	VHF Analog Conventional	N/A
Wayne	Hanksville/Wayne County Fire Dept	VHF Analog Conventional	N/A



Southeastern Regional Statistics

- 54,180 Square Miles.
- Population: 56,350.

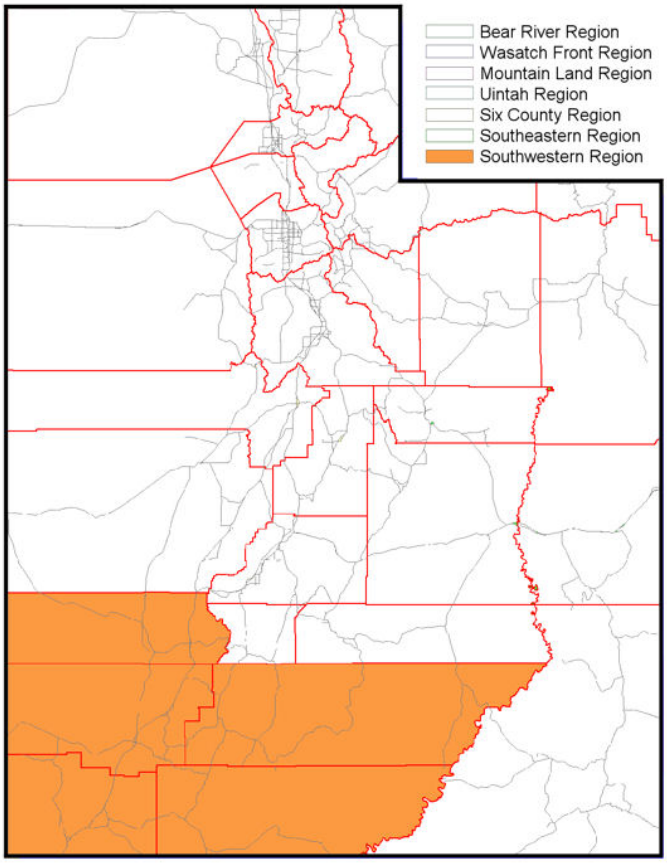
Technology Standards

- VHF Analog Conventional (Voice)
- 800 MHz Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- GSM / EVDO and 700 MHz Mobile Data (Data)
- 84 VHF channels in use (150 – 160 MHz)
- 6 Channels in use (700 MHz)
- 3 Channels in Use (800 MHz)

Table 8. Southeastern Region

County	Agency	Voice	Data
	Southeastern Region		
Carbon	Carbon County Sheriff	VHF Analog Conventional	GSM / EVDO
Carbon	East Carbon Police Department	VHF Analog Conventional	GSM / EVDO
Carbon	Wellington Police Department	VHF Analog Conventional	GSM / EVDO
Carbon	East Carbon Fire Dept	VHF Analog Conventional	GSM / EVDO
Carbon	Helper Fire & Rescue	VHF Analog Conventional	GSM / EVDO
Carbon	Price City Fire Department	VHF Analog Conventional	GSM / EVDO
Carbon	Sunnyside Fire Department	VHF Analog Conventional	GSM / EVDO
Carbon	Wellington Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
Emery	Emery County Sheriff	VHF Analog Conventional	GSM / EVDO
Emery	Cleveland Fire Department	VHF Analog Conventional	GSM / EVDO
Emery	Castle Dale Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
Grand	Grand County Sheriff	VHF Analog Conventional	GSM / EVDO
Grand	Moab Police Department	VHF Analog Conventional	GSM / EVDO
Grand	Green River Fire Department	VHF Analog Conventional	GSM / EVDO
Grand	Moab Valley Fire Protection District	VHF Analog Conventional	GSM / EVDO
San Juan	San Juan County Sheriff	VHF Analog Conventional	GSM / EVDO
San Juan	Blanding Police Department	VHF Analog Conventional	GSM / EVDO
San Juan	Monticello Police Department	VHF Analog Conventional	GSM / EVDO
San Juan	Bluff Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	Blanding Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	La Sal Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	Mexican Hat - Halchita Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	Montezuma Creek Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	Eastland Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	Pack Creek Fire Department	VHF Analog Conventional	GSM / EVDO

San Juan	Monticello Fire Department	VHF Analog Conventional	GSM / EVDO
San Juan	San Juan County Fire/Emergency Services	VHF Analog Conventional	GSM / EVDO
San Juan	Monument Valley Fire Department	VHF Analog Conventional	GSM / EVDO



Southwestern Regional Statistics

- 17,480 Square Miles.
- Population: 203,204.

Technology Standards

- VHF Analog Conventional (Voice)
- 800 MHz Analog Conventional (Voice)
- 800 MHz Analog Trunked (Voice) (UCAN Network)
- GSM / EVDO and 700 MHz Mobile Data (Data)
- 8 Channels in use (700 MHz)
- 3 Channels in Use (800 MHz)

Table 9. Southwestern Region

County	Agency	Voice	Data
	Southwestern Region		
Beaver	Beaver County Sheriff	VHF Analog Conventional	GSM / EVDO
Beaver	Beaver County Fire District #.1	VHF Analog Conventional	GSM / EVDO
Beaver	Beaver County Fire District # 2	VHF Analog Conventional	GSM / EVDO
Iron	Iron County Sheriff	VHF Analog Conventional	GSM / EVDO
Iron	Brian Head Police Department	VHF Analog Conventional	GSM / EVDO
Iron	Cedar City Police Department	VHF Analog Conventional	GSM / EVDO

Iron	Parowan Police Department	VHF Analog Conventional	GSM / EVDO
Iron	Brian Head Fire Department	VHF Analog Conventional	GSM / EVDO
Iron	Cedar City Fire Department	VHF Analog Conventional	GSM / EVDO
Iron	Kanarraville Fire Department	VHF Analog Conventional	GSM / EVDO
Iron	Newcastle Volunteer Fire Dept	VHF Analog Conventional	GSM / EVDO
Iron	Panguitch City Fire Department	VHF Analog Conventional	GSM / EVDO
Iron	Paragonah Fire Dept	VHF Analog Conventional	GSM / EVDO
Garfield	Garfield County Sheriff	VHF Analog Conventional	GSM / EVDO
Garfield	Boulder Fire Department	VHF Analog Conventional	GSM / EVDO
Garfield	Bryce Canyon Fire Department	VHF Analog Conventional	GSM / EVDO
Garfield	Tropic Volunteer Fire Department	VHF Analog Conventional	GSM / EVDO
Garfield	Hatch Fire Department	VHF Analog Conventional	GSM / EVDO
Kane	Kane County Sheriff	VHF Analog Conventional	GSM / EVDO
Kane	Kanab Police Department	VHF Analog Conventional	GSM / EVDO
Kane	Kanab Fire Department	VHF Analog Conventional	GSM / EVDO
Kane	Kane County Fire Dept	VHF Analog Conventional	GSM / EVDO
Kane	Long Valley Orderville Fire Dept	VHF Analog Conventional	GSM / EVDO
Washington	Washington County Sheriff	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Hildale Police Department	VHF Analog Conventional	GSM / EVDO
Washington	Hurricane Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Ivins Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Leeds Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Santa Clara Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	St. George Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Washington City Police Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Smithsonian Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Diamond Valley Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Gunlock Fire Department	800 MHz Trunked	GSM / EVDO

		(UCAN)	
Washington	Hurricane Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Ivins Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Laverkin Fire & Rescue	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Leeds Area Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Harmony Valley Fire District	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Pine Valley Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Springdale Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Zion National Park	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	St. George Fire Department	800 MHz Trunked (UCAN)	GSM / EVDO
Washington	Washington City Fire Dept	800 MHz Trunked (UCAN)	GSM / EVDO

As illustrated above virtually all first responders operating in the urbanized areas of the state utilize 800 MHz radio equipment on one of two trunked networks. Salt Lake City operates a Motorola 800 MHz Smartzone system covering all incorporated areas of Salt Lake County. Utah Communications Agency Network (UCAN) is an organization operating a Motorola 800 MHz Smartzone system which provides 90% portable coverage in eight counties. UCAN is a state agency with legislative oversight and is tasked with providing public safety communications in the heavily populated areas, including Salt Lake City.

UCAN is governed by a board of directors representing several participating public safety agencies and state level departments. UCAN also operates a Motorola Omni-Link audio bridge which interfaces between the UCAN 800 MHz network, Salt Lake City 800 MHz network, Statewide VHF Repeater System (SRS, and Statewide VHF Law Enforcement System (LES). Omni-Link connects PSAP dispatch centers, located throughout the state, together in a way that allows communications resources from each dispatch center to be shared with other centers in a zone configuration.

All PSAP dispatch centers are assigned to one of four zones. Dispatch centers operating within the UCAN 800 MHz network footprint are assigned to Zone 1, 2, or 4 and have the ability to share trunked and conventional communications resources with each other. Salt Lake City dispatch and all trunked and conventional communications resources connected to the Salt Lake City network are designated Zone 3. Resources from zones 1, 2, 3 and 4 are interconnected through the Omni-Link audio bridge. The interoperability benefits of the Omni-Link audio bridge include the ability to share all connected communications resources within a zone with all PSAP dispatch centers operating within the same zone. Limited communications resources are also made available from one zone to another through the Omni-Link audio switch.

All PSAP dispatch centers in the state region utilize Motorola Gold Elite consoles and are interconnected together through the Omni-Link audio bridge. A complete list of PSAP dispatch centers operating in the state region is included in Appendix D. The State of Utah, Department of Technology Services, operates two statewide VHF repeater networks supporting public safety operations. The Statewide Repeater System (SRS) is a conventional analog repeater network with transmitters supporting all public safety disciplines while the Law Enforcement System (LES) supports primarily law enforcement operations. A description of transmitter locations, equipment utilized, and frequency assignments are presented in *Figure 4* below and Appendix E.

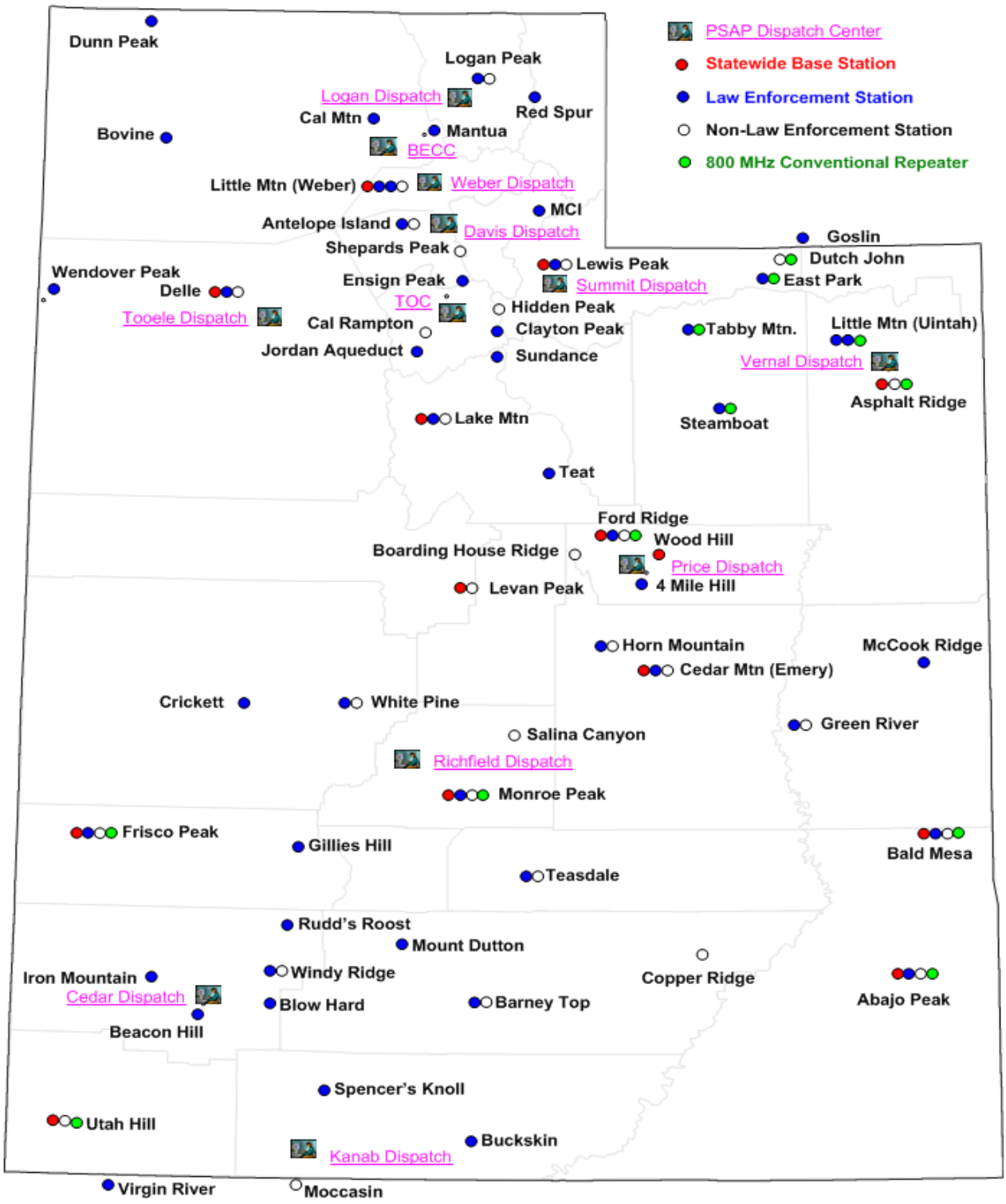


Figure 8. State Repeater System

Local government agencies throughout the state also operate on independent VHF 150 MHz communications systems which are not described in the SCIP. Primary frequencies utilized in each county are listed in Appendix F - Regional VHF Frequency Assignments. The SRS/LES provides communications resources that facilitate interoperability between VHF conventional and 800 MHz trunked networks in the Wasatch Front and Mountain Land regions. The SRS also provides limited 800 MHz conventional analog coverage outside the UCAN network footprint to facilitate interoperability between 800 MHz and VHF statewide. Existing 800 MHz conventional coverage outside the UCAN network footprint is inadequate for statewide interoperability requirements.

Designated Communications Interoperability Channels: The Utah SIEC approves the following list of frequencies to be utilized in the statewide communications plan as designated interoperability resources. Additional channels will be identified by the project team:

Table 10. Shared Interoperability Channels

Primary Use	Name	Description	Mobile Rx/Tx	CTCSS
VHF				
National Call	V –CALL	Mutual Aid	155.7525 / 155.7525 MHz	CSQ
National Tactical	V –TAC 1	Mutual Aid	151.1375 / 151.1375 MHz	CSQ
National Tactical	V –TAC 2	Mutual Aid	154.4525 / 154.4525 MHz	CSQ
National Tactical	V –TAC 3	Mutual Aid	158.7375 / 158.7375 MHz	CSQ
National Tactical	V –TAC 4	Mutual Aid	159.4725 / 159.4725 MHz	CSQ
Law Enforcement	Statewide UHP	Mutual Aid	155.5050 / 155.5050 MHz	CSQ
Law Enforcement	National Law	Mutual Aid	155.4750 / 155.4750 MHz	CSQ
Search & Rescue	Statewide SAR	SAR	155.1600 / 155.1600 MHz	CSQ
Emergency Medical	Statewide EMS	EMS HEAR	155.3400 / 155.3400 MHz	CSQ
Inter-Agency Fire	Statewide Fire	Mutual Aid	154.2800 / 154.2800 MHz	CSQ
UHF				
National Call	U –CALL	Mutual Aid	453.2125 / 458.2125 MHz	CSQ
National Tactical	U –TAC 1	Mutual Aid	453.4625 / 458.4625 MHz	CSQ
National Tactical	U –TAC 2	Mutual Aid	453.7125 / 458.7125 MHz	CSQ
National Tactical	U –TAC 3	Mutual Aid	453.8625 / 458.8625 MHz	CSQ
800 MHz				
Mutual Aid	National 1 (ICALL)	Assigned as needed	866.0125 / 821.0125 MHz	CSQ
Mutual Aid	National 2 (ITAC1)	Assigned as needed	866.5125 / 821.5125 MHz	CSQ
Mutual Aid	National 3 (ITAC2)	Assigned as needed	867.0125 / 822.0125 MHz	CSQ
Mutual Aid	National 4 (ITAC3)	Assigned as needed	867.5125 / 822.5125 MHz	CSQ
Mutual Aid	National 5 (ITAC4)	Assigned as needed	868.0125 / 823.0125 MHz	CSQ
State Mutual Aid	ST TA1	As Assigned	868.4000 / 868.4000 MHz	CSQ
State Mutual Aid	ST TA2	As Assigned	868.4875 / 868.4875 MHz	CSQ
State Mutual Aid	ST TA3	As Assigned	868.7625 / 868.7625 MHz	CSQ
State Mutual Aid	ST TA4	As Assigned	867.1250 / 867.1250 MHz	CSQ
State Mutual Aid	ST TA5	As Assigned	867.7000 / 867.7000 MHz	CSQ
State Mutual Aid	STRPTR1	As Assigned	868.4000 / 823.4000 MHz	CSQ

Primary Use	Name	Description	Mobile Rx/Tx	CTCSS
State Mutual Aid	STRPTR2	As Assigned	868.4875 / 823.4875 MHz	CSQ
State Mutual Aid	STRPTR3	As Assigned	868.7625 / 823.7625 MHz	CSQ
State Mutual Aid	STRPTR4	As Assigned	867.1250 / 822.1250 MHz	CSQ
State Mutual Aid	STRPTR5	As Assigned	867.7000 / 822.7000 MHz	CSQ

CTCSS – Continuous Tone Coded Squelch System
NPSPAC – National Public Safety Planning Advisory Committee

4.3 Standard Operating Procedures

4.3.1 Existing Standard Operating Procedures

The following statewide interoperability SOPs have already been identified and previously approved by the SIEC:

SOP Name	*Agencies Included*	*Disciplines Included*	*SOP Location**	*Frequency of Use*
SOP Name: ***Salt Lake Urban Area TICP*** *SOP Description:* **Tactical Interoperability Communications Plan**	21	13	Utah Division of Homeland Security	Annual Exercise and Daily
SOP Name: **800 MHz Interoperability Talkgroup Utilization**	131	All	UCAN	Daily
SOP Name: **Statewide 505** *SOP Description:* **Operational rules for statewide 155.505 MHz**	368	All	Utah Department of Public Safety	Daily

4.3.2 Planned Standard Operating Procedures

The Utah SIEC SCIP planning subcommittee, in partnership with the Utah Department of Public Safety, the Utah Communications Agency Network (UCAN), and the Division of Homeland Security, is working to develop statewide interoperable communications Standard Operating Procedures (SOPs). These SOPs are envisioned to address inter-agency communications on assets designated as components of statewide (rather than regional) interoperability systems. All statewide SOPs must be approved by the SIEC prior to implementation.

The Utah SIEC SCIP planning subcommittee will leverage these statewide inter-agency communications SOPs to develop an approved SOP template for dissemination and use at the

regional or local level. Dissemination of this template is designed to facilitate a level of SOP standardization across the state, easing inter-agency coordination and cooperation during incidents or events. The SIEC intends to release this template for use by June 30, 2008. Through standing agreements between local agencies and the SIEC, regional and/or local SOPs can also be submitted through the SIEC for review and input. Any regional or local SOPs involving a statewide interoperability asset will require SIEC approval prior to implementation.

Local, regional, and statewide SOPs approved by the SIEC will be cataloged and reviewed annually by the State Interoperability Coordinator. The Coordinator will report back to the SIEC once per year at a regularly scheduled SIEC meeting with details of which SOPs require update or revision. Local or regional representatives can also bring identified SOP modifications to the SIEC at this same meeting. The SIEC SCIP planning subcommittee will be tasked with updating and revising the documents. Cataloging, maintaining, and updating SOPs that do not require SIEC approval is the responsibility of the owning and/or participant agencies.

SIEC approved SOPs will be distributed to stakeholder agencies via the local and regional SIEC representatives, SIEC meetings, the SIEC website, and agency point-of-contact email distribution. Updates to these SOPs will be disseminated in the same fashion.

4.4 Training and Exercises Plan

The Utah Department of Public Safety Division of Homeland Security (DHLS) training group (http://www.cem.utah.gov/training/) is tasked with all regional and statewide training and exercise programs related to emergency management. Specifically, the DHLS "provides high-quality training to members of the Utah emergency management community to help save lives, prevent injuries, protect property, and preserve the environment during major emergencies and disasters."

The DHLS Training Team is authorized by the National Emergency Training Center to deliver in Utah the Field Course Curriculum of the Federal Emergency Management Agency (FEMA). In addition, a training needs assessment is conducted and training is customized to meet the needs of local jurisdictions. Cross-disciplinary training is offered at no-or-low cost to all public sector, volunteer, and non-governmental organizations with a legitimate connection to emergency management or response responsibilities and a desire to enhance their ability to prepare for, respond to, and recover from emergencies and disasters.

