Northwest Nevada Region
Tactical
Interoperable Communications Plan (RTICP)

January 2010

Version 2.4 - 2010

Tactical Interoperable Communications Plan
Signature Page

Approved by:

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Record of Change

Change No.	Description	Change Date	Approved By
Version 1.0	Initial Draft Version	April 2009	NCSC
Version 2.0	Completed version	December 2009	NA
Version 2.1	With Updates from Agencies	December 2009	NA
Version 2.2	Updated by Jake Conely	December 2009	NA
Version 2.3	Reformatted tables	January 2010	NA
Version 2.4	Reformatted tables	January 2010	NCSC

This Regional Tactical Interoperable Communications Plan (RTICP) is subject to information and/or equipment updates and changes. The use of this Record of Change helps manage RTICP modifications throughout the life of this document. All attempts have been made to ensure the accuracy of the information within this RTICP as of the initial distribution date. Any subsequent adjustments should be logged and coordinated with user agencies within the Northwest Nevada Region.

Executive Overview

This document establishes a Regional Tactical Interoperable Communications Plan (RTICP) for the Northwest Nevada Region, inclusive of US FEMA Region 9.

The RTICP is intended to document the interoperable communications resources available within the designated area, who controls each resource, and what rules of use or operational procedures exist for the activation and deactivation of each resource. The idea is to consolidate all this information into one document and make it available to all users.

While the Nevada Statewide Communications Interoperability Plan (SCIP) is the vision