DHLS also provides a statewide disaster Exercise Program, in which city, county, agency and organizational emergency plans, policies, procedures and equipment are tested and evaluated through frequent and regular simulated disasters. The State Exercise Officer conducts disaster simulation exercises in all of Utah's twenty-nine counties and many of its cities, and coordinates disaster exercises between the public and private sectors. While many of these exercises incorporate communications capabilities, Utah also engages in at least one multi-agency, multi-jurisdictional, cross-disciplinary exercise annually focused on evaluating the communications capabilities described in the SLUA-TICP.

DHLS also facilitates training for Utah citizens at the National Emergency Training Center in

Maryland, paid for by the Federal Emergency Management Agency (FEMA), recruiting individuals from numerous jurisdictions throughout Utah. Courses and workshops are available at little-or-no cost to all Utah citizens with a legitimate professional or volunteer involvement in emergency management, and can be taken whenever offered, in any order.

As described in detail in the Utah SCIP strategic initiative focused on incorporating interoperable communications into regional and statewide training and exercise programs (see Section 5.4.8 below), the Utah SIEC intends to form a close partnership with DHLS to;

- Incorporate interoperable communications capabilities into existing Homeland Security Exercise and Evaluation Program (HSEEP)-compliant public safety exercises
- Develop communications-focused exercise programs
- Develop statewide mechanisms to allow public safety professionals to achieve appropriate communications certifications
- Promote statewide interoperable communications training courses and certifications

To fully achieve our interoperability goals and objectives, the SIEC and DHLS will focus on involving multiple agencies and jurisdictions in these cross-disciplinary training and exercise opportunities. The Utah SIEC will therefore work closely with the Division of Homeland Security to ensure that appropriate and adequate communications interoperability training objectives are met.

4.5 Usage

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, or national/international sporting events, also require communications interoperability. In addition to existing interoperability systems and procedures, the Utah SIEC is therefore pursuing a statewide interoperability solution that can meet daily communications interoperability requirements and be expanded, when needed, to support large-scale incidents and/or planned events.

A comprehensive process for weekly testing of various statewide system components has been developed by the Utah Division of Homeland Security and is described in the Utah Emergency Communications Center (ECC) Operations Plan (housed in the EOC operational library). This process includes requirements for conducting radio tests with various dispatch centers and field units on a rotating basis statewide to ensure that their systems are operational. The State also conducts weekly HF tests with Denver, CO to ensure interstate connectivity and frequently involves non-governmental organizations such as the American Red Cross. All communications interoperability resources are tested and validated by the Utah Division of Homeland Security based on a predefined schedule. Local and regional systems and assets are tested both in accordance with their internal maintenance procedures and in conjunction with the statewide testing. These systems are also tested on virtually a daily basis as users interoperate on their systems frequently. Non-system based tactical assets (e.g., mobile repeaters, mobile gateways, cache radios, etc.) are tested during training events, exercises, and planned or emergency incidents.

Current and planned public safety exercise opportunities involve a communications component allowing participants to test and utilize various operable and interoperable communications in a realistic, operational setting. For example, Utah conducts an exercise annually specifically to test the SLUA-TICP as directed by the Division of Homeland Security. These types of exercises involve both single-agency events and multi-agency, multi-jurisdictional, and/or multi-discipline events that allow participants to fully test the various interoperability assets on hand.

The State Interoperability Coordinator will report the results of these tests and exercises to the SIEC quarterly. This report will include an assessment of usage statistics such as:

- Number of deployments of mobile assets
- Number of users on various interoperable systems
- Frequency of use of various interoperable assets
- Number of units available for deployment
- Geographical deployment and/or coverage of available mobile devices

5. Strategy

Public safety first responders, incident commanders, support personnel, and the public they serve, recognize the vital role effective communications has during an emergency. The Utah SIEC was established to facilitate discussion and address communications interoperability issues in the public safety community. The following mission statement, goals, and objectives, have been adopted by the SIEC Executive Board:

The Utah SIEC is established to facilitate communications interoperability among public safety agencies, homeland security, and other entities delivering vital services to citizens in the region. It is in the interest of the State to leverage existing infrastructure with emerging technologies to create an interoperable voice and data network that supports the delivery of public safety, homeland security, and other vital services. The Utah SIEC seeks a partnership with agencies in the region to promote the creation of standards and best practices that will improve interoperability communications today and far into the future.

Goals:

1. Establish a positive working relationship with all public safety entities in the state.
2. Promote cooperation between Federal, State, and local government service providers.
3. Provide leadership in the development and implementation of a statewide communications interoperability plan.
4. Establish a long term partnership with public safety service providers and first responders.
5. Provide system planning support for all agencies involved in public safety communications operating in the state.
6. Promote National Incident Management System (NIMS) concepts and compliance statewide.

Objectives:

1. Develop and implement a Statewide Communications Interoperability Plan (SCIP).
2. Establish a Memorandum of Understanding (MOU) with all public safety support and first responder agencies operating in the state.
3. Assist in the development of Standard Operating Procedures (SOP) that will define interoperability best practices in all regions and statewide.
4. Design and implement a statewide interoperability communications network that will support voice and data requirements.
5. Coordinate and manage all frequencies and spectrum designated by the Federal Communications Commission (FCC) for interoperability operations.

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5.1 Interoperability Vision

The Utah SIEC is established to promote and facilitate cooperation between the State and all public safety interests in the region. Vision, leadership, collaboration, and compromise are important to the successful implementation of a statewide communications interoperability project covering all jurisdictional boundaries.

The Utah SIEC recognizes the independence of many agencies in the state that for whatever reason choose to operate systems in relative isolation. It is not the intent of the SIEC to replace existing systems with a *"one size fits all"* multipurpose statewide communications network. However, the SIEC acknowledges its vital interest in a common network platform that can provide functional interconnectivity between disparate systems.

Expanding existing 800 MHz coverage statewide is in the common interest of State and local government agencies currently operating in the Wasatch Front region and agencies operating outside the Wasatch Front region. Interoperability between agencies traveling outside the Wasatch Front region and agencies operating in VHF spectrum cannot be effectively achieved without expanded 800 MHz coverage. Unfortunately the ongoing debate between proponents of 800 MHz and VHF technologies has persistently challenged the realization of statewide interoperability objectives. Rather than continuing the debate the Utah SIEC will work to develop common technology solutions through cooperative partnerships.

Specifically the Utah SIEC proposes the following solution oriented objectives:

- Cooperate with local agencies in each region to determine appropriate technology requirements for interoperability between existing VHF and 800 MHz systems. This can be facilitated using a population based matrix to assist in the selection of appropriate technologies and funding sources. Many regions in the state require only conventional technology resources while more populated areas may require advanced technologies to support public safety requirements.
- Design and implement a statewide radio to IP based network that can support analog and P25 digital interconnectivity. The SIEC recommends that designated interoperability resources be interconnected with a special application IP based network. This option provides independence and autonomy for local agency resources not intended to be available for multi agency utilization while supporting communications interoperability objectives statewide.
- Assist in the establishment of regional SOPs and a statewide SOP for communications interoperability. These SOPs will define specific operational frequencies/talkgroups and the interconnection process required to bridge between available resources.
- Establish an MOU between the SIEC and public safety entities, in all regions of the state, promoting cooperation and partnership in the context of common interoperability goals and objectives.
- Cooperate with local government agencies to develop a long term strategy for legacy system support and migration to emerging technology opportunities in the 700 MHz spectrum when they become available. With increasingly limited spectrum resources in the VHF/UHF bands migration to 700 MHz is an inevitability for many existing systems.

The 700 MHz public safety allocation will also support future mobile data initiatives that are now emerging.

- Identify costs and funding opportunities required to expand 800 MHz coverage statewide and implement a Radio to IP based network supporting interoperability objectives.
- Assist agencies with NIMS compliance for events requiring multiple agency response, command, and control.
- Develop annual training standards and requirements for regional and statewide communications interoperability exercises.

5.2 Mission

The Utah SIEC was created to promote statewide communications interoperability. Prior to the creation of the Utah SIEC several independent efforts to establish communications interoperability in the state were undertaken by various committees and entities with limited success. Statewide communications interoperability has proven to be an elusive objective in the state for over three decades with fragmented systems operating in the 30 – 50 MHz, 150 – 174 MHz, 450 – 470 MHz, 700 MHz and 800 MHz public safety allocations. When Salt Lake City was selected to host the 2002 Winter Olympics in the early 1990's public safety administrators realized that antiquated conventional communications systems in the region were inadequate to handle the impending public safety requirements. In response to public safety advocacy groups and Utah Governor Mike Leavitt the Utah Legislature created the Utah Communications Agency Network (UCAN). UCAN was tasked with the implementation of a statewide 800 MHz trunked radio communications network in support of public safety. At the time UCAN was established Salt Lake City and Salt Lake County were already operating on independent 800 MHz trunked radio systems along with separate conventional VHF 150 MHz and UHF 460 MHz systems. The City of Ogden was also operating on a conventional UHF 460 MHz system. The balance of state public safety agencies operating outside the populated Wasatch Front region were operating on independent conventional VHF 150 MHz radio systems. By the time Salt Lake City hosted the Winter Olympics in 2002, UCAN had successfully consolidated all public safety agencies operating in the Wasatch Front and Mountain Land regions under a single 800 MHz trunked radio network except Salt Lake City and Salt Lake County which continued to operate independent 800 MHz trunked radio systems.

Public safety operations during the Winter Olympics challenged all available communications resources and the UCAN 800 MHz network especially. Despite a near 1000% increase in public safety communications during the Winter Olympics the UCAN communications network exceeded performance expectations. Communications interoperability would have been impossible to achieve during the Winter Olympics without the common air interface UCAN provided. Since the conclusion of the Winter Olympics in 2002 the majority of public safety entities operating in the populated Wasatch Front and Mountain Land regions have continued to operate on the UCAN 800 MHz trunked radio network. The independently operated Salt Lake County 800 MHz trunked radio communications system eventually consolidated with UCAN while the Salt Lake City 800 MHz trunked radio system continues to operate independently. Salt

Lake City and Murray City are the only cities within the UCAN network footprint today that continue to operate independent 800 MHz radio communications systems.

After the Winter Olympics public safety agencies with statewide jurisdiction encouraged UCAN to expand 800 MHz coverage into other regions of the state as defined by UCAN's legislative mandate. Unfortunately UCAN was created under a cost recovery model and the UCAN board of directors failed to act on pressure to expand the network when confronted with the inevitable impact on user rates. Public safety entities who do not subscribe to the UCAN network are not currently represented in the UCAN board of directors. Expanding the UCAN communications network into rural areas of the state will significantly impact UCAN user rates due to the fact that there are currently not enough potential subscribers in less populated areas of the state to offset the cost of network expansion. Meanwhile the Utah Department of Technology Services in partnership with the Utah Department of Public Safety has undertaken the task of expanding conventional analog 800 MHz coverage into rural areas of the state in a limited fashion. Statewide interoperability between existing conventional VHF 150 MHz and 800 MHz systems cannot be achieved without expanding 800 MHz coverage into regions where it currently does not exist.

Recognizing the potential financial and technological impasse between urban and rural regions in the context of statewide interoperability the Utah Department of Public Safety initiated an interim interoperability solution in 2004 involving a common audio bridge between disparate communications systems in the state. In 2004 the Utah Department of Public Safety purchased a Motorola Omni-Link audio bridge that provides limited interoperability between the UCAN 800 MHz trunked radio network, the Salt Lake City 800 MHz trunked radio system, The Utah VHF Statewide Repeater System, and a majority of PSAP dispatch centers in the state. Omni-Link allows interoperability between networks and systems limited by technology constraints inherent in the Omni-Link product.

With the establishment of the Utah SIEC in March 2007 Governor Jon Huntsman encouraged communities and public safety entities in the state to unify around common interoperability standards and objectives. Under the Utah SIEC, Governor Huntsman tasked State Chief Information Officer, Stephen Fletcher, with the responsibility to discover and implement a long term statewide interoperability solution involving all Federal, state, and local government public safety entities' operating in Utah. Following guidance from the Department of Homeland Security, and SAFECOM, the Utah SIEC has adopted the SAFECOM interoperability continuum philosophy as described in *Figure 7.*

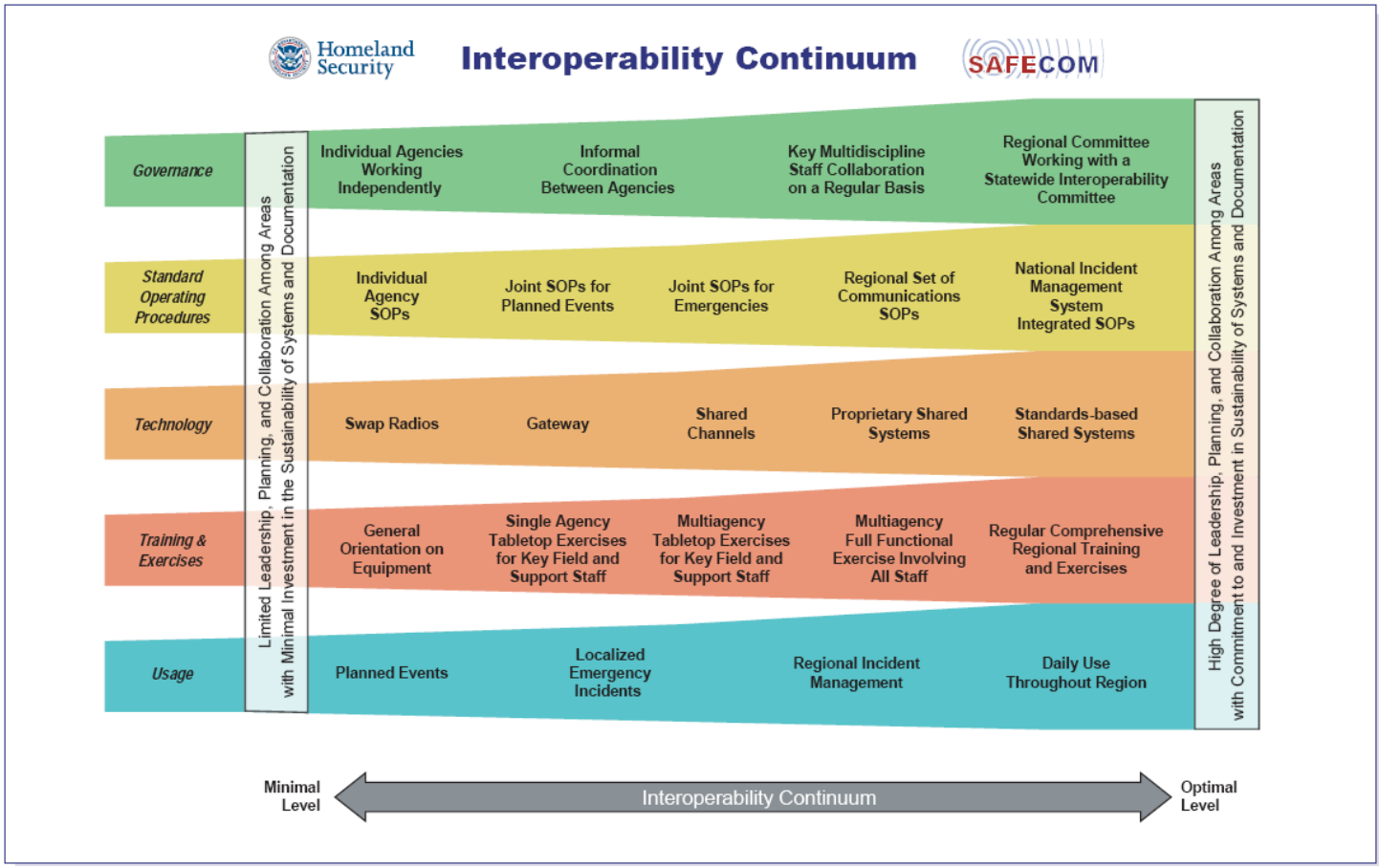

Figure 9. Interoperability Continuum

The Utah SIEC provides appropriate governance with leadership support from major public safety entities statewide. All regional public safety oriented committees in the state are represented on the Utah SIEC executive board. The development of local, regional, and state standard operating procedures integrated with the National Incident Management System (NIMS) is a priority for the Utah SIEC. Through appropriate subcommittee action the Utah SIEC promotes the development of common shared technology standards statewide; including P25 air interface and open standards IP based infrastructure. The Utah SIEC in partnership with the Utah Division of Homeland Security will ensure regular comprehensive regional and statewide communications interoperability training and exercise on an annual basis. The State Interoperability Coordinator will administer training and exercise programs under direction from the Utah SIEC and Division of Homeland Security. The Utah SIEC recognizes the independence of public safety agencies to operate under private communications networks for internal use, but seeks collaboration from all agencies in the development of a statewide interoperability network supporting special events and daily operational requirements.

The primary short term mission objective (3 – 5 year) of the Utah SIEC is to facilitate the planning, multi-agency collaboration, project management, and implementation of a statewide communications interoperability network that interfaces with existing systems operating in VHF

150 MHz and 800 MHz spectrum. Long term (6 – 10 year) mission objectives include the migration of all spectrally inefficient analog communications systems in the state to more efficient P25 digital technology interconnected with a standards based IP based network statewide. Current 800 MHz rebanding efforts will allow current communications systems operating in the 800 MHz public safety allocation to incorporate 700 MHz channels into the same systems. The Utah SIEC promotes the future utilization of 700 MHz channels incorporated into existing 800 MHz networks as current systems are migrated to P25 digital air interfaces. The UCAN and Salt Lake City 800 MHz trunked radio networks currently operate with Motorola version 4.x SmartNet/SmartZone system controllers. Both systems face an inevitable migration to Motorola 7.x technology within the next decade due to end of life support issues Motorola has imposed on 4.x technology. The Utah SIEC promotes migration to 7.x technology in both systems within the next 3 – 5 years in order to utilize P25 air interface and IP based interconnection technology not available in 4.x systems. Motorola 7.x controllers connected to currently implemented Omni-Link technology promises to expand the states communications interoperability strategy between VHF 150 MHz and 800 MHz communications resources with fewer limitations than are currently present in the system. The Utah SIEC proposes to use available funding to facilitate the purchase and implementation of 7.x controllers as soon as practicable.

5.3 Goals and Objectives

In the context of the statewide communications interoperability project the Utah SIEC has identified the following goals and objectives with timeline estimates for completion. Each of the following will be reviewed, and revised if necessary, by the SIEC board of directors semi-annually.

Goals (5 – 10 year)

1. Implement a NIMS compliant communications interoperability system utilizing designated VHF and 800 MHz radio resources in combination with additional VHF and 800 MHz radio resources required to provide 80% overlapping mobile coverage statewide.

Objectives:

a. Determine technical requirements for 80% statewide VHF and 800 MHz coverage.
b. Select appropriate locations for interoperability base stations and repeaters.
c. Determine backhaul infrastructure requirements to an IP based master controller (Gateway).
d. Identify and secure funding.
e. Purchase and install an IP based controller (Gateway)
f. Purchase and install additional base stations and repeaters as required.
g. Test system for performance expectation.
h. Develop, publish, and promote an internet based training program.

2. Expand current interoperability capabilities of the Motorola Omni-Link audio bridge to include an interface with the state IP based interoperability controller.

   Objectives:

   a. Determine interconnectivity requirements between the currently deployed Motorola Omni-Link audio bridge and the new IP based Motorola version 7.x controller.
   b. Implement network interconnectivity between the currently deployed Motorola Omni-Link audio bridge and the new IP based Motorola version 7.x controller.
   c. Establish procedures for initiating a patch between 800 MHz talkgroups on the UCAN network to interoperability resources on the state controller.

3. Establish regional and statewide standard operating procedures for interoperability between VHF and 800 MHz systems.

   Objectives:

   a. Assign interoperability designation to appropriate 800 MHz and VHF 150 MHz resources both regionally and statewide.
   b. Establish standard operating procedures for the utilization of interoperability resources.

4. Implement common channel naming and programming standards statewide.

   Objectives:

   a. Create common channel naming standards based on the Channel Naming Report published by the National Public Safety Telecommunications Council (NPSTC).
   b. Establish statewide support for the adoption of common channel names and programming.
   c. Develop, publish, and promote an internet based training program.

5. Successfully implement NIMS compliant training and exercise programs for each region and statewide.

   Objectives:

   a. Work in partnership with the Utah Division of Homeland Security to identify current NIMS compliant training opportunities.
   b. Develop region specific communications interoperability training programs incorporating NIMS requirements and procedures.
   c. Implement regional and statewide training in cooperation with the Utah Division of Homeland Security.

d. Identify annual exercise opportunities in cooperation with the Utah Division of Homeland Security.
e. Assist the Utah Division of Homeland Security with the implementation of communications interoperability exercises at least annually.

Goals (3 – 5 year)

1. Statewide VHF/UHF narrowband migration project to improve spectrum efficiency.

   Objectives:

   a. Identify non-narrowband capable public safety radio equipment and infrastructure currently operating in the state.
   b. Identify active FCC licenses for public safety that require modification to allow narrowband modulation.
   c. Determine funding requirements for replacement equipment and FCC license modification.
   d. Implement required equipment replacements and license modifications.
   e. Develop, publish, and promote an internet based training program.

2. Implement standards based P25 digital technology.

   Objectives:

   a. Identify communications interoperability resources that can be transitioned to a P25 digital air interface based on potential benefits for end users.
   b. Implement P25 digital air interface transition on selected analog conventional base stations and repeaters.

Goals (5 – 10 year)

- Implement standards based P25v.2 air interface technology.

  Objectives:

  a. Establish support for a migration strategy to P25v.2 air interface technology for all operating public safety systems statewide.
  b. Provide purchasing guidance for all public safety entities operating in the state to ensure equipment compatibility.
  c. Identify funding requirements and sources.
  d. Implement replacement strategy for all non-compliant infrastructure and end user equipment statewide.

5.4 Strategic Initiatives

In recognition of the importance communications interoperability plays in the preservation of life, and the protection of property, during an emergency Governor Jon Huntsman established the Utah SIEC. Governor Huntsman also approved a strategic initiative calling for a statewide communications interoperability project. The statewide project is directed to involve all public safety entities operating in the state region and is to be administered by the Utah SIEC. The Utah SIEC is specifically tasked with improving statewide and interstate communications interoperability. In an effort to avoid politically motivated competition between state agencies, UCAN, local governments, non-governmental public safety organizations, commercial service providers, and vendors, Governor Huntsman delegated his authority to the State CIO and the Utah SIEC executive board of directors. The State CIO acts as chairperson for the Utah SIEC that has primary responsibility to oversee the development and implementation of a statewide communications interoperability project. It is Governor Huntsman's intent that the Utah SIEC should develop sustainable policy and implement statewide standards with respect to communications interoperability systems and networks.

The following strategic initiatives were discussed and selected by SCIP planning subcommittee members. Initiative priority was determined through a consensus decision during a SCIP development workshop. As work on these initiatives commences, the Utah SIEC will develop a mechanism for gauging and reporting on initiative progress.

Timeframes for these initiatives have been defined as "short term" (0-6mo), "medium term" (6mo-3yr), and "long term" (3yrs-10yrs).

Strategic initiatives identified by the State CIO and managed by the Utah SIEC are as follows:

5.4.1 Establish regional and statewide standard operating procedures

Task: Develop regional and statewide interoperable communications SOPs envisioned to address inter-agency communications on assets designated as components of statewide and regional interoperability systems.

Timeframe: Medium

Priority: High

Action Plan:

Statewide SOPs

1) Task the SIEC Planning Subcommittee to develop statewide interoperable communications SOPs for interoperability between VHF and 800 MHz systems
2) Gather and incorporate existing statewide communications SOPs into future SOP language
3) Review existing SOPs for NIMS compliance
4) Develop statewide interoperable communications SOPs
5) Obtain SIEC and State Interoperability Coordinator approval on the developed SOPs

6) Leverage the statewide interoperable communications SOPs to develop an SIEC approved SOP template
7) Disseminate the SIEC approved SOP template
8) Develop a recommended training program for familiarizing users with approved SOPs
9) Incorporate updated communications SOPs into planned training, exercise, and planned event opportunities.
10) Assess the outcome of these training and planned events
11) Develop and implement an SIEC process for annual review and revision of SOPs to maintain applicability and sustainability
12) Revise the SOPs on an annual or as needed basis.

Regional SOPs

1) Task working groups in each homeland security planning region to develop any applicable regional interoperable communications SOPs
2) Gather and incorporate existing regional communications SOPs into future SOP language
3) Review existing SOPs for NIMS compliance
4) Develop regional interoperable communications SOPs utilizing the SIEC-provided SOP template
5) Submit regional SOPs to the SIEC for review and/or approval, as needed
6) Develop a recommended training program for familiarizing users with approved regional SOPs
7) Incorporate updated communications SOPs into planned training, exercise, and planned event opportunities.
8) Assess the outcome of these training and planned events
9) Develop and implement a regional process for annual review and revision of SOPs to maintain applicability and sustainability
10) Revise the SOPs on an annual or as needed basis.

Critical Milestones:

1) Initiate SIEC Planning Subcommittee tasking by April 30, 2008
2) Initiate the regional SOP assessment by May 30, 2008
3) Submit SOP template to SIEC for approval by June 1, 2008
4) Disseminate the SIEC approved SOP template to all state, regional, local, tribal, and non-governmental stakeholders by June 30, 2008
5) Obtain SIEC approval on statewide SOPs by August 30, 2008
6) Develop statewide SOP training mechanism by September 30, 2008
7) Initiate development of regional SOPs by July 30, 2008

Performance Metrics:

1) Meet all NIMS compliance requirements
2) Describe the approved mechanisms for using statewide interoperability equipment
3) Provide training on developed SOPs to all appropriate stakeholders and end users

Challenges/Hazards:

1) Impact of a lack of inter-agency or inter-regional cooperation
2) Impact of a postponed statewide template on the development of regional SOPs

5.4.2 Secure long-term sustainment funding and resources

Task: Secure additional long-term sustainment funding and resources in addition to Federal and/or State grant allocations. A comprehensive funding strategy is essential to Utah's ability to support and implement this SCIP. A dedicated, sustainable funding stream allows planners to appropriately invest in communications solutions and make significant impacts toward closing identified communications gaps.

Timeframe: Medium

Priority: High

Action Plan:

1) Pursue funding for a SIEC directed task force to evaluate ongoing statewide communications progress and needs
2) Identify the current and projected future statewide funding need
3) Identify potential funding sources
4) Investigate the feasibility of procuring long-term funding (e.g., tax increases, bonds, partnerships, etc.)
5) Engage in outreach programs to bring awareness of the public safety communications funding need to the appropriate funding and/or legislative entities
6) Participate in any/all appropriate grant application programs
7) Develop partnerships with organizations to submit state budget initiatives supported by stakeholder input
8) Secure identified funding
9) Allocate procured funding to approved projects and initiatives

Critical Milestones:

1) Meet all grant program application deadlines and requirements
2) Meet all state legislative meeting cycles

Performance Metrics:

1) Quantitative assessment of additional dollars secured for statewide communications initiatives
2) Quantitative assessment of additional initiatives accomplished with procured funds
3) Qualitative measure of additional agency relationships developed and strengthened through the funding procurement process

Challenges/Hazards:

1) Cooperation among potentially competing agencies/organizations
2) Impact of denied grant applications
3) Impact of annually fluctuating current funding sources
4) Impact of the overall statewide and nationwide economy
5) Impact of the preferential funding of other priority projects
6) Impact of inflation and cost increases due to funding delays
7) Impact of an incident of national significance that raises the level of concern regarding funding interoperable communications-related initiatives

5.4.3 Enhance the statewide communications interoperability system

Task: Cooperate and collaborate with all Utah statewide public safety, tribal, and non-governmental stakeholders to enhance the current statewide interoperable communications system-of-systems based on a migration from dedicated infrastructure to shared infrastructure using an IP based controller capable of interconnecting communications resources from multiple existing and future communications networks operating in the state.

Timeframe: Long

Priority: High

Action Plan:

1) Determine technical requirements for statewide VHF and 800 MHz coverage
2) Investigate the applicability of incorporating standards based P25 digital technology
3) Select appropriate locations for interoperability base stations and repeaters
4) Determine backhaul infrastructure requirements to an IP based master controller (Gateway)
5) Identify and secure funding (see strategic initiative 5.4.2)
6) Purchase and install an IP based controller (Gateway)
7) Purchase and install additional base stations and repeaters as required
8) Test system for performance expectation
9) Develop, publish, and promote associated statewide SOPs (see strategic initiative 5.4.1)
10) Develop, publish, and promote an internet based training program

Critical Milestones:

1) Completion of the technical requirements assessment
2) Acquisition and installation of the IP gateway
3) Acquisition and installation of additional base stations and repeaters
4) Acquisition and distribution of additional radios

Performance Metrics:

1) Achievement of the 80% (portable) and 90% (mobile) statewide coverage objective
2) Demonstrable improvement in the ability to access interoperable assets via computerized means

Challenges/Hazards:

1) Impact of insufficient and/or delayed funding
2) Impact of the completion of associated strategic initiative 5.4.1 (SOP development)
3) Impact of an unanticipated need for additional infrastructure to achieve the desired coverage due to narrowbanding
4) Impact of delays in receiving required hardware

5.4.4 Coordinate interoperable communications with neighboring states

Task: Coordinate interstate communications with Colorado, Wyoming, Idaho, Nevada, Arizona, and New Mexico.

Timeframe: Long

Priority: High

Action Plan:

1) Identify statewide stakeholders willing to initiate development of a strategy to enhance interstate communications with Utah's neighboring states.
2) Leverage existing interstate and tribal partnerships (i.e. the Region Four Corners [R4C] committee) to initiate discussions regarding the current cross-border interoperability capabilities and needs
3) Develop draft interstate communications for each impacted Utah region.
4) Present each regional interstate communications plan to the SIEC for input and/or approval, as needed
5) Develop SOPs to support each regional interstate communications plan.
6) Incorporate regional interstate communications plan into existing cross-disciplinary training and/or exercise programs
7) Incorporate needs identified through the regional interstate communications planning process into future SCIP initiatives

Critical Milestones:

1) Award of requested PSIC funding allocated for assets that will be incorporated in four corners area through the R4C committee
2) Activation of agreements with Colorado, New Mexico, and Arizona to share CASM data in order to perform a four-corners area interoperability assessment

Performance Metrics:

1) Qualitative and quantitative output of the four corners CASM assessment
2) Increased cooperation, contact, and coordination with communications partners in bordering states
3) Improved capacity to address calls for service and critical incidents that span state lines

Challenges/Hazards:

1) Impact of non-cooperation and/or competing priorities of other states

5.4.5 Complete the statewide adoption of uniform channel naming and programming convention

Task: Promote the statewide public safety adoption of a uniform channel naming and programming convention similar to the guidance provided by the Channel Naming Report published by the National Public Safety Telecommunications Council (NPSTC).

Timeframe: Short

Priority: High

Action Plan:

1) Create common channel naming standards similar to the guidance provided by the Channel Naming Report published by the NPSTC
2) Establish statewide support for the adoption of common channel names and programming
3) Implement comprehensive channel naming and programming standards involving all communications resources statewide.
4) Develop, publish, and promote an internet based training program for users on the revised channel naming protocols

Critical Milestones:

1) Identified the impacted statewide interoperable talkgroups, channels, and/or frequencies by June 15, 2008
2) Produce, approve, and disseminate a list of impacted statewide interoperable talkgroups, channels, and/or frequencies by July 15, 2008
3) Sign required MOUs by August 30, 2008
4) Reprogram approved user equipment (i.e. consoles, portable radios, and mobile radios) to meet the new naming conventions by October 30, 2008

Performance Metrics:

1) Development of signed and approved MOUs specific to statewide channel names and programming
2) Number of programming compliant public safety agencies and/or organizations
3) Number of reprogrammed consoles, portable, and mobile radios.

Challenges/Hazards:

1) Impact of insufficient or delayed funding for radio reprogramming
2) Impact of legal process delays
3) Impact of the physical limitations of existing subscriber unit visual displays

5.4.6 Develop a statewide strategy to address a catastrophic loss of communications assets

Task: Develop robust communications redundancies designed to provide emergency communications capabilities in the event of a catastrophic system and/or infrastructure loss.

Timeframe: Medium

Priority: Medium

Action Plan:

Strategic Technology Reserve (STR)

1) Conduct a statewide redundancy assessment to determine the known capabilities and gaps in communications redundancy
2) Determine the requirements of an STR including needed technologies, best locations for storage, and existing limitations.
3) Determine how current funding streams can best be applied to improve those gaps

4) Develop STR response plans detailing how this equipment will be requested, activated, deployed, and deactivated in support of a planned event or emergency incident within the state.
5) Coordinate any local, tribal, or regional STR capabilities with the addition of State and/or statewide resources
6) Develop and field applicable public safety agency training programs

Recovery from a Catastrophic System and/or Infrastructure Loss

1) Determine the current statewide capability to maintain public safety operations in the event of a major system failure (i.e. determine the effectiveness of existing VHF and 800MHz systems to act as a redundant capability for one another)
2) Determine the necessary public safety and/or private sector resources needed to recover from a catastrophic communications system and/or critical infrastructure loss
3) Develop emergency agreements with all required stakeholders to ensure access and service in the event of a catastrophic communications loss
4) Develop response plans for applicable public safety and/or private sector organizations detailing a communications systems failure and the loss of critical infrastructure (e.g., communications centers, EOCs, communications towers, etc.)

Critical Milestones:

1) Completion of an STR project charter by August 2008 to identify the project sponsor, stakeholders, and completion objectives.
2) Completion of a comprehensive statewide needs assessment by September 2008
3) Establish technology requirements and associated engineering documentation by January 2009
4) Establish purchasing contracts and authority March 2009
5) Purchase, receive, program, and deploy end user equipment August 2009
6) Execute compliance tests on purchased equipment to ensure usability and adherence to purchase requirements by September 2010
7) Close the project and deliver a system status report to the Utah SIEC by December 2010

Performance Metrics:

1) Adherence to project timeline and meeting all project completion dates
2) Assessment of increased capacity to augment and/or reestablish damaged communications statewide
3) Quantitative assessment of the increased number of STR equipment caches available statewide

Challenges/Hazards:

1) Impact of vendor availability to provide purchased equipment on the allotted timeline
2) Impact of multi-agency coordination to determine appropriate STR technology assets, deployment sites, procedures, etc.
3) Impact of any delays in receiving PSIC grant funding

5.4.7 Develop a strategy for addressing communications interoperability with major public and private transit systems statewide

Task: Develop a strategy for incorporating the interoperable communications capabilities and needs of public and private transit systems (e.g., TRACKS, Front Runner Commuter Rail System, Utah Transit Authority [UTA], Amtrak, Union Pacific security, etc.) into the statewide interoperability strategic planning process. Note that there are no passenger or cargo ports in the state of Utah.

Timeframe: Medium

Priority: Medium

Action Plan:

1) Identify all appropriate transit partners within the state of Utah. Include information specific to their transit type, service area, communications systems, and number of communications users.
2) Develop partnerships with those agencies in order to identify their current interoperable communications capabilities and needs
3) Develop a mechanism to raise transit communications needs to the SIEC for consideration and incorporation into future strategic planning processes

Critical Milestones:

1) None identified at this time (pending collaboration with appropriate transit agencies to determine their capabilities and needs)

Performance Metrics:

1) Increased participation of transit agencies in SIEC meetings
2) Increased documentation of transit capabilities and needs in future SIEC and SCIP reports

Challenges/Hazards:

1) Impact of cooperation between public safety and transit agencies

5.4.8 Incorporate interoperable communications into regional and statewide training and exercise programs

Task: Partner with the Utah Division of Homeland Security to facilitate NIMS compliant training and exercise programs incorporating interoperable communications policies, procedures, and assets.

Timeframe: Medium

Priority: Medium

Action Plan:

Training

1) Work in partnership with the Utah Division of Homeland Security to identify current NIMS compliant training opportunities.

2) Pursue nationally available communications-oriented training opportunities such as:
    i. Communications Unit Leader (when available)
    ii. Communications Unit Awareness Course (when available)
    iii. APCO telecommunicator training courses
    iv. Applicable NIMS/ICS training courses
    v. American Radio Relay League (ARRL) courses
3) Develop region specific communications interoperability training programs incorporating NIMS requirements and procedures.
4) Implement regional and statewide training in cooperation with the Utah Division of Homeland Security.

Exercises

1) Identify existing annual Homeland Security Exercise and Evaluation Program (HSEEP)-compliant exercise opportunities in cooperation with the Utah Division of Homeland Security.
2) Partner with the Division of Homeland Security to incorporate interoperable communications capabilities into existing exercise opportunities
3) Partner with the Utah Division of Homeland Security to execute annual communications interoperability-focused exercises.

Critical Milestones:

1) Incorporating communications capability requirements into annual exercise planning workshop cycles
2) Meeting training registration deadlines
3) Meeting annual competency and continuing education/training requirements

Performance Metrics:

1) After action assessments of communications capabilities following operational and communications-focused exercises and real-life events
2) Measured capability progress through the Corrective Action Program (CAP) following an exercise
3) Quantitative assessment of the number of participants completing each given training and/or exercise annually
4) Quantitative assessment of the number of personnel statewide completing communications competency certifications

Challenges/Hazards:

1) Impact of fluctuating funding for staff training and/or exercise participation
2) Impact of limited time available for staff training and/or exercise participation
3) Impact of the availability of courses and certified instructors

5.4.9 Develop an operational manual for each homeland security region

Task: Develop an operational manual of interoperability SOPs, assets, coverage, and accessibility for each homeland security region

Timeframe: Medium

Priority: Medium

Action Plan:

1) Develop a working group and/or SIEC subcommittee to determine the appropriate content and format for the operational manual template
2) Develop and obtain SIEC approval for the final operational manual template
3) Collect the require data specific to each homeland security region
4) Incorporate region-specific information into each operational manual
5) Obtain SIEC approval on the final manual for each region
6) Distribute operational manuals to agencies and users in each region
7) Develop a secured internet-based training protocol to be disseminated to agencies and organizations in each region
8) Develop a regional maintenance and update process for the regional operational manuals

Critical Milestones:

1) Complete the operational manual template by January 2009
2) Complete all regional operational manuals by January 2010

Performance Metrics:

1) Assessment of the number of completed regional operational manuals by the projected project completion date
2) Assessment of the number of distributed manual copies in each region
3) Assessment of the number of users who complete the internet-based training on the operational manual in each region

Challenges/Hazards:

1) Impact of the completion of statewide and regional interoperable communications SOPS
2) Impact of the acceptance and implementation of interoperable channel naming and programming protocols

5.4.10 Promote increased spectrum efficiency

Task: Transition existing systems operating in the VHF 150 MHz and UHF 450/460 MHz spectrum to narrowband modulation emission standards within the next 3 years.

Timeframe: Medium

Priority: Medium

Action Plan:

1) Identify non-narrowband capable public safety radio equipment and infrastructure currently operating in the state.
2) Identify active FCC licenses for public safety that require modification to allow narrowband modulation.
3) Determine funding requirements for replacement equipment and FCC license modification.
4) Implement required equipment replacements and license modifications.
5) Develop, publish, and promote an internet based training program.

Critical Milestones:

1) Desired completion of narrowbanding is January 1, 2011 to avoid a reduction in existing capabilities due to re-licensing that makes public safety agencies secondary users on their frequencies
2) Full completion of narrowbanding must be completed statewide by January 1, 2013

Performance Metrics:

1) Quantitative reduction in the number of agencies and/or systems operating in a broadband capacity
2) Quantitative increase in the number of agencies and/or systems operating in a narrowband capacity

Challenges/Hazards:

1) Impact of narrowbanded frequencies for public safety use in Utah
2) Impact of delayed and/or unavailable funding to pay for frequency coordination/licensing
3) Potential Impact of a reduced coverage area which could increase the need for additional radio sites

5.4.11 Develop capabilities for statewide data interoperability

Task: Enhance existing statewide capabilities and the strategy for enabling appropriate data interoperability for public safety agencies.

Timeframe: Long

Priority: Low

Action Plan:

1) Identify statewide stakeholders interested in researching current capabilities and best practices related to data interoperability nationwide
2) Initiate a statewide data interoperability needs and capability assessment
3) Identify current and projected technologies that could be applied to documented data interoperability needs

Critical Milestones:

1) None identified at this time (movement on this initiative is pending resolution of the nationwide public safety broadband issue)

Performance Metrics:

1) None identified at this time (movement on this initiative is pending resolution of the nationwide public safety broadband issue)

Challenges/Hazards:

1) Impact of a delayed or non-resolution of the nationwide public safety broadband issue
2) Impact of the delayed development and/or acceptance of technology standards for data interoperability
3) Impact of competing vendor technologies on available tools and asset cost-effectiveness

5.5 National Incident Management System (NIMS) Compliance

The Utah SIEC recognizes the value of policy-based communications over traditional centralized models. National Incident Management System (NIMS) operating procedures require a standardized on-scene management construct referred to as the Incident Management System (ICS) for all hazards designated events. ICS is designed to provide for the adoption of an integrated organizational structure reflecting the complexity and demands of the incident without being hindered by jurisdictional boundaries. In other words, ICS provides flexibility for on-site command and control reflecting the complexity of the incident. The problem generally associated with current centralized command and control models is that incident commanders and first responders can effectively take action and issue orders only from specific locations i.e., mobile command centers, PSAP dispatch centers, and emergency operations centers.

The Utah SCIP proposes NIMS compliant communications interoperability through the allocation of communications channels and resources based on incident requirements rather than pre-allocation of resources to independent public safety disciplines and jurisdictions. Channels/Talkgroups and communications resources operating under the statewide interoperability project will be dynamically allocated as needed in support of the on-site ICS incident commander. IP based network interconnectivity will allow incident commanders access to communications resources currently only available from PSAP dispatch centers. An IP based network also supports all IP-enabled end user devices, including mobile radios, computers, VoIP wireline phones, wireless phones, handheld devices, etc. This NIMS compliant decentralized model will provide greater communications flexibility and allow for distributed command and control from virtually any location. Template based standard operating procedures and plain language operational policies will also provide flexibility for ICS as interoperability requirements change. The Utah SIEC is fully committed to integrating NIMS operating procedures into the statewide communications interoperability plan and Utah SIEC policy.

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5.6 Review and Update Process

The Utah SIEC Executive Board has the responsibility to review this document semi-annually. Requests for modification and revision should be submitted to the SCIP point of contact (see Section 2.3) for consideration and recommendation. The point of contact will submit all correspondence received to the State CIO and Executive Committee for approval if necessary. Revision proposals can also be recommended by any of the advisory user groups or subcommittees of the Utah SIEC. Agencies participating in this plan will be formally notified by email within 15 business days of any modifications or additions to the Utah SCIP.

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6. Implementation

Implementing our diverse and far-reaching strategic initiatives will require the cooperation and participation of all the local, tribal, regional, State, and non-governmental stakeholders involved. Utah intends to leverage existing local and regional project models to ensure a bottoms-up approach to implementing these strategic initiatives. For example, the R4C committee is a multi-state partnership involving tribal governments, local agencies, and each state's Department of Homeland Security. The R4C will directly lead implementation of the statewide interoperability system-of-systems enhancements impacting the four corners region. Further interstate interoperability initiatives will be addressed by the Region 41 Planning Committee (in cooperation with their counterparts in Arizona, Idaho, Nevada, New Mexico, Wyoming, and Colorado) that is also comprised of local, tribal, state, and non-governmental representatives.

In addition to the Utah SIEC (which itself is comprised of local, regional, tribal, and State cross-disciplinary stakeholders), each homeland security region has a regional planning committee also comprised of the multi-agency, multi-jurisdiction stakeholders in that region impacted by or involved with interoperability. Many of the discrete tasks required to implement the above listed strategic initiatives in each region will be accomplished by these partners and their respective agencies as we move forward statewide.

The only state-sponsored initiative is the IP gateway, primarily because the SIEC itself does not have the purchasing authority to acquire the needed equipment. However, the SIEC and its constituent members will be heavily leveraged for input on technical specifications, system requirements, and operational applications as the project moves forward. In this way, each local, tribal, or regional entity that will benefit from this statewide system enhancement will be directly involved with the development and implementation of this initiative.

6.1 Performance Measures

Identified performance measures for each strategic initiative are detailed above in Section 5.4.

6.2 Critical Success Factors

Several factors (including funding, cooperation, technology availability, and policy development) will be key to implementing the strategic initiatives set forth in this SCIP. Critical success factors identified for each strategic initiative are detailed above in Section 5.4.

6.3 Educating Policy Makers

In order to achieve these interoperable communications strategic initiatives, the Utah SIEC and its constituent members cannot understate the importance of fostering support and awareness at the executive level statewide. The executive officials of our public safety agencies, local and regional legislatures, and State government officials play a key role in supporting, funding, and

driving communications achievements. In order to fully incorporate our executives and policy makers into this process, Utah intends to conduct educational opportunities such as:

- Briefing executives on the current state of interoperability in Utah
- Briefing executives and obtain executive level signature and buy-in on the finalized SCIP.
- Producing regular update memos to executive officials on SCIP progress, accomplishments, and needs
- Conducting executive-level communications-focused exercises, wherever possible
- Incorporating interested executives in SIEC meetings, public safety exercises, etc.

Specifically, the Utah SIEC intends to brief the Chiefs of Police Association, Sheriff's Association, Utah League of Cities and Towns, and the Association of Counties during their biannual events by creating a training track opportunity for each conference. The SIEC will also work to develop an educational opportunity on the agenda for the public safety related subcommittees of the State Legislature.

6.4 Educating Practitioners

Providing end user familiarity with the technology and procedures associated with the above strategic initiatives is essential to the success of our interoperability plans in Utah. Training programs and training needs overall are specifically identified in strategic initiative 5.4.8 above and are included for each strategic initiative in Section 5.4.

7. Funding

Current funding

One of the primary responsibilities of the Utah SIEC is to seek support for project funding, including possible Federal or other funding, for state sponsored wireless communications systems. The Utah SIEC also must identify sustainable funding sources for system implementation and recurring costs, such as equipment replacement and operation costs. The Utah SIEC functions as a collaborative advisory board with limited internal funding.

Current funding for interoperable communications within the state of Utah relies on various sources including state and federal grants (e.g., UASI grants, PSIC grants, COPS grants, etc.), legislative appropriations (i.e. for the Omni-link project), local budget allotments, and rate recovery programs.

At the State level, funding is provided through both legislative appropriations and a rate recovery structure. Utah provides infrastructure statewide and recovers that money by collecting a use fee for that infrastructure. Some regional systems (i.e. the UCAN system) also use a similar rate recovery system to collect sustainment fees from system users.

In addition to the funding described above, specific current funding from the PSIC interoperability grant program is proposed for various SIEC initiatives within the statewide interoperability project. The following table demonstrates proposed funding for each SIEC initiative:

Table 11. Proposed Funding from PSIC Grant Program

Interoperability Project	**Proposed Funding**
Bear River Region Project	$2,500,000.00
Mountain Land Region Project	$320,000.00
Wasatch Front Region Project	$645,000.00
Uintah & Southeastern Region Project	$1,450,000.00
Six County Region Project	$186,000.00
Southwestern Region Project	$2,392,000.00
State Project	$1,880,000.00
Strategic Technology Reserve	$900,000.00

Comprehensive future funding plan

Currently, the budgetary process is segmented at both the local and state level with no “roll up” under any one given group statewide. Utah is currently evaluating ways to coordinate these disparate budgetary programs to an appropriate extent that would ease interoperability funding for statewide initiatives. The Utah SIEC Chair has taken the responsibility for investigating

future sustainable funding solutions and has been tasked with developing a project management plan that addresses projected costs and needed resources.

As a way to leverage current statewide projects, the Utah SIEC hopes to implement a statewide charge-based model that could provide funds for statewide interoperability costs. For example, Utah currently obtains funding for public safety answering point (PSAP) operations from a 9-1-1 charge-based funding program considered an ideal model for future interoperability funding expansions. Finally, the proposed projects detailed above are designed in part to reduce current sustainment costs in order to make the existing funding reach further.

8. Close

The Utah SIEC was established on March 08, 2007, by executive order. The primary objective in creating a statewide interoperability executive committee involves collaboration, planning, funding, and implementing a statewide communications project. The Utah SCIP is the primary planning document in the statewide project; establishing vision, mission objectives, and common technology standards. The SCIP is subject to revision as necessary by the Utah SIEC executive board. Major initiatives described in the SCIP include the following:

- Plan and implement a statewide communications interoperability system including statewide 800 MHz coverage expansion.
- Implement a System of systems communications interoperability model
- Establish regional and statewide standard operating procedures
- Adoption of uniform channel naming and programming convention
- Develop regional and statewide training and exercise programs
- Promote increased spectrum efficiency
- Implement standards based P25 digital technology
- Promote the (Long Term) migration of primary statewide interoperability systems to 700 MHz
- Promote the utilization of a nationwide 700 MHz public safety broadband network
- Develop a sustainable long term funding strategy

The Utah SIEC understands that statewide communications interoperability is an ongoing process in which continued active involvement of its members will be required. The development of a statewide communications interoperability plan is an initial step with many more to follow. The Utah SIEC is actively working with its federal, state and local partners to gain support for the statewide communications interoperability project. Current and future funding opportunities are dependent on strong administrative support for the plan, from all levels within the public safety community including state and local governments, and the Utah legislature. The Utah SIEC is committed to building the necessary support through collaborative efforts and vigorous active promotion of the statewide project.

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Appendix A. Executive Order

Issued: March 8, 2007

EXECUTIVE ORDER

Creating the Utah State Interoperability Executive Committee

WHEREAS, it is in the interest of the state to provide voice and data technology resources and services that facilitate interoperability among state and other agencies delivering public safety, homeland security, and other vital services to citizens;

WHEREAS, the agencies that serve the interests of public safety, homeland security, and other vital services are operating on multiple technologies provided by multiple agencies and vendors that are often not interoperable;

WHEREAS, it is in the interest of the state to leverage existing infrastructure with emerging technologies to create an interoperable voice and data network that supports the delivery of public safety, homeland security, and other vital services;

WHEREAS, the development of interoperable services and related technologies requires a high level of coordination and communication among entities providing such services;

NOW, THEREFORE, I, Jon M.Huntsman, Jr., of the State of Utah, by virtue of the authority vested in me by the laws and Constitution of the State of Utah, hereby order the following:

1. There is created the Utah State Interoperability Executive Committee (SIEC) Board.

2. The board shall:

a. Promote wireless technology information and interoperability among local, state, federal, and other agencies.

b. Provide a mechanism for coordinating and resolving wireless communication issues among local, state, federal, and other agencies.

c. Coordinate statewide efforts for implementation of interoperable statewide voice and data networks.

d. Improve data and information sharing and coordination of multi-jurisdictional responses using the Utah SIEC.

e. Leverage existing state resources and develop a network that will provide seamless, coordinated, and integrated communication for local, state, federal, and other agencies.

f. Identify opportunities to consolidate infrastructures and technologies.

g. Evaluate current technologies and determine if they are meeting the needs of agency personnel in their respective service areas.

h. Develop and recommend short and long-term proposals for future communication needs.

i. Serve as Utah's State Interoperability Executive Committee (SIEC) as outlined and governed by the Federal Communications Commission.

i. Form Memorandums of Understanding (MOU) between agencies in support of proactive planning efforts.

ii. Create and maintain procedures for requesting interoperability channels.

iii. Administer interoperability spectrum.

iv. Develop and maintain a statewide interoperability plan.

3. Members of the board shall be a single appointment, made by their agency's Executive Director (or equivalent). The following agencies will be represented:

a. Utah National Guard

b. Utah Department of Transportation

c. Utah League of Cities and Towns

d. Utah Department of Public Safety

e. Utah Association of Counties

f. Utah Department of Natural Resources

g. Utah Commission on Criminal and Juvenile Justice

h. Utah Department of Health

i. Utah Department of Corrections

j. Utah Fire Chiefs Association

k. Utah Chiefs of Police

l. Utah Education Network

m. Utah Communications Agency Network

n. Utah Sheriff's Association

o. Utah Department of Technology Services

p. Utah Department of Community and Culture, Division of Indian Affairs

q. Ad-hoc local government representative of rural Utah

4. Members of the board shall serve without per diem or expenses.

5. Terms of officials serving on the board shall correspond to their terms of service in the relevant assignment within their agency.

6. The board's executive committee will consist of five members, one each from the Department of Public Safety, Department of Technology Services, Department of Health, the Utah Communication Agency Network, and a member representing rural local government.

a. The executive committee shall plan agendas and call meetings of the board.

b. The executive committee may meet as often as necessary, at the call of the chair.

7. The State's Chief Information Officer (CIO) will serve as the Chair of the Governance Board and the Executive Committee. The CIO may temporarily delegate this responsibility to another member of the Governance Board.

8. The Department of Technology Services shall provide staff support, with further support welcome from all participating agencies.

9. A majority of the board constitutes a quorum for voting purposes, and all actions shall be by majority vote of the quorum in attendance.

10. The board may meet as often as necessary to perform its duties, and shall meet at least quarterly.

11. The board may establish subcommittees and working groups to address wireless technology coordination and communication issues between agencies providing vital services to citizens.

12. The board shall prepare a brief annual report for the governor.

13. The board does not have the authority to require expenditure of public funds.

14. This order supplants Governor Walker's Executive Order creating the Utah Wireless Integrated Network (UWIN) on November 7, 2003.

15. This order shall remain in effect until revoked or supplanted by executive order.

IN WITNESS, WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Utah this 8th day of March, 2007.

(State Seal)

Jon M. Huntsman, Jr.
Governor

ATTEST:

Gary R. Herbert
Lieutenant Governor

Appendix B. Utah SIEC Governance Roster

Entity	Name	Contact Information
County – First Class - Public		
Salt Lake	Jeff Graviet	Salt Lake County 2001 South State Street Suite N4300 Salt Lake City, UT 84190
County – Second Class - Public		
Weber	Tina Roylance	Weber Area 911 & ES District 2186 Lincoln Ave Ogden, UT 84401
Utah	Sgt Tom Hodgson	Utah County Sheriff's Dept 3075 North Main Spanish Fork, UT 84660
Washington		St. George City 175 East 200 North St. George, UT 84770
Davis	Lt. Brad Wilcox	Davis County Sheriff's Office 800 West State Street Farmington, UT 84025
Association of Governments - Public		
Bear River	Randy Auman	Logan City 255 North Main Logan, UT 84321
Uintah Basin	Lt. John Laursen	Uintah County Sheriff's Department 152 East 100 North Vernal, UT 84078
Five County	Alan Alldredge	Kane County Emergency Services 180 West 300 North Kanab, UT 84741
Southeastern	Bret Mills	Emery County Sherriff Office PO Box 817 Castle Dale, UT 84513
Six County	Emery Polelonema	Six County Association of Governments 250 North Main Street Richfield, UT 84701
Mountainland	Jeff Winterton	Wasatch County Sheriff 1361 South Hwy 40 Heber City, UT 84032

Other Required Associations - Public		
UCAN	Steve Proctor	Utah Communications Agency Network (UCAN) 5360 South Ridge Valley Dr Salt Lake City, UT 84118
Association of Police Chiefs	Chief Terry Keefe	Layton City Police Department 429 North Wasatch Drive Layton, UT 84041
Sheriffs Association	Sheriff Robert Dekker	Millard County Sheriff's Department 765 South Highway 99 Fillmore, UT 84631
Fire Chiefs Association	Chief Gil Rodriguez	Murray Fire Department 40 East 4800 South Murray, UT 84107
Urban Security	Chief Chris Burbank	Salt Lake City Police Department 451 South State Street PO Box 145474 Salt Lake City, UT 84114
State Agencies – Executive Director		
Department of Public Safety	Commissioner Lance Davenport	4501 South 2700 West Salt Lake City, UT 84119
Department of Transportation	John Njord – Designee: Steve McCarthy & Chris Siavrakas	4501 South 2700 West Salt Lake City, UT 84119
Utah National Guard	Col Greggory Cluff	12953 South Minuteman Dr Draper, UT 84020
Department of Community & Culture/Native American Tribes	Shirlee Silversmith	324 South State Street, Suite 500 Salt Lake City, UT 84114
Department of Corrections	Tom Patterson – Designee: Jerry Pope	14717 South Minuteman Dr Draper, UT 84020
Department of Natural Resources	Mike Styler – Designee: Sid Groll	1594 West North Temple Suite 3710 Salt Lake City, UT 84114
Department of Health	Dr. David Patton – Designee: Paul Patrick	288 North 1460 West Salt Lake City, UT 84116
Department of Technology Services	Ken Petersen	1 State Office Building, 6th Fl Salt Lake City, UT 84114
Chief Information Officer	Steve Fletcher	1 State Office Building, 6th Fl Salt Lake City, UT 84114

SIEC Staff		
Name	**Agency**	**Phone**
Kevin Rose	Department of Technology Services	801-538-3700
Melissa Brown	Department of Technology Services	801-538-3298
Doug Chandler	Department of Technology Services	801-538-3585

Appendix C. Public Safety Agency Points of Contact

Police Department	Point of Contact	Phone Number
Alpine/Highland Police Department	Donald "Kip" Botkin	801 756-9800
Alta Town Marshal	Mike Morey	801 363-5105
American Fork PD	Lance Call	801 763-3020
Aurora PD	Roger Taylor	435 529-7170
Blanding PD	Lyle Bayles	435 678-2334
Bountiful PD	Tom Ross	801 298-6000
Brian Head PD	Gary Bulloch	435 677-2029
Brigham City Police Department	Paul Tittensor	(435) 723-3423
BYU PD	Larry Stott	
Cedar City PD	Robert "Bob" Allinson	435 865-5139
Centerfield PD	Brett McCall	435 528-5511
Centerville PD	Neal Worsley	801 292-8441
Clearfield PD	Greg Krusi	801 525-2800
Clinton PD	William Chilson	801 774-2630
College of Eastern Utah PD	James Prettyman	
Cottonwood Heights PD	Robby Russo	(801) 545-4154
Dixie College Campus PD	Don Reid	435 652-7515
Draper PD	Mac Cannole	801.840.4000
East Carbon Police Department	Sam Leonard	435 888-2081
Enoch Police Department	Jackson Ames	435 586-1119
Ephraim Police Department	Ron Rasmussen	435 283-4602
Escalante Police Department	Jared Dunton	
Fairview Police Department	Robert Bingham	435 427-3304
Farmington Police Department	Wayne Hansen	801 451-5453
Fountain Green Police Department	Jeff Nielson	435 445-3453/3206
Garland Police Department	Linda Bourne	435 257-5657/7577
Goshute Tribal Police Department	Ron T. Williams	435 234-1139
Granite School District PD	Randy Johnson	801 481-7122

Grantsville PD	Danny A. Johnson	435 884-6881
Gunnison PD	Trent Halliday	435-528-5532
Harrisville Police Department	Max Jackson	801 782-4100
Heber Police Department	Edward Rhoades	435 654-3040
Helper Police Department	Trent Anderson	435 472-3719
Hildale Police Department		435 874-2240
Hurricane Police Department	Lynn Excell	435 635-9663
Ivins Police Department	Robert "Bob" Flowers	435-674-5503
Kamas Police Department	Adam Jones	435 783-4344
Kanab Police Department	Tom Cram	435 644-5854/5807
Kaysville Police Department	Mike Lee	801 546-1131
LaVerkin Police Department	Lloyd Watkins	
Layton Police Department	Terry Keefe	801-336-3407
LDS Security	Greg Dunn	801 240-2797
Leeds Police Department	David Crouse	435 879-2447
Lehi Police Department	Chad Smith	801 768-7110
Lindon Police Department	Cody Cullimore	801 769-8600
Logan Police Department	Gary Jensen	435-716-9310
Mantua Police Department	Jim Jones	435 723-7054/1947
Mapleton Police Department	Dean Pettersson	801 491-8048
Midvale Police Department	Tony Mason	801 256-2500
Moab Police Department	Mike Navarre	435 259-8939
Monticello Police Department	Kent Adair	435 587-2273
Moroni Police Department	Claude Pickett	435 436-9811 ext: 4
Mt. Pleasant Police Department	Jim Wilberg	435 462-2724
Murray Police Department	Pete Fondaco	801 264-2673/2605
Naples Police Department	Mark Watkins	435 789-9449
Nephi Police Department	Mike Morgan	435 623-1626
North Ogden Police Department	Polo Afuvai	801 782-7219/7211
North Park Police Department	Kim Hawks	435 753-7600

North Salt Lake Police Department	Craig Black	801 936-3881
Ogden City Police Department	Jon Greiner	801 629-8226
Orem Department of Public Safety	Mike Larsen	801 229-7062
Park City Police Department	Wade Carpenter	435 615-5505
Parowan Police Department	Preston B. Griffiths	435 477-8144/3383
Payson Police Department	Tom Runyon	801 465-5240
Perry Police Department	Mike Jones	435 723-5291
Pleasant Grove Police Department	Tom Paul	801 785-3506
Pleasant View Police Department	Scott Jackson	801 782-6736
Price Police Department	Aleck Shilaos	435 636-3190
Provo Police Department	RIck Gregory	801 852-6200
Richfield Police Department	John Evans	435 896-8484
Riverdale Department of Public Safety	Dave Hansen	801 394-6616
Roosevelt Police Department	Rick Harrison	435 722-2330
Roy Police Department	Greg Whinham	801 774-1055
Salem Police Department	Brad James	801 423-2770
Salina Police Department	Greg Harwood	435 529-3311
Salt Lake Airport Police Department	Steve Marlovits	801 575-2480
Salt Lake City Police Department	Chris Burbank	801 799-3800
Sandy City Police Department	Stephen Chapman	801 568-7200
Santa Clara Department of Public Safety	Robert "Bob" Hansen	435 652-1122
Santaquin-Genola City Police Department	Dennis Howard	801 754-3211 x21
Saratoga Springs Police Department	Gary Hicken	801 766-6503
Smithfield Police Department	Johnny W. McCoy	435 563-8501
Snow College Public Safety	Bob Wright	435 283-7170
South Jordan Police Department	Lindsay Shepherd	801 254-4708
South Ogden Police Department	Val D. Shupe	801 622-2800
South Salt Lake Police Department	Chris Snyder	801-412-3600
Southern Utah University PD	Rick Brown	435 586-7793
Spanish Fork Police Department	Dee Rosenbaum	801 798-5070
Spring City Police Department	Zach Barnes	435 462-2244

Springdale/Zion Police Department	Kurt Wright	
Springville Police Department	J. Scott Finlayson	801 489-9421
St. George Police Department	Marlon Stratton	435 634-5001
Stockton Marshal's Office	Gilbert Trujillo	435 830-1523
Sunset Police Department	Ken Eborn	801 825-1620
Syracuse Police Department	Brian Wallace	801 825-4400
Taylorsville Police Department	Del Craig	(801) 955-2000
Tooele City Police Department	Ronald D. Kirby	435 882-8900
Tremonton Police Department	Dave Nance	435 257-9555
University of Utah PD	Scott Folsom	801 581-7619
Utah State University PD	Steven J. Mecham	435 797-1939
Utah Transit Authority Police Department	Ross Larsen	801 287-2601
Utah Valley University PD	John Brewer	
Vernal Police Department	Dylan Rooks	435 789-5835
Veterans Administration Police Department	Teri Sommers	801 584-1287
Washington City Police Department	Jim Keith	435 986-1515
Weber State Univeristy PD	Dane LeBlanc	
Wellington Police Department	Lee Barry	435 637-5213
West Bountiful Police Department	John Rasmussen	801 292-4487
West Jordan Police Department	Ken McGuire	801 569-5270/5200
West Valley City Police Department	Thayle "Buzz" Nielsen	801 963-3255
Willard Police Department	Nate Thompson	435 734-9881
Woods Cross Police Department	Greg Butler	801 292-4422

County	Sheriff's Office POC	Phone
Beaver	Cameron Noel	(435) 438-2467
Box Elder	Lynn Yeates	(435) 734-3800
Cache	Lynn Nelson	(435) 755-1000
Carbon	James Cordova	(435) 636-3251
Daggett	Jerry Jorgensen	(435) 784-3255
Davis	Todd Richardson	(801) 451-4120
Duchesne	Travis Mitchell	(435) 738-0196
Emery	Greg Funk	(435) 381-2404
Garfield	James Perkins	(435) 676-2678
Grand	Steve White	(435) 259-8115
Iron	Mark O. Gower	(435) 867-7500
Juab	Alden B. Orme	(435) 623-1344
Kane	Lamont Smith	(435) 644-2349
Millard	Robert Dekker	(435) 743-5302
Morgan	Blaine Breshears	(801) 845-4037
Piute	Marty Gleave	(435) 577-2893
Rich	Dale Stacey	(435) 793-2285
Salt Lake	Jim Winder	(801) 743-7000
San Juan	Rick Eldredge	(435) 587-2237
Sanpete	Brian Nielson	(435) 835-2191
Sevier	Nathan Curtis	(435) 896-2600
Summit	David A. Edmunds	(435) 336-3510
Tooele	Frank J. Park	(435) 843-3332
Uintah	Jeff Merrell	(435) 781-5403
Utah	James O. Tracy	(801) 851-4001
Wasatch	Todd L. Bonner	(435) 654-3532
Washington	Cory Pulsipher	(435) 656-6501
Wayne	Kurt Taylor	(435) 836-2789
Weber	Terry L. Thompson	(801) 778-6621

Appendix D. PSAP Dispatch Centers

UTAH DISPATCH CENTERS

(Revised 6/21/11)

1 UTAH DISPATCH CENTERS AND PSAPS		
1.	**Alta Town Police Department Dispatch** Alta Town Marshal's Office P.O. Box 8016 Alta, UT 84092 Phone: (801) 742-2033 Fax: (801) 742-1006	Jared Higgins amo@townofalta.com Alta Town Marshal, UFA, Snowbird Ski Resort, Alta Ski Resort, Salt Lake County Sheriff, UDOT, US Forest Service
2.	**Brigham Young University Police Dept.** 2120 JKB Brigham Young University Provo, UT 84602 Phone: (801) 422-2222 Fax: (801) 378-0935	Steve Goodman steve_goodman@byu.edu Brigham Young University Fire/Medical thru Provo City PD On-Campus Medical Emergencies Only
3.	**Beaver County Sheriff's Office** 2270 S. 525 W., PO Box 391 Beaver, UT 84713-0391 Phone: (435) 438-2862 Fax: (435) 438-5184	Sheriff Cameron Noel cnoel@bcso.utah.gov Dispatch Supervisor Paul Wolden pewolden@beaver.utah.gov Beaver County Sheriff's Office Only ***PSAP***
4.	**Bountiful City Police Department** 805 S. Main Street Bountiful, UT 84010 Phone: (801) 298-6000 Fax: (801) 292-6441	Deanne Henderson henderson@bountifulutah.gov Bountiful City Police, North Salt Lake Police, Woods Cross Police; Fire & Medical for Bountiful, West Bountiful, Centerville; North Salt Lake, and Woods Cross. ***PSAP***
5.	**Box Elder Communications Center/State DPS** PO Box 888 52 S. 1000 W. Brigham City, UT 84302 Phone: (435) 734-3800 Office: (435) 734-3820 Fax: (435) 734-3866 Cell Phone: (435) 720-1527	Lesa Wilson lsolarez@utah.gov EMS/PD/Fire for Box Elder County, Brigham City, Willard City, Perry, Tremonton, Mantua, Garland, State Agencies (State Parks, DWR), Fire Departments, and UHP. ***PSAP***
6.	**Cedar Communications Center/State DPS** 2130 N. Main	Linda Petty lpetty@utah.gov Iron County, Cedar City, Parowan, Brian Head,

	Cedar City, UT 84720 Phone: (435) 586-9445 SL Line: (801) 965-4216 Manager Cell: (435) 590-8081 Manager Office: (435) 867-7552 Fax: (435) 867-7554	Enoch City, Paragonah, Kanarraville, All State Agencies in Iron, Beaver and Washington counties, UHP, and Arizona DPS ***PSAP***
7.	**Clearfield City Police Department** 55 South State Street Clearfield, UT 84015 Phone: (801) 525-2806 or (801) 525-2842 Fax: (801) 525-2862	Wendy Brimhall wendy.brimhall@clearfieldcity.org Clearfield City Police Department, North Davis Fire District, EMS ***PSAP***
8.	**Davis County Sheriff's Office** 800 W. State Street, P.O. Box 618 Farmington, UT 84025 Dispatch Phone: (801) 451-4141 Fax: (801) 451-4044 Manager: (801) 451-4157	Tom Norvelle tnorvelle@co.davis.ut.us Davis County except Layton, Clearfield, and Bountiful City jurisdictions ***PSAP***
9.	**Emery County Sheriff's Office** 1850 N. 550 West, PO Box 817 Castle Dale, UT 84513-0817 Phone: (435) 381-2111 Fax: (435) 381-2200	Bliss Mead bliss@ecso.com Emery County ***PSAP***
10.	**Garfield County Sheriff's Office** 375 N. 700 W., PO Box 370 Panguitch, UT 84759-0370 Phone: (435) 676-2678 Fax: (435) 676-1182	Mel Miller gcso@color-country.net Garfield County ***PSAP***
11.	**Grand County Sheriff's Office** 125 E. Center Street Moab, UT 84532 Phone: (435) 259-8115 Fax: (435) 259-1364	Veronica Bullock vbullock@grandcountysheriff.org Grand County ***PSAP***
12.	**Granite School District Police Department** 2500 S. State Street Salt Lake City, UT 84115 Phone: (801) 481-7122 Fax: (801) 481-7274	Daniel Brooks dbrooks@graniteschools.org Granite School District
13.	**Hill Air Force Base Police Department** 6010 Gum Lane Hill AFB, UT 84056 Phone: (801) 777-3056/3057 Fax: (801) 777-5689 Capt. Hagemier Phone: (801) 777-5531	Captain Hagemier James.hagemier@hill.af.mil Hill Air Force Base Police Department
14.	**Hill Air Force Base Fire Department** 5935 C Avenue Hill AFB, UT 84056 Phone: (801) 777-3022 Office: (801) 775-3227 Fax: (801) 777-0527 Cell: (801) 430-4408	Michael King Michael.king1@hill.af.mil Hill Air Force Base Fire Department ***PSAP***
15.	**Juab County Sheriff's Office** 425 W. Sheep Lane Drive	Fred Smalley fesmalley@juab.utah.gov Juab County

	Nephi, UT 84648 Phone: (435) 623-1349 Fax: (435) 623-2899	***PSAP***
16.	**Kane County Sheriff's Office** 76 N. Main Kanab, UT 84741 Phone: (435) 644-2349 Fax: (435) 644-4996	Beverly Dinsmore bdinsmorekcso@kanab.net or comm@xpressweb.com Kane County, Tribal Kaibab and Piute Reservation, Fredonia Sheriff's Office (AZ) ***PSAP***
17.	**Layton City Police Department** 429 N. Wasatch Drive Layton, UT 84041 Phone: (801) 497-8300 Office: (801) 336-3507 Fax: (801) 336-3503	Karl Kuehn KKuehn@laytoncity.org All of Layton City **2 PSAP**
18.	**Logan City Communications Center** 290 North 100 West Logan, UT 84321 Phone: (435) 716-9420 Fax: (435) 716-9431	Randy Auman rauman@loganutah.org All of Cache County, and UHP ***PSAP***
19.	**Millard County Sheriff's Office** 765 S. Hwy. 99 Fillmore, UT 84631 Phone: (435) 743-5302 Fax: (435) 743-6324	Shane Brunson SBrunson@co.millard.ut.us Millard County ***PSAP***
20.	**Orem City Department of Public Safety** 95 E. Center Street Orem, UT 84057 Phone: (801) 229-7070 Office: (801) 229-7253 Fax: (801) 229-7136	Ralph Crabb rccrabb@orem.org Orem City ***PSAP***
21.	**Park City Police Department** PO Box 1480 Park City, UT 84060-1480 Phone: (435) 615-5500 Fax: (435) 615-4913	Maggie Petersen mpetersen@parkcity.org All of Park City 9-1-1 calls transferred from Summit County SO
22.	**Pleasant Grove City Police Department** 87 East 100 South Pleasant Grove, UT 84062 Phone: (801) 785-3506 Fax: (801) 785-6819	Sherri Atwood sherri@pg911.org All of Pleasant Grove City and Lindon ***PSAP***
23.	**Price Communications Center/State DPS** 940 S. Carbon Avenue Price, UT 84501 Phone: (435) 637-0893 SL Line: (801) 965-4684 Office: (435) 637-1856 Fax: (435) 637-0456	Marjean Hansen mohansen@utah.gov All of Carbon County, Price City, Helper, Sunnyside, Wellington, CEU, UHP, and State Agencies ***PSAP***
24.	**Provo City Police/Fire/EMS** P.O. Box 1849 Provo, UT 84601-1849 Phone: (801) 852-6211 Fax: (801) 852-6278 Office: (801) 852-7260 Supervisor: Rachel Moore (801) 852-6376	Lt. Brian Wolken bwolken@provo.utah.gov All of Provo City ***PSAP***

25.	**Rich County Sheriff's Office** P.O. Box 38 Randolph, UT 84064-0038 Phone: (435) 793-2285 Fax: (435) 793-3122	Linda Tobin rcso@allwest.net All of Rich County ***PSAP***
26.	**Richfield Communications Center/State DPS** 350 South 900 West Richfield, UT 84701 Phone: (435) 896-6471 SL Line: (801) 965-4680 Office: (435) 896-2978 Fax: (435) 896-6201	Kathy Quarnberg kathyquarnberg@utah.gov Law Enforcement, Fire and EMS in Sevier, Piute, and Wayne counties, UHP, All State Agencies in Kane, Sanpete, Garfield, and Juab Counties ***PSAP***
27.	**Salt Lake City Department of Airports** PO Box 145550 Salt Lake City, UT 84114-5550 Phone: (801) 575-2401 Office: (801) 575-2486 Fax: (801) 575-2407	Lisa Julio lisa.julio@slcgov.com Salt Lake City International Airport In-House Emergencies Only
28.	**Salt Lake City Police & Fire Departments** PO Box 145497 315 E. 200 S. Salt Lake City, UT 84111-5497 P. Office: (801) 799-3594 Police: (801) 799-3000 P. Fax: (801) 799-4180 F. Office: (801) 799-4167 Fire: (801) 799-3540 F. Fax: (801) 799-3684 Fire Cell: (801) 556-1234	(PD) Roxann Cheever roxann.cheever@slcgov.com (Fire) Scott Freitag scott.freitag@slcgov.com Salt Lake City Police and Fire Departments ***PSAP***
29.	**Salt Lake Communications Center/State DPS** 2060 S. 2760 W. Salt Lake City, UT 84104 Dispatch Phone: (801) 887-3800 Dispatch Fax: (801) 887-3810 Manager Office: (801) 887-3840 (Fax: 887-3845) Manager Cell: (801) 330-1411	Chris Rueckert crueckert@utah.gov All State Agencies in Salt Lake and Utah Counties, Utah Highway Patrol
30.	**San Juan County Sheriff's Office** 297 S. Main Street P.O. Box 788 Monticello, UT 84535-0788 Phone: (435) 587-2237 Fax: (435) 587-2013	Sue Redd sredd@sanjuancounty.org All of San Juan County ***PSAP***
31.	**Sanpete County Sheriff's Office** 1500 South Main, PO Box 130 Manti, UT 84642 Phone: (435) 835-2345 Fax: (435) 835-2125 Office: (435) 835-2192	Joe Bennett bennettj@sanpeteso.org All of Sanpete County ***PSAP***
32.	**Springville City Police Department** 110 South Main Springville, UT 84663 Phone: (801) 489-9421 Fax: (801) 489-7726	Carol Huff chuff@springville.org All of Springville City; Mapleton Police Dept. ***PSAP***
33.	**St. George Police Department**	Jeff Dial jdial@sgcity.org

	265 N. 200 E. St. George, UT 84770 Phone: (435) 627-4300 Office: (435) 627-4911 Fax: (435) 634-5841	Law Enforcement, Fire and EMS for all of St. George City, Washington County, including Dixie State College PD, Utah State Parks (Sand Hollow and Quail Creek) and Dixie Ambulance Service. ***PSAP***
34.	**Summit County Sheriff's Office** 6300 N. Silver Creek Drive Park City, UT 84098 Phone: (435) 615-3500 Office: (435) 615-3618 Fax: (435) 615-3614	Melanie Crittenden mcrittenden@co.summit.ut.us All of Summit County (except Park City Police Dept.) and UHP ***PSAP***
35.	**Tooele County Sheriff's Office** 47 S. Main Street Tooele, UT 84074 Phone: (435) 882-5600 Office: (435) 843-3340 Fax: (435) 843-4724	Regina Campbell rcampbell@co.tooele.ut.us All of Tooele County, Tooele City, Grantsville, Erda, Stansbury Park, Stockton, Wendover, and UHP ***PSAP***
36.	**Uintah Basin Communications Center/State DPS** 641 East 300 South, Suite 310 Vernal, UT 84078 Phone: (435) 789-4222 SL Line: (801) 965-4605 Office: (435) 781-6737 Fax: (435) 789-5750	Laconna Davis laconnadavis@utah.gov Law Enforcement, Fire, and EMS for Uintah, Duchesne, and Daggett counties. All State Agencies and UHP ***PSAP***
37.	**Unified Police of Greater Salt Lake** 3380 S. 900 W. EOC Salt Lake City, UT 84119 Phone: (801) 743-7000 Office: (801) 743-5982 Cell: (801) 633-3745 Fax: (801) 743-7098	Christine (Chris) Dunn cdunn@slco.org Dispatch: 3380 S. 900 W., EOC, SLC 84119 All of Salt Lake County except South Salt Lake, Sandy City, South Jordan, Midvale, West Jordan, West Valley City, and Murray City
38.	**University of Utah Police Department** DPS Building 301 1735 E. South Campus Drive Salt Lake City, UT 84112 Phone: (801) 585-2677 Fax: (801) 585-6348 Supervisor: (801) 585-1160	Lynn Mitchell (801) 585-1160 Lynn.Mitchell@dps.utah.edu University of Utah Campus Emergencies on Campus Only
39.	**Utah Valley Dispatch Special Service District** 3075 N. Main Spanish Fork, UT 84660 Phone: (801) 851-4100 Office: (801) 851-4131 Fax: (801) 851-4119	Deborah Mecham, Executive Director (801) 851-4131 dmecham@utahvalley911.org All of Utah County except Provo, Orem, Springville, Pleasant Grove, and Lindon ***PSAP***
40.	**Utah State University Police Department** UMC 5800 Logan, UT 84322-5800 Phone: (435) 797-1939 Fax: (435) 797-3756	Sgt. Travis Dunn travis.dunn@usu.edu USU Police Department Emergencies on Campus Only
41.	**Utah Valley University Police Department** 800 W. University Parkway, Mail Stop 195 Orem, UT 84058 Phone: (801) 863-5555 Office: (801) 863-7185 Fax: (801) 863-7079	Chris Rockwood rockwoch@uvu.edu UVU Campus Emergencies on Campus Only

42.	**VECC** Salt Lake Valley Emergency Communications Ctr. 5360 S. Ridge Village Drive West Valley City, Utah 84118 Phone: (801) 840-4000 Office: (801) 840-4001 Fax: (801) 840-4040	William Harry wharry@vecc9-1-1.com South Salt Lake, Sandy City, South Jordan, Midvale, West Jordan, West Valley City, Murray, Draper, Bluffdale, Cottonwood Heights and Unified Fire Authority. 9-1-1 for Alta, Herriman, Holladay, Riverton, Salt Lake County and Taylorsville City ***PSAP***
43.	**Wasatch County Sheriff's Office** 1361 South Highway 40 Heber City, UT 84032 Phone: (435) 654-1411 Fax: (435) 657-3585	Suzanne Rowser srowser@co.wasatch.ut.us All of Wasatch County ***PSAP***
44.	**Weber Area Dispatch 911 and Emergency Services District** 2186 Lincoln Avenue Ogden, UT 84401 Phone: (801) 629-8221 Office: (801) 395-8222 Cell: (801) 940-6282 Dispatch Fax: (801) 395-8232 Admin. Fax: (801) 395-8233	Tina Roylance, Executive Director Troylance@weber911.org (801) 395-8222 All of Weber and Morgan counties, All State Agencies, UHP ***PSAP***
COLLEGE/UNIVERSITY/OTHER DISPATCH CENTERS, NOT 24-HOUR OPERATIONS, COVERED BY OTHER CENTERS		
	Centerville City Police Department 250 N. Main Centerville, UT 84014 Phone: (801) 292-8441 Fax: (801) 292-2078 Dixie College Police Department 225 S. 700 E. St. George, UT 84770 Phone: (435) 652-7515 Fax: (435) 674-7528 Salt Lake Community College P.O. Box 30808 Salt Lake City, UT 84130 Phone: (801) 957-4270 Fax: (801) 957-4444 Southern Utah University 351 W. Center Cedar City, UT 84720 Phone: (435) 586-7793 Fax: (435) 586-5482 Westminster College 1840 S. 1300 E. Salt Lake City, UT 84105 Phone: (801) 488-1665 Fax: (801) 466-6916	College of Eastern Utah 451 E. 400 N. Price, UT 84501 Phone: (435) 637-6911 Fax: (435) 637-4078 Kaysville City Police Department 58 E. 100 N. Kaysville, UT 84037 Phone: (801) 546-1131 Fax: (801) 544-1147 Snow College 150 E. College Avenue Ephraim, UT 84627 Phone: (435) 283-4021 Fax: (435) 283-6879 Weber State University 4040 Tyler Street Ogden, UT 84408-3001 Phone: (435) 626-6460 Fax: (435) 626-6319

	Utah Department of Public Safety Communications Bureau 2060 South 2760 West Salt Lake City, UT 84104 Fax: (801) 887-3895	Alan Workman, Director, aworkman@utah.gov (801) 887-3892 Wendy Lister, Financial Officer wlister@utah.gov (801) 887-3891 Shelley Crown, Secretary scrown@utah.gov (801) 887-3890

Appendix E. SRS Frequency List

Site Name	Transmit	Receive	Tone	Make	Service	Contol Point
4-Mile Hill	155.4300	159.2100	146.2	Mastr III	LES	Price Dispatch
Abajo Peak	151.3100	159.3000	151.4	Mastr III	SRS	Price Dispatch
Abajo Peak	155.5050	155.5050	162.2	Mastr III	LES	Price Dispatch
Abajo Peak	155.6550	158.9100	146.2	Mastr III	LES	Price Dispatch
Antelope Island	154.6800	155.9700	203.5	Master II	LES	Davis Dispatch
Antelope Island	151.1300	159.1650	203.5	Master II	SRS	Davis Dispatch
Asphalt Ridge	151.1300	159.1650	203.5	Mastr III	SRS	Vernal Dispatch
Asphalt Ridge	155.5050	155.5050	162.2	Mastr III	LES	Vernal Dispatch
Bald Mesa	151.3700	159.4050	203.5	Mastr III	SRS	Price Dispatch
Bald Mesa	155.5050	155.5050	162.2	Mastr III	LES	Price Dispatch
Bald Mesa	154.8300	159.1500	146.2	Mastr III	LES	Price Dispatch
Barney Top	151.1300	159.1650	203.5	Mastr III	SRS	Richfield Dispatch
Barney Top	154.6800	159.0900	203.5	Mastr III	LES	Richfield Dispatch
Beacon Hill	158.9700	154.9200	203.5	Mastr III	LES	Cedar Dispatch
Boarding House Ridge	151.4600	159.4350	146.2	Mastr III	SRS	Price Dispatch
Bovine Peak	154.8000	156.0150	210.7	Mastr III	LES	BECC
Buckskin	155.8350	154.9950	203.5	Mastr III	LES	Richfield Dispatch
Cal Mountain	154.6650	159.1500	203.5	Mastr III	LES	BECC
Calvin Rampton	151.0250	159.0150	151.4	Mastr II	LES	TOC
Cedar Mountain	155.5050	155.5050	162.2	Mastr III	LES	Price Dispatch
Cedar Mountain	154.9200	158.9400	146.2	Mastr III	LES	Price Dispatch
Cedar Mountain	153.8600	159.0750	203.5	Mastr III	SRS	Price Dispatch
Copper Ridge	151.0400	159.0150	146.2	Mastr III	SRS	Price Dispatch
Cricket	151.2350	156.2100	151.4	Mastr III	LES	Cedar Dispatch
Delle	151.0550	159.1350	151.4	Mastr II	SRS	Tooele Dispatch
Delle	155.5050	155.5050	230.5 TX	Mastr II	LES	Tooele Dispatch
Delle	155.9100	155.9100	203.5	Mastr II	LES	TOC
Dunn Peak	154.8000	156.0150	162.2	Mastr III	LES	BECC

Dutch John	155.7000	155.0700	203.5	Mastr III	SRS	Vernal Dispatch
East Park	156.2400	159.1050	203.5	Mastr III	LES	Vernal Dispatch
Ensign Peak	155.5800	155.5800	162.2	Mastr II	LES	TOC
Ford Ridge	151.4150	159.2850	151.4	Mastr III	SRS	Price Dispatch
Ford Ridge	155.5050	155.5050	162.2	Mastr III	LES	Price Dispatch
Ford Ridge	155.6550	154.8150	173.8	Mastr III	LES	Price Dispatch
Frisco Peak	151.2800	159.2400	203.5	Mastr II	SRS	Cedar Dispatch
Frisco Peak	155.5650	156.2100	203.5	Mastr III	LES	Cedar Dispatch
Frisco Peak	155.5050	155.5050	162.2	Mastr II	LES	Cedar Dispatch
Gillies Hill	159.0300	156.2100	151.4	Mastr III	LES	Cedar Dispatch
Goslin	155.8050	159.0150	203.5	Mastr III	LES	Vernal Dispatch
Green River	151.2575	158.9400	203.5	Mastr III	LES	Price Dispatch
Green River	151.1975	159.0750	203.5	Mastr III	SRS	Price Dispatch
Hidden Peak	151.1450	159.3000	151.4	Mastr II	SRS	TOC
Horn Mountain	151.2575	158.9400	203.5	Mastr III	LES	Price Dispatch
Horn Mountain	151.1975	159.0750	203.5	Mastr III	SRS	Price Dispatch
Iron Mountain	156.1800	151.4000	151.4	Mastr III	LES	Cedar Dispatch
Jordan Aqueduct	154.9050	155.5200	186.2	Mastr III	LES	TOC
Lake Mountain	151.0850	159.0450	151.4	Mastr ll	SRS	TOC
Lake Mountain	155.6250	155.6250	186.2	Mastr ll	LES	TOC
Lake Mountain	155.5050	155.5050	162.2	Mastr ll	LES	TOC
Levan Peak	151.2200	159.2250	203.5	Mastr lll	SRS	Richfield Dispatch
Levan Peak	155.5050	155.5050	162.2	Mastr III	LES	Richfield Dispatch
Lewis Peak	151.0400	159.0750	151.4	Mastr II	SRS	Summit Dispatch
Lewis Peak	155.6100	159.2100	151.4	Mastr III	LES	Summit Dispatch
Lewis Peak	155.5050	155.5050	162.2	Mastr II	LES	Summit Dispatch
Little Mountain (Weber)	155.5050	155.5050	162.2	Mastr III	LES	Weber Dispatch
Little Mountain (Weber)	155.7900	155.7900	151.4	Kenwood	LES	Weber Dispatch
Little Mountain (Weber)	155.5950	159.1500	151.4	Mastr III	LES	BECC
Little Mountain (Weber)	151.2800	159.2400	203.5	Mastr III	SRS	Weber Dispatch
Little Mountain (Uintah)	155.6700	154.8450	179.9	Mastr III	LES	Vernal Dispatch
Little Mountain (Uintah)	158.9250	153.8000	162.2	Mastr III	LES	Vernal Dispatch
Logan Peak	155.7000	159.0600	151.4	Mastr III	LES	Logan Dispatch
Logan Peak	151.2350	159.4200	151.4	Mastr III	SRS	Logan Dispatch

Mantua	151.1150	159.1500	151.4	Mastr III	LES	BECC
McCook Ridge	155.6700	154.8450	151.4	Mastr III	LES	Vernal Dispatch
MCI Hill	151.2200	154.6950	173.8	Mastr III	LES	Weber Dispatch
Moccasin	155.7000	155.0700	151.4	Mastr III	SRS	Richfield Dispatch
Monroe Peak	151.1450	159.4200	203.5	Mastr III	SRS	Richfield Dispatch
Monroe Peak	155.5950	158.7900	203.5	Mastr III	LES	Richfield Dispatch
Monroe Peak	155.5050	155.5050	162.2	Mastr III	LES	Richfield Dispatch
Mount Dutton	159.0075	151.3325	151.4	Kenwood	LES	Richfield Dispatch
Red Spur	155.7000	155.0700	203.5	Mastr III	LES	Logan Dispatch
Rudd's Roost	159.1500	156.1500	162.2	Mastr III	LES	Cedar Dispatch
Salina Canyon	151.0850	159.0450	151.4	Mastr III	SRS	Richfield Dispatch
Shepards Peak	151.4150	159.2850	151.4	Mastr III	SRS	Weber Dispatch
Spencer's Knoll	155.8350	154.9950	123.0	Mastr III	LES	Kanab Dispatch
Steamboat	154.7700	155.3700	162.2	Mastr III	LES	Vernal Dispatch
Sundance	150.9950	159.2400	203.5	Mastr III	SRS	TOC
Tabby	151.2800	159.2400	151.4	Mastr III	SRS	Vernal Dispatch
Teasdale	151.2350	159.4200	203.5	Mastr III	SRS	Richfield Dispatch
Teasdale	155.7000	159.1350	162.2	Mastr III	LES	Richfield Dispatch
Teat Peak	155.6250	154.9350	203.5	Mastr III	LES	TOC
Utah Hill	155.5050	155.5050	162.2	Mastr III	LES	Iron County
Utah Hill	151.3700	159.4050	203.5	Mastr III	SRS	IronCounty
Virgin River	155.6250	154.9350	203.5	Mastr III	LES	Cedar Dispatch
Wendover Peak	155.8200	155.8200	167.9	Mastr II	LES	Tooele Dispatch
White Pine	155.3100	159.2100	192.8	Mastr III	LES	Richfield Dispatch
White Pine	151.0250	159.0150	203.5	Mastr III	SRS	Richfield Dispatch
Windy Ridge	151.1750	154.9350	203.5	Mastr III	LES	Cedar Dispatch
Windy Ridge	151.0850	159.0450	203.5	Mastr III	SRS	Cedar Dispatch
Wood Hill	155.5050	155.5050	162.2	Mastr II	LES	Price Dispatch

Appendix F. Regional VHF Frequency Assignments

UHP Section 1A Box Elder County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Box Elder Sheriff	155.5950	162.2	159.1500	162.2
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 RESERVED				
5 Box Elder Sheriff - Dunn Peak	154.8000	CSQ	156.0150	CSQ
6 Red Spur - SRS (Rich County)	151.1900	CSQ	159.2400	203.5
7 RESERVED				
8 Tremonton Police	155.5200	CSQ	155.5200	CSQ
9 Brigham Fire/EMS	155.4300	CSQ	155.4300	CSQ
10 Logan Peak - DPS (Cache County)	155.7000	162.2	155.0700	162.2
11 Logan Peak - SRS (Cache County)	151.2350	151.4	159.4200	151.4
12 Valley Service	155.6550	CSQ	159.0900	103.5
13 Cache PT1	154.8900	CSQ	154.8900	192.8
14 Cache PT2	154.9800	CSQ	154.9800	192.8
15 Cache TAC	155.0550	CSQ	155.0550	192.8
16 Cache Sheriff - Car/Car	154.7700	CSQ	154.7700	CSQ
17 Logan Police	155.5350	CSQ	155.5350	203.5
18 Logan Police - Channel 2	155.9100	CSQ	155.9100	CSQ
19 Statewide EMS	155.3400	CSQ	155.3400	CSQ
20 Rich Sheriff - Crawford	156.0000	CSQ	155.1150	203.5
21 Rich Sheriff - Laketown	156.0000	CSQ	153.9800	151.4
22 Logan TAC	154.8300	CSQ	154.8300	123.0
23 DNR Car/Car	155.7750	210.7	155.7750	210.7
24 US Forest Service - Cache	164.1250	CSQ	168.1250	123.0
25 Thiokol	153.1400	91.5	153.1400	91.5

UHP Section 1B Cache County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Logan Peak - DPS (Cache County)	155.7000	151.4	155.0700	151.4
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Cache Sheriff	155.6550	103.5	155.6550	103.5
5 Red Spur - SRS (Rich County)	151.1900	203.5	159.2400	203.5
6 Logan Peak - SRS (Cache County)	151.2350	151.4	159.4200	151.4
7 Box Elder Sheriff	155.5950	CSQ	159.1500	162.2
8 Weber Sheriff - North	155.7900	146.2	155.7900	146.2

9 Valley Service	155.6550	CSQ	159.0900	103.5
10 Cache PT1	154.8900	CSQ	154.8900	192.8
11 Cache PT2	154.9800	CSQ	154.9800	192.8
12 Cache TAC	155.0550	CSQ	155.0550	192.8
13 Cache Sheriff - Car/Car	154.7700	CSQ	154.7700	CSQ
14 Logan Police	155.5350	CSQ	155.5350	203.5
15 Logan police - Channel 2	155.9100	CSQ	155.9100	CSQ
16 Statewide EMS	155.3400	CSQ	155.3400	CSQ
17 Rich Sheriff - Crawford	156.0000	CSQ	155.1150	203.5
18 Rich Sheriff - Laketown	156.0000	CSQ	153.9800	151.4
19 Logan TAC	154.8300	CSQ	154.8300	123.0
20 DNR Car/Car	155.7750	210.7	155.7750	210.7
21 US Forest Service - Cache	164.1250	CSQ	168.1250	123.0
22 RESERVED				
23 RESERVED				
24 RESERVED				
25 RESERVED				

UHP Section 2 Weber County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Weber Sheriff - North	155.7900	146.2	155.7900	146.2
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 MCI - SRS (Morgan County)	151.2200	173.8	154.6950	173.8
5 DNR Car/Car	155.7750	210.7	155.7750	210.7
6 Little Mountain - SRS (Weber County)	151.2800	203.5	159.2400	203.5
7 Box Elder Sheriff	155.5950	CSQ	159.1500	162.2
8 Box Elder Sheriff - Dunn Peak	154.8000	CSQ	156.0150	CSQ
9 Tooele - DPS (Tooele County)	155.9100	203.5	155.9100	203.5
10 Logan Peak - DPS (Cache County)	155.7000	151.4	155.0700	151.4
11 Red Spur - SRS (Rich County)	151.1900	CSQ	159.2400	203.5
12 Rich Sheriff - Crawford	156.0000	CSQ	155.1150	203.5
13 Lewis Peak - SRS (Summit County)	151.0400	151.4	159.0750	151.4
14 Coalville - DPS (Summit County)	155.6100	151.4	155.6100	151.4
15 Weber State University Police	156.0900	CSQ	156.0900	CSQ
16 Statewide EMS	155.3400	CSQ	155.3400	CSQ
17 Weber County Fire	154.1600	CSQ	154.1600	CSQ
18 Logan Peak - SRS (Cache County)	151.2350	151.4	159.4200	151.4
19 Shepherd Peak - SRS (Davis County)	151.4150	203.5	159.2850	203.5
20 US Forest Service - Ogden	168.1250	CSQ	164.1250	156.7
21 Davis Sheriff - Antelope Island	154.6800	CSQ	155.9700	203.5
22 Davis TAC	151.2500	186.2	159.2250	186.2
23 AP&P	153.9350	CSQ	153.9350	CSQ
24 RESERVED				
25 RESERVED				

UHP Section 3 Davis County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Davis Sheriff - Antelope Island	154.6800	CSQ	155.9700	203.5
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Davis Service	155.6400	203.5	155.6400	203.5
5 Davis TAC	151.2500	186.2	159.2250	186.2
6 Davis Car/Car	155.6850	CSQ	155.6850	CSQ
7 Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
8 Salt Lake Service	155.2500	186.2	155.2500	186.2
9 Salt Lake North - DPS (Salt Lake County)	155.5800	162.2	155.5800	162.2
10 Bountiful Police	155.8500	100.0	154.9350	100.0
11 Clearfield Police	156.1500	CSQ	156.1500	203.5
12 Antelope Island - SRS (Davis County)	151.1300	203.5	159.1650	203.5
13 Lewis Peak - SRS (Summit County)	151.0400	151.4	159.0750	151.4
14 MCI - SRS (Morgan County)	151.2200	173.8	154.6950	173.8
15 Weber Sheriff - North	155.7900	146.2	155.7900	146.2
16 Shepherd Peak - SRS (Davis County)	151.4150	203.5	159.2850	203.5
17 Davis Search & Rescue	151.4150	151.4	159.2850	151.4
18 RESERVED				
18 RESERVED				
20 AP&P	153.9350	CSQ	153.9350	CSQ
21 DNR Car/Car	155.7750	210.7	155.7750	210.7
22 US Forest Service - Ogden	168.1250	CSQ	164.1250	156.7
23 US Forest Service - Davis	168.1250	CSQ	164.1250	110.9
24 SOA	168.7750	CSQ	168.7750	CSQ
25 Civil Air Patrol	148.1500	CSQ	148.1500	CSQ

UHP Section 4 Salt Lake County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Salt Lake Service	155.2500	186.2	155.2500	186.2
5 Lewis Peak - SRS (Summit County)	151.0400	151.4	159.0750	151.4
6 Delle - SRS (Tooele County)	151.0550	151.4	159.1350	151.4
7 Coalville - DPS (Summit County)	155.6100	151.4	155.6100	151.4
8 Davis Sheriff - Antelope Island	154.6800	CSQ	155.9700	203.5
9 Tooele - DPS (Tooele County)	155.9100	203.5	155.9100	203.5
10 Salt Lake South - DPS (Utah County)	155.6250	186.2	155.6250	186.2
11 Salt Lake Fire	154.4300	CSQ	154.4300	CSQ
12 Salt Lake County Fire	153.8900	CSQ	159.3450	186.2
13 Salt Lake County Fire 2	154.1750	CSQ	159.2700	186.2
14 Salt Lake Sheriff - West	154.7850	179.9	159.4500	179.9

15 Salt Lake Sheriff - South	155.3700	173.8	159.0000	173.8
16 Salt Lake Sheriff - East	151.3250	162.2	159.3300	162.2
17 Sandy Police	154.8300	186.2	159.1500	186.2
18 Salt Lake Sheriff - 1	154.6500	151.4	159.0600	151.4
19 VECC Link	151.1150	186.2	159.3600	186.2
20 RESERVED				
21 RESERVED				
22 RESERVED				
23 RESERVED				
24 RESERVED				
25 RESERVED				

UHP Section 5 Daggett, Duchesne, Uintah Counties

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 DPS Repeater (Daggett County)	155.7000	203.5	155.0700	203.5
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Uintah Basin - East	155.6700	179.9	154.8450	179.9
5 Uintah Basin - West	155.3700	162.2	154.7700	162.2
6 Roosevelt Police	158.9250	162.2	153.8000	162.2
7 Little Mountain - EMS	155.0550	186.2	153.8150	186.2
8 Tabby - SRS (Duchesne County)	151.2800	151.4	159.2400	151.4
9 Asphalt Ridge - SRS (Uintah County)	151.1300	203.5	159.1650	203.5
10 Tabby Mountain - EMS	155.8350	167.9	155.1000	167.9
11 Price - DPS (Carbon County)	154.9200	146.2	158.9400	146.2
12 Indian Affairs	155.4150	CSQ	154.7250	103.5
13 Coalville - DPS (Summit County)	155.6100	151.4	155.6100	151.4
14 US Forest Service - Dutch John	171.4750	CSQ	162.2250	136.5
15 Roosevelt Police	155.0100	CSQ	155.0100	CSQ
16 Vernal Police - TAC	154.9500	CSQ	154.9500	CSQ
17 Colorado State Police	155.5800	136.5	158.9100	136.5
18 Wyoming Mutual Aid	154.8750	CSQ	154.8750	CSQ
19 Sweetwater Sheriff (Wyoming)	155.4150	CSQ	154.9500	100.0
20 RESERVED				
21 RESERVED				
22 RESERVED				
23 RESERVED				
24 RESERVED				
25 RESERVED				

UHP Section 6 Utah, Juab Counties

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Salt Lake South - DPS (Utah County)	155.6250	186.2	155.6250	186.2

3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
5 Utah Sheriff - North	154.8600	203.5	154.8600	203.5
6 Utah Sheriff - South	158.9100	123.0	158.9100	123.0
7 Utah County - South	158.9700	162.2	154.7100	162.2
8 Utah County Car/Car	154.8900	203.5	154.8900	203.5
9 Teat Peak - DPS (Utah County)	155.6250	203.5	154.9350	203.5
10 Levan Peak - SRS (Juab County)	151.2200	203.5	159.2250	203.5
11 Provo Canyon - SRS (Utah County)	151.0550	203.5	159.1350	203.5
12 Lake Mountain - SRS (Utah County)	151.0850	151.4	159.0450	151.4
13 Provo Police	155.1900	CSQ	155.8500	173.8
14 Springville Police	155.5350	71.9	155.5350	71.9
15 Spanish Fork Police	159.0300	CSQ	159.0300	71.9
16 Payson Police	155.4900	71.9	155.4900	71.9
17 American Fork Police	154.1000	CSQ	154.1000	CSQ
18 Lehi Police	154.0400	CSQ	154.0400	CSQ
19 Juab Sheriff	154.8000	CSQ	154.8000	CSQ
20 RESERVED				
21 RESERVED				
22 RESERVED				
23 RESERVED				
24 RESERVED				
25 RESERVED				

UHP Section 7 Summit, Wasatch Counties

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Summit County Repeater	155.6100	151.4	159.2100	151.4
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Wasatch Sheriff	154.7550	CSQ	158.7900	192.8
5 Wasatch Sheriff - Car/Car	154.8150	CSQ	154.8150	CSQ
6 Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
7 Salt Lake South - DPS (Utah County)	155.6250	186.2	155.6250	186.2
8 Park City Police	154.7400	85.4	154.7400	85.4
9 Lewis Peak - SRS (Summit County)	151.0400	151.4	159.0750	151.4
10 Tabby Mountain - SRS (Duchesne County)	151.2800	151.4	159.2400	151.4
11 Uintah Basin - West	155.3700	162.2	154.7700	162.2
12 US Forest Service - Current Creek	172.3750	CSQ	168.6750	136.5
13 MCI - SRS (Morgan County)	151.2200	173.8	154.6950	173.8
14 Uintah Sheriff (Wyoming)	155.4900	CSQ	155.4900	CSQ
15 Summit County - EMS	155.0850	CSQ	155.0850	203.5
16 Statewide - EMS	155.3400	CSQ	155.3400	CSQ
17 DNR Car/Car	155.7750	210.7	155.7750	210.7
18 Wyoming State Police	155.4450	CSQ	154.6800	107.2
19 Wyoming Mutual Aid	154.8750	CSQ	154.8750	CSQ
20 RESERVED				
21 RESERVED				

22 RESERVED
23 RESERVED
24 RESERVED
25 RESERVED

UHP Section 8 Tooele County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 South Mountain 910	155.9100	179.9	158.7900	179.9
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Wendover Law Enforcement	155.0400	179.9	155.0400	179.9
5 Delle - DPS (Tooele County)	155.9100	203.5	155.9100	203.5
6 South Mountain 820	155.8200	103.5	155.8200	103.5
7 Delle - SRS (Tooele County)	155.0550	151.4	159.1350	151.4
8 Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
9 Salt Lake South - DPS (Utah County)	155.6250	186.2	155.6250	186.2
10 Black Crook 910	155.9100	100.0	155.9100	100.0
11 Black Crook 820	155.8200	131.8	155.8200	131.8
12 Wendover Car/Car	155.8200	167.9	155.8200	167.9
13 CSEPP Farnsworth 1	148.8250	71.9	149.8375	71.9
14 CSEPP Farnsworth 2	148.8250	79.7	150.6125	79.7
15 CSEPP South Mountain	148.8250	88.5	150.6500	88.5
16 CSEPP Delle	148.8250	100.0	150.6875	100.0
17 Tooele Car/Car	154.7700	CSQ	154.7700	CSQ
18 Grantsville Car/Car	155.4900	CSQ	155.4900	CSQ
19 Tooele Search & Rescue	155.1600	CSQ	155.1600	CSQ
20 RESERVED				
21 RESERVED				
22 RESERVED				
23 RESERVED				
24 RESERVED				
25 RESERVED				

UHP Section 9A Emery County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Ford Ridge - DPS (Carbon County)	155.6550	173.8	154.8150	173.8
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Cedar Mountain - DPS (Emery County)	154.9200	146.2	158.9400	146.2
5 Bald Mesa - DPS (Grand County)	154.8300	146.2	159.1500	146.2
6 Abajo Peak - DPS (San Juan County)	155.6550	146.2	158.9100	146.2
7 Grand Sheriff	158.8500	103.5	155.9100	103.5
8 Emery Sheriff	156.2100	203.5	156.2100	203.5
9 Emery County	156.0000	203.5	156.0000	203.5

10	Bald Mesa - SRS (Grand County)	151.3700	203.5	159.4050	203.5
11	Cedar Mountain - SRS (Emery County)	153.8600	203.5	159.0750	203.5
12	Copper Ridge - SRS (Sanpete County)	151.0400	146.2	159.0150	146.2
13	Teasdale Peak - DPS (Wayne County)	155.7000	162.2	154.7400	162.2
14	Colorado State Police	155.5650	CSQ	155.5650	156.7
15	Mesa Sheriff (Colorado)	155.4900	141.3	154.9500	141.3
16	White Pine - DPS (Sevier County)	155.3100	192.8	159.2100	192.8
17	Salina Canyon - SRS (Sevier/Emery County)	151.0850	151.4	159.0450	151.4
18	National Law Enforcement	155.4750	CSQ	155.4750	CSQ
19	National Park Service - Bullfrog	171.6250	CSQ	172.4750	123.0
20	Colorado State Police	155.5650	CSQ	155.5650	156.7
21	Mesa Sheriff (Colorado)	155.4900	141.3	154.9500	141.3
22	Dove Creek (Arizona)	158.9750	107.2	153.9350	107.2
23	Cortez (Colorado)	155.1150	CSQ	158.8800	CSQ
24	Bald Mesa - SRS (Grand County)	151.3700	203.5	159.4050	203.5
25	Abajo Peak - SRS (San Juan County)	151.1300	151.4	159.3000	151.4

UHP Section 9B Grand County

Channel Name		Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1	Statewide	155.5050	CSQ	155.5050	162.2
2	Ford Ridge - DPS (Carbon County)	155.6550	173.8	154.8150	173.8
3	DPS Car/Car	155.7450	210.7	155.7450	210.7
4	Cedar Mountain - DPS (Emery County)	154.9200	146.2	158.9400	146.2
5	Bald Mesa - DPS (Grand County)	154.8300	146.2	159.1500	146.2
6	Abajo Peak - DPS (San Juan County)	155.6550	146.2	158.9100	146.2
7	Grand Sheriff	158.8500	103.5	155.9100	103.5
8	Copper Ridge - SRS (Sanpete County)	151.0400	146.2	159.0150	146.2
9	San Juan Sheriff	154.8600	67.0	156.0600	67.0
10	Grand County - EMS	155.8350	100.0	155.1450	100.0
11	Moab Police	155.4150	100.0	154.7250	100.0
12	Emery Sheriff	156.2100	CSQ	156.2100	203.5
13	National Park Service	166.3250	CSQ	166.9250	123.0
14	National Park Service - Bullfrog	171.6250	CSQ	172.4750	123.0
15	Colorado State Police	155.5650	CSQ	155.5650	156.7
16	Mesa Sheriff (Colorado)	155.4900	141.3	154.9500	141.3
17	San Juan Sheriff - Horse Flat	154.8600	74.4	156.0300	74.4
18	San Juan Sheriff - Abajo Peak	154.8600	88.5	156.0600	88.5
19	White Pine - DPS (Sevier County)	155.3100	192.8	159.2100	192.8
20	Teasdale Peak - DPS (Wayne County)	155.7000	162.2	159.1350	162.2
21	Salina Police	151.0850	151.4	159.0450	151.4
22	San Juan County - EMS	154.9650	127.3	158.7450	127.3
23	Cedar Mountain - SRS (Emery County)	153.8600	203.5	159.0750	203.5
24	Bald Mesa - SRS (Grand County)	151.3700	203.5	159.4050	203.5
25	Abajo Peak - SRS (San Juan County)	151.3100	151.4	159.3000	151.4

UHP Section 9C Grand County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Ford Ridge - DPS (Carbon County)	155.6550	173.8	154.8150	173.8
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Cedar Mountain - DPS (Emery County)	154.9200	146.2	158.9400	146.2
5 Bald Mesa - DPS (Grand County)	154.8300	146.2	159.1500	146.2
6 Abajo Peak - DPS (San Juan County)	155.6550	146.2	158.9100	146.2
7 San Juan Sheriff	154.9600	67.0	156.0300	67.0
8 Copper Ridge - SRS (Sanpete County)	151.0400	146.2	159.0150	146.2
9 Grand Sheriff	158.8500	103.5	155.9100	103.5
10 San Juan - EMS	154.9650	127.3	158.7450	127.3
11 Moab Police	155.4150	100.0	154.7250	100.0
12 Blanding Police	155.8050	CSQ	158.8050	103.5
13 San Juan Sheriff - Goodman Repeater	154.8600	71.9	156.0300	71.9
14 San Juan Sheriff - Cedar Mesa Repeater	154.8600	79.7	156.0300	79.7
15 San Juan Sheriff - Horse Flat Repeater	154.8600	74.4	156.0300	74.4
16 San Juan Sheriff - Clay Hill Repeater	154.8600	88.5	156.0300	88.5
17 Navajo Police	155.4600	CSQ	155.4600	CSQ
18 National Park Service	166.3250	CSQ	166.9250	123.0
19 National Park Service - Bullfrog	171.6250	CSQ	172.4750	123.0
20 Colorado State Police	155.5650	CSQ	155.5650	156.7
21 Mesa Sheriff (Colorado)	155.4900	141.3	154.9500	141.3
22 Dove Creek (Arizona)	158.9750	107.2	153.9350	107.2
23 Cortez (Colorado)	155.1150	CSQ	158.8800	CSQ
24 Bald Mesa - SRS (Grand County)	151.3700	203.5	159.4050	203.5
25 Abajo Peak - SRS (San Juan County)	155.1300	151.4	159.3000	151.4

UHP Section 9D Carbon County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Ford Ridge - DPS (Carbon County)	155.6550	173.8	154.8150	173.8
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Cedar Mountain - DPS (Emery County)	154.9200	146.2	158.9400	146.2
5 Bald Mesa - DPS (Grand County)	154.8300	146.2	159.1500	146.2
6 Abajo Peak - DPS (San Juan County)	155.6550	146.2	158.9100	146.2
7 Salina Canyon - SRS (Sevier/Emery County)	151.0850	151.4	159.0450	151.4
8 Copper Ridge - SRS (Sanpete County)	151.0400	146.2	159.0150	146.2
9 Carbon Sheriff	155.4300	146.2	159.2100	146.2
10 Carbon County	155.1150	CSQ	155.1150	CSQ
11 Emery Sheriff	156.2100	CSQ	156.2100	203.5
12 Emery County	156.0000	CSQ	156.0000	203.5
13 Carbon Sheriff Repeater	156.1050	CSQ	159.1050	203.5
14 Carbon/Emery County - EMS	155.2800	CSQ	155.2800	CSQ

15	Boarding House Ridge - SRS (Carbon County)	151.4600	146.2	159.4350	146.2
16	Teat Peak - DPS (Utah County)	155.6250	203.5	154.9350	203.5
17	Grand Sheriff	158.8500	103.5	155.9100	103.5
18	Teasdale Peak - DPS (Wayne County)	155.7000	162.2	159.1350	162.2
19	National Park Service - Bullfrog	171.6250	CSQ	172.4750	123.0
20	Colorado State Police	155.5650	CSQ	155.5650	156.7
21	Mesa Sheriff (Colorado)	155.4900	141.3	154.9500	141.3
22	Ford Ridge - SRS (Carbon County)	151.4150	151.4	159.2850	151.4
23	Cedar Mountain - SRS (Emery County)	153.8600	203.5	159.0750	203.5
24	Bald Mesa - SRS (Grand County)	151.3700	203.5	159.4050	203.5
25	White Pine - DPS (Sevier County)	155.3100	192.8	159.2100	192.8

UHP Section 10 Sevier, Sanpete, Piute, Wayne Counties

	Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1	Statewide	155.5050	CSQ	155.5050	162.2
2	Monroe Peak - DPS (Sevier County)	155.5950	203.5	158.7900	203.5
3	DPS Car/Car	155.7450	210.7	155.7450	210.7
4	White Pine - DPS (Sevier County)	155.3100	192.8	159.2100	192.8
5	Salina Canyon - SRS (Sevier/Emery County)	151.0850	151.4	159.0450	151.4
6	Sevier Sheriff	155.6700	CSQ	154.8450	123.0
7	Sevier Sheriff - Search & Rescue	155.2050	CSQ	155.2050	CSQ
8	Sevier EOC	155.0250	CSQ	155.9850	162.2
9	Richfield Police	155.5350	CSQ	155.5350	CSQ
10	Teasdale - DPS (Wayne County)	155.7000	162.2	159.1350	162.2
11	Loa/Bicknell - EMS	155.2800	CSQ	153.8750	179.9
12	Hanksville - EMS	155.2800	CSQ	155.2800	186.2
13	Copper Ridge - SRS (Sanpete County)	151.0400	146.2	159.0150	146.2
14	Sanpete Sheriff	155.4150	CSQ	155.4150	114.8
15	Sanpete Sheriff - North	155.1000	CSQ	155.1000	114.8
16	Sanpete Sheriff - Search & Rescue	155.0550	114.8	153.8750	114.8
17	Sanpete - EMS	155.9250	CSQ	154.1150	131.8
18	Levan Peak - SRS (Juab County)	151.2200	203.5	159.2250	203.5
19	Juab Sheriff	154.8000	CSQ	154.8000	CSQ
20	Price - DPS (Carbon County)	154.9250	146.2	158.9400	146.2
21	Kanab Repeater - DPS (Kane County)	155.7000	203.5	155.0700	203.5
22	Kanab - Reverse	155.0700	203.5	155.7000	203.5
23	Spencer's Ridge - DPS (Kane County)	155.8350	CSQ	154.9950	123.0
24	Buckskin Repeater - SRS (Kane County)	151.2800	151.4	159.1800	151.4
25	Barney Top - DPS (Garfield County)	154.6800	203.5	159.0900	203.5

UHP Section 11A Iron County

	Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1	Statewide	155.5050	CSQ	155.5050	162.2
2	Rudd's Roost - DPS (Iron County)	159.1500	162.2	156.1500	162.2

3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Windy Ridge - DPS (Iron County)	154.6950	203.5	158.9100	203.5
5 Beacon Hill - DPS (Iron County)	158.9700	203.5	154.9200	203.5
6 Iron Sheriff - Rudd's Roost	154.8750	CSQ	155.6400	203.5
7 Beaver Sheriff	155.8650	CSQ	153.9800	127.3
8 Virgin River Repeater - DPS (Washington County)	155.6250	203.5	154.9350	203.5
9 TAC 1	154.3400	203.5	154.3400	203.5
10 Gillies Hill - DPS (Beaver County)	159.0300	151.4	154.7100	151.4
11 Frisco Peak - DPS (Beaver County)	155.5650	203.5	156.2100	203.5
12 National Search & Rescue	155.1600	CSQ	155.1600	CSQ
13 Iron Sheriff - Iron Mountain	155.9250	203.5	153.8000	203.5
14 Iron Sheriff - Blowhard Mountain	151.1750	203.5	154.0250	203.5
15 Cedar City - EMS	155.1750	203.5	155.1750	203.5
16 Cedar City Fire	154.4450	CSQ	154.4450	103.5
17 Parowan - EMS	155.2650	203.5	155.2650	203.5
18 Parowan Fire	155.1000	CSQ	155.1000	CSQ
19 Paragonah Fire	154.9650	CSQ	154.9650	CSQ
20 Brian Head Fire/EMS	153.9650	CSQ	153.9650	151.4
21 Lincoln Sheriff - Nevada	154.8600	CSQ	155.5350	151.4
22 Spencers Ridge - DPS (Kane County)	155.8350	CSQ	154.9950	123.0
23 Kanab Repeater - DPS (Kane County)	155.7000	203.5	155.0700	203.5
24 Kanab - Reverse	155.0700	203.5	155.7000	203.5
25 Levan Peak - SRS (Juab County)	151.2200	203.5	159.2250	203.5

UHP Section 11B Beaver, Millard Counties

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Gillies Hill - DPS (Beaver County)	159.0300	151.4	154.7100	151.4
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Frisco Peak - DPS (Beaver County)	155.5650	203.5	156.2100	203.5
5 Windy Ridge - DPS (Iron County)	154.6950	203.5	158.9100	203.5
6 Beaver Sheriff	155.8650	CSQ	153.9800	127.3
7 Beaver EMS	155.1150	CSQ	153.7850	127.3
8 Beaver Jail	151.0100	127.3	159.0000	127.3
9 Rudd's Roost - DPS (Iron County)	159.1500	162.2	156.1500	162.2
10 Millard Sheriff - Cedar	154.9950	CSQ	154.0850	77.0
11 Millard Sheriff - Cricket	155.6850	CSQ	154.9500	77.0
12 Millard Sheriff - LRN	155.6850	CSQ	154.8150	77.0
13 Levan Peak - SRS (Juab County)	151.2200	203.5	159.2250	203.5
14 National Search & Rescue	155.1600	CSQ	155.1600	CSQ
15 Virgin River Repeater - DPS (Washington County)	155.6250	203.5	154.9350	203.5
16 Monroe Peak - DPS (Sevier County)	155.5950	203.5	158.7900	203.5
17 White Pine - DPS (Sevier County)	155.3100	192.8	159.2100	192.8
18 Barney Top - DPS (Garfield County)	154.6800	203.5	159.0900	203.5
19 Iron Sheriff - Rudd's Roost	154.8750	CSQ	155.6400	203.5

20 Juab Sheriff	154.8000	CSQ	154.8000	CSQ
21 Salt Lake South - DPS (Utah County)	155.6250	186.2	155.6250	186.2
22 Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
23 Beacon Hill - DPS (Iron County)	158.9700	203.5	154.9200	203.5
24 Garfield Sheriff - Barney Top	156.0150	CSQ	155.0400	123.0
25 UDOT 12	156.0600	210.7	156.0600	210.7

UHP Section 11C Kane, Garfield Counties

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	CSQ
2 Barney Top - DPS (Garfield County)	154.6800	203.5	159.0900	203.5
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Kanab Repeater - DPS (Kane County)	155.7000	203.5	155.0700	203.5
5 Kanab - Reverse	155.0700	203.5	155.7000	203.5
6 Monroe Peak - DPS (Sevier County)	155.5950	203.5	158.7900	203.5
7 Garfield Sheriff - Barney Top	156.0150	CSQ	155.0400	123.0
8 Garfield Sheriff - Dutton Peak	155.8800	CSQ	158.9400	141.3
9 Spencers Ridge - DPS (Kane County)	155.8350	CSQ	154.9950	123.0
10 Buckskin Repeater - SRS (Kane County)	151.2800	151.4	159.1800	151.4
11 Virgin River Repeater - DPS (Washington County)	155.6250	203.5	154.9350	203.5
12 St George Police	155.6700	DPL031	154.7250	DPL031
13 St George Police - TAC	155.1300	DPL115	155.8500	DPL115
14 Washington Sheriff - Seegmiller Peak	155.4300	CSQ	154.8300	123.0
15 Washington Sheriff - Zion	155.4300	CSQ	154.8300	141.3
16 Windy Ridge - DPS (Iron County)	154.6950	203.5	158.9100	203.5
17 Rudd's Roost - DPS (Iron County)	159.1500	162.2	156.1500	162.2
18 Gillies Hill - DPS (Beaver County)	159.0300	151.4	154.7100	151.4
19 Frisco Peak - DPS (Beaver County)	155.5950	203.5	156.2100	203.5
20 Levan Peak - SRS (Juab County)	151.2200	203.5	159.2250	203.5
21 Fredonia Police (Arizona)	159.0900	203.5	154.6800	203.5
22 Arizona DPS - Repeater	155.4900	CSQ	159.2100	151.4
23 Arizona DPS - Car/Car	155.4900	CSQ	155.4900	CSQ
24 National Search & Rescue	155.1600	CSQ	155.1600	CSQ
25 DNR Car/Car	155.7750	210.7	155.7750	210.7

UHP Section 11D Washington County

Channel Name	Rx Frequency MHz	CTCSS	Tx Frequency MHz	CTCSS
1 Statewide	155.5050	CSQ	155.5050	162.2
2 Virgin River Repeater - DPS (Washington County)	155.6250	203.5	154.9350	203.5
3 DPS Car/Car	155.7450	210.7	155.7450	210.7
4 Washington Sheriff - West	155.4300	CSQ	154.8300	192.8

5	Washington Sheriff - TAC	154.7400	CSQ	154.7400	CSQ
6	St George Police	155.6700	DPL031	154.7250	DPL031
7	St George Police - TAC	155.1300	DPL115	155.8500	DPL115
8	St George Fire	154.1600	123.0	155.8050	127.3
9	Washington Sheriff - Flat Top	155.4300	CSQ	154.8300	179.9
10	Washington Sheriff - Seegmiller	155.4300	CSQ	154.8300	123.0
11	Washington Sheriff - Zion	155.4300	CSQ	154.8300	141.3
12	Washington Sheriff - Search & Rescue	155.3700	67.0	159.0150	141.3
13	Zion National Park	166.3250	CSQ	166.9250	114.8
14	Hilldale	155.1000	103.5	153.9050	103.5
15	Windy Ridge - DPS (Iron County)	154.6950	203.5	158.9100	203.5
16	Rudd's Roost - DPS (Iron County)	159.1500	162.2	156.1500	162.2
17	Gillies Hill - DPS (Beaver County)	159.0300	151.4	154.7100	151.4
18	Frisco Peak - DPS (Beaver County)	155.5650	203.5	156.2100	203.5
19	Levan Peak - SRS (Juab County)	151.2200	203.5	159.2250	203.5
20	Salt Lake South - DPS (Utah County)	155.6250	186.2	155.6250	186.2
21	Salt Lake Repeater - DPS (Salt Lake County)	154.9050	186.2	155.5200	186.2
22	Kanab Repeater - DPS (Kane County)	155.7000	203.5	155.0700	203.5
23	Kanab - Reverse	155.0700	203.5	155.7000	203.5
24	Barney Top - DPS (Garfield County)	154.6800	203.5	159.0900	203.5
25	Spencers Ridge - DPS (Kane County)	155.8350	CSQ	154.9950	123.0

Appendix G. Strategic Technology Reserve

The State of Utah, Department of Technology Services has purchased 5 Strategic Technology Reserve trailers that are available for deployment throughout the state. The 5 trailers have been placed in Richfield, Vernal, Price, Cedar City, and Ogden.

Each trailer had been equipped with the following:

- 2- 800 MHz repeaters
- 2- VHF repeaters
- 2- UHF repeaters
- 1- 800 MHz mobile radio
- 1- VHF mobile radio
- 1- Amateur radio
- ACU audio bridge
- Cellular amplifier
- Network router
- 40’ telescopic tower
- Assorted directional and omni-directional antennas
- Diesel generator and battery backup

These trailers can be deployed at any time by contacting the local State Radio Shop technician. If an agency is unable to contact the local radio technician they may then contact the Radio Shop manager.

A list of area radio technicians can be acquired by contacting the State Radio Shop at 801 965-4538.

Appendix H. Memorandum of Understanding

SIEC Policy Action 02-2007

MEMORANDUM OF UNDERSTANDING
Regarding Nationwide Interoperability Channels

Utah SIEC

and

_____
(Federal Agency, State, or Local Jurisdiction, Emergency Organization)

Purpose
This Memorandum of Understanding (MOU) establishes permissions and guidelines for use of interoperability or mutual-aid radio channels by
• Local government or tribal jurisdictions in Utah and their associated emergency response agencies
• State agencies in Utah and their associated emergency response organizations
• Federal agency local units in Utah and their associated emergency response organizations
• Private sector emergency response organizations licensed or otherwise entitled to operate in the Public Safety Pool as defined in Part 90 of the FCC Rules (47CFR subpart B paragraphs 90.15-90.20).
It imposes certain protocols, procedures, and obligations upon jurisdictions hereby authorized to use national interoperability channels managed by the Utah SIEC.

Authority
Execution of this agreement by state and local entities is authorized by Governor Huntsman's Executive Order 2007-0002; Creating the Utah State Executive Committee. This MOU satisfies Federal Communications Commission Part 90 rules for extending license privileges to others by agreement. Federal agencies are permitted access to interoperability channels as authorized by 47 CFR 2.102 (c) & 2.103 and Part 7.12 of the NTIA Manual. Federal agencies may execute this MOU and shall adhere to the attached guidelines.

Applicability
This MOU authorizes the use of certain radio frequencies by emergency response organizations as defined by Department of Homeland Security (Office of Domestic Preparedness). Generally, this includes organizations in the following governmental disciplines:

- Emergency Management Public Safety Communications
- Law Enforcement Public Health
- Fire Service Health Care

- Emergency Medical Services Hazardous Materials
- Public Works / Transportation Governmental Administration
- National Guard

This MOU authorizes the use of interoperability frequencies for the purpose of coordination between emergency response agencies and resources. Such coordination may occur during interagency operations, en-route travel, or on-incident communications in accordance with an Incident Communications Plan.

Background
In January of 2007, Utah's Chief Information Officer, Stephen Fletcher, in an effort to provide for more effective interoperable emergency radio communications between agencies, approached the Governors office with the intent to form a new organization, dedicated specifically to ensuring interoperability among the various federal, state, and local government public safety agencies. On March 8, 2007 Governor Jon M. Huntsman, Jr. executed Executive Order 2007-0002 Creating the Utah State Interoperability Executive Committee (SIEC).

Understandings

Utah SIEC will:
• Manage and maintain proper licenses for the use of the interoperability frequencies referenced herein.
• Manage and maintain an accurate database of federal, state, and local government agencies that have accepted and signed this MOU.

Jurisdiction will:
- Participate in SIEC communications planning efforts.
- Manage the use of the interoperability frequencies by its employees, ensuring compliance with Utah's Statewide Communications Interoperability Plan (SCIP).
- Use the interoperability frequencies authorized hereby for their intended purpose of coordination between emergency response agencies and resources. Such coordination may occur during interagency operations, en-route travel, or on incident.
- Prioritize use of the interoperability frequencies:
- Emergency or urgent operation involving imminent danger to life or property
- Disaster or extreme emergency operation requiring extensive interoperability and inter-agency communications Special event, generally of a pre-planned nature Joint training exercises Inter-agency and enroute communications
- Implement radio communications procedures consistent with the National Incident Management System (NIMS) and Incident Command System (ICS) including:
    - Use "plain language" without 10-codes or agency-specific codes/jargon.
    - Use the calling protocol: "Agency-Unit #, **this is** Agency-Unit #", rather than "Unit # **to** Unit #". Examples: ***"Bryan EMS 1605, this is Tyler Fire 2102"*** **or** ***"Incident Command, this is DPS 505"***
    - Use the naming criteria outlined in the "NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels" referenced in the

following section, when programming channel names into radios, or when referring to interoperability channels.

Document Incorporated into this MOU
Responding to the FCC/NCC requirement for a common naming protocol for public safety interoperability channels, The National Public Safety Telecommunications Council (NPSTC) created the document "NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels". Utah's SIEC recognizes and supports the value of this document. The latest revision of this document will be used as the working reference for all activities associated with the use of interoperability channels.

Terms
This agreement shall be subject to review, renewal or cancellation and remain in effect until either party notifies the other in writing, not less than 90 days before any action is taken, that would alter or nullify this agreement.

References
NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels:
http://www.npstc.org/documents/IO-0060B-20070612%20Standard%20Channel%20Nomenclature%20Final.pdf

Agreement
This MOU was agreed to this _____ day of _____, 2007.
Return two copies of only this signature page to the address below.

JURISDICTION
Jurisdiction Name: _____
Authorized Signature: _____
Print Name: _____
Title: _____
Jurisdiction Address: _____
_____
_____
Phone: _____ e-mail: _____
Number of mobile, portable, and/or temporary base radios to be operated under DPS licenses:
Mobiles Portables Temporary Base-Mobile Relay
150 MHz Wideband
150 MHz Narrowband
450 MHz Narrowband
800 MHz NPSPAC
(This information is required as a condition of the associated FCC license.)

UTAH STATE INTEROPERABILITY EXECUTIVE COMMITTEE
Authorized Signature: _____

For the State Chief Information Officer
Stephen Fletcher, SIEC Chair
1 State Office Building, FL6
Salt Lake City, UT 84114
Telephone 801-538-3298
sfletcher@utah.gov

Appendix I. SCIP OP

This section is still under development and intentionally left blank.

Appendix J. ICS Forms

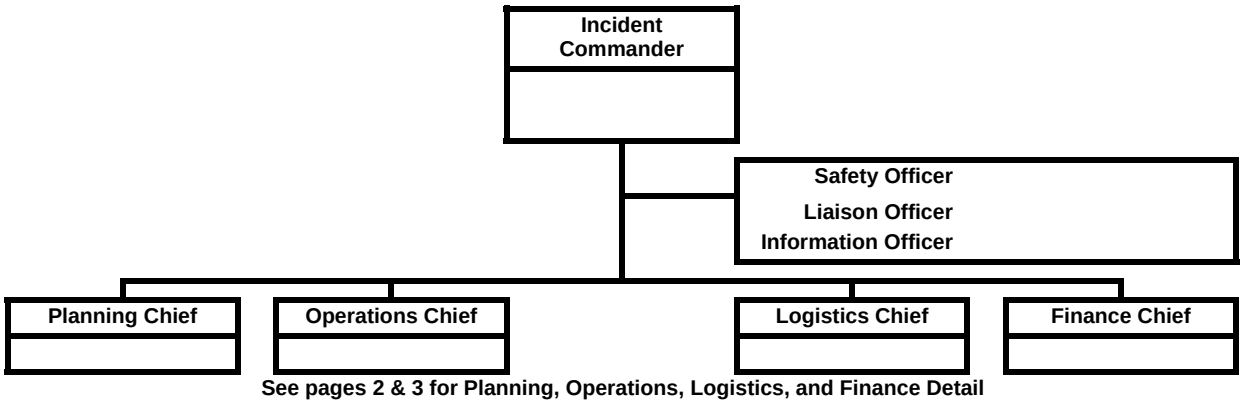
This appendix contains forms for incident command system (ICS) planning.

Form. ICS 201

INCIDENT BRIEFING	1. Incident Name	2. Date	3. Time

4. Map Sketch

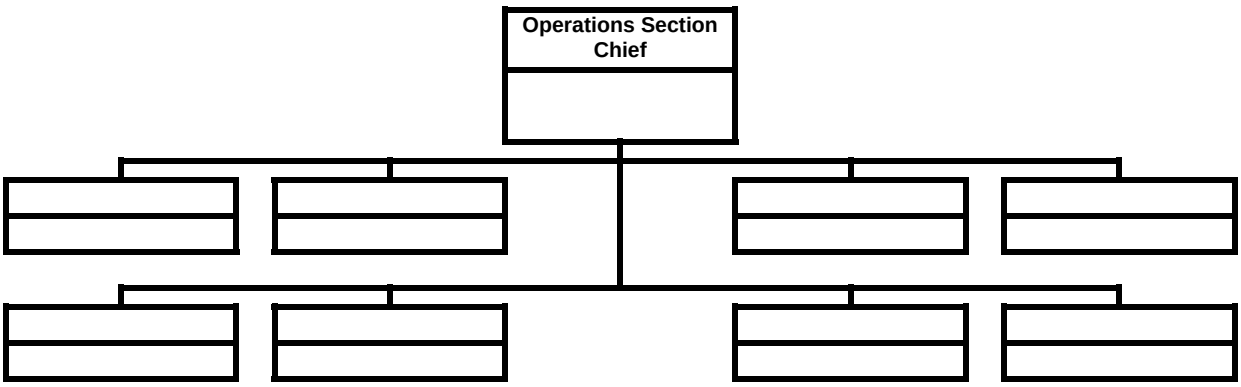
5. Current Organization



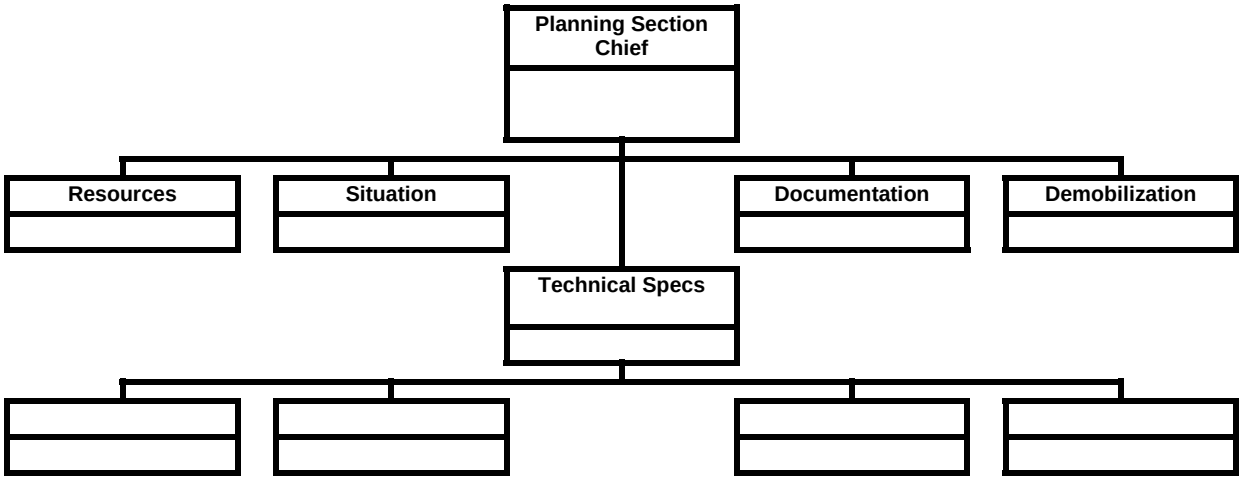
See pages 2 & 3 for Planning, Operations, Logistics, and Finance Detail

Page 1 of 4	6. Prepared by (Name and Position)

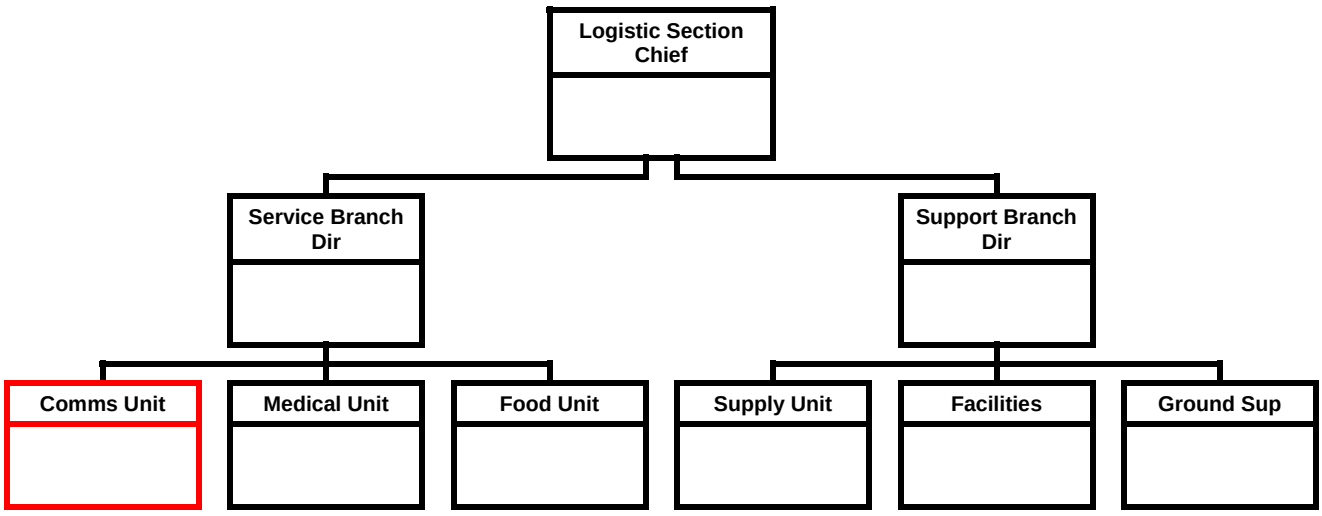
5.1 Operations



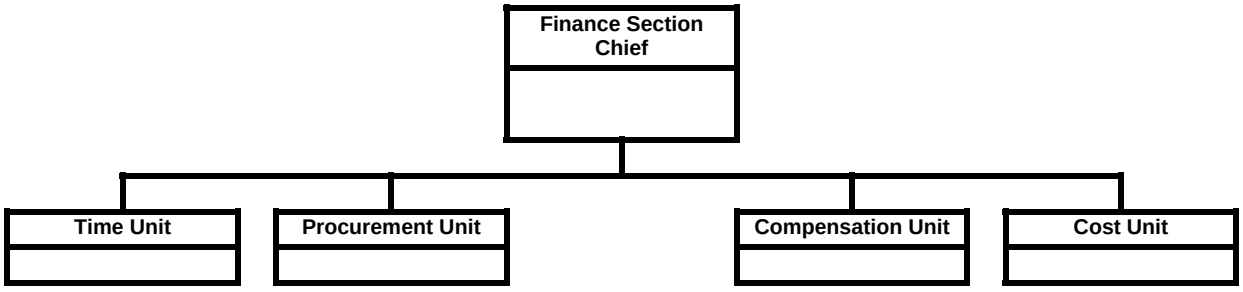
5.2 Planning



5.3 Logistics



5.4 Finance



6. Resources Summary			
Resources Ordered	Resource Identification	ETA On Scene	Location/Assignment
7. Summary of Current Actions			

Form. ICS 203

ORGANIZATION ASSIGNMENT LIST	
1. Incident Name	
2. Date	3. Time
4. Operational Period	
Position	Name
5. Incident Commander and Staff	
Incident Commander	
Deputy	
Safety Officer	
Information Officer	
Liaison Officer	
6. Agency Representative	
Agency	Name
7. Planning Section	
Chief	
Deputy	
Resources Unit	
Situation Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	
Human Resources	
Training	
8. Logistics Section	
Chief	
Deputy	
Supply Unit	
Facilities Unit	

Ground Support Unit	
Communications Unit	
Medical Unit	
Security Unit	
Food Unit	

9. Operations Section		
Chief		
Deputy		
a. Branch I - Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
b. Branch II - Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
c. Branch III - Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
d. Air Operations Branch		
Air Operations Branch Director		
Air Attack Supervisor		
Air Support Supervisor		
Helicopter Coordinator		
Air Tanker Coordinator		

10. Finance Section	
Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation/Claims Unit	
Cost Unit	

Prepared by (Resource Unit Leader)

Form. ICS 204

DIVISION ASSIGNMENT LIST	1. Branch	2. Division/Group
3. Incident Name	4. Operational Period Date: Time:	

5. Operations Personnel			
Operations Chief		Division/Group Supervisor	
Branch Director		Air Attack Supervisor No.	

6. Resources Assigned this Period

Strike Team/Task Force/ Resource Designator	Leader	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time

7. Control Operations

8. Special Instructions

9. Division/Group Communication Summary

Function	Frequency	System	Channel	Function	Frequency	System	Channel
Command		King NIFC		Logistics		King NIFC	
Tactical Div/Group		King NIFC		Air to Ground		King NIFC	

Prepared by (Resource Unit Leader)	Approved by (Planning Section Chief)	Date	Time

Appendix K. Glossary

Item/Acronym	Definition
ACU-1000	Audio bridge used in fixed and mobile configurations. Requires radio from each connected communications system. Gateway device used to link disparate radio systems.
Audio Bridge	Connects four-wire audio from disparate radio systems to provide interoperability.
CERV	Communications Emergency Response Vehicle
CIO	Chief Information Officer
Console Patching	Ability to connect dispatch consoles
CP	Command Post
CST	National Guard Civil Support Team
CTCSS	Continuous Tone Coded Squelch System
DFM	Department of Facility Maintenance
DHS	Department of Homeland Security
DHLS	Utah Division of Homeland Security
DOD	Department of Defense
DOH	Department of Health
DPS	Department of Public Safety
DTS	Department of Technology Services
EMC	Emergency Management Command
EMD	Emergency Medical Dispatch
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
EOC	Emergency Operations Center
EOD	Explosive Ordinance Disposal
ETA	Estimated Time of Arrival
FEMA	Federal Emergency Management Agency

Item/Acronym	Definition
FBI	Federal Bureau of Investigation
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
GETS	Government Emergency Telecommunications Service
HEICS	Hospital Emergency Incident Command System
HEAR	Hospital Emergency Advisory Radio
IAP	Incident Action Plan
IC	Incident Command
ICC	Incident Communications Center
ICALL	Calling Channel for ITAC
ICS	Incident Command System
ICTAP	Interoperable Communications Technology Assistance Program
IED	Improvised Explosive Device
Inter-agency	Located or occurring between two or more agencies
Interoperable	Ability of a system to use the parts or equipment of another system
ITAC	Conventional mutual aid channel 800 Mhz
JIC	Joint Information Center
JTTF	Joint Terrorism Task Force
LES	Law Enforcement System
MAA	Mutual Aid Agreement
MHz	Abbreviation for megahertz. 5 MHz = 5,000,000 Hz or 5,000 kHz.
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MST	Medical Support Team
Mutual Aid	Personnel, equipment, or services provided to another jurisdiction
NCC	Network Control Center
NENA	National Emergency Number Association

Item/Acronym	Definition
NERRTC	National Emergency Response & Rescue training Center
NETC	National Emergency Training Campus
NIMS	National Incident Management System
NLEEC	National Law Enforcement Emergency Channel
NPSPAC	National Public Safety Planning Advisory Committee
NRP	National Response Plan
NSAR	National Search and Rescue
NTPI	National Terrorism Preparedness Institute
OG&T	Office of Grants and Training
OMNI-Link	Motorola Interoperability Equipment
PA	Public Announcement
PIO	Public Information Officer
POC	Point of Contact
PSAP	Public Safety Anserwing Point
R4C	Regional Four Corners Committee
RACES	Radio Amateur Civil Emergency Service
RCC	Regional Communication Center
RDC	Naval Regional Dispatch Center
RDD	Radiological Dispersal Device
RF	Radio Frequency
RSAG	Regional Security Advisory Group
SAFECOM	Oversees all initiatives and projects pertaining to public safety communications and interoperability. Managed by DHS, it is the first national program designed by public safety for public safety and works cooperatively with more than 50,000 local and state public safety agencies.
SAR	Search and Rescue
SCIP	Strategic Interoperable Communications Plan
SIEC	State Interoperability Executive Committee

Item/Acronym	Definition
SLUA-TICP	Salt Lake Urban Area TIC Plan
SMR	Specialized Mobile Radio System
SOP	Standard Operating Procedure
SPAWAR	Space and Naval Warfare
SRS	State Repeater Network (VHF/UHF)
SSC SD	Space and Naval Warfare Systems Center San Diego
Talkgroup	Term ususally used with trunked radio systems. A talkgroup is a predefined list of radios/users assigned a unique ID which allows them to communicate with each other over the trunked radio system.
TAT	Terrorist Advisory Team
TIC Plan	Tactical Interoperable Communications Plan
UASI	Urban Areas Security Initiative
UAWG	Urban Area Working Group
UCAN	Utah Communications Agency Network
UHF	Ultra High Frequency – Range of 300 to 3,000 MHz. For public safety LMR, usually refers to two bands. 380 to 460 MHz (low) and 460 to 512 MHz (high).
USAFR	United States Air Force Reserves
USAR	Urban Area Search and Rescue
USCG	United States Coast Guard
UWIN	Utah Wireless Integrated Network
VHF	Very High Frequency – For public safety LMR, usually refers to VHF High Band with a range of 136 to 164 MHz. VHF Low Band has a frequency range below 100 MHz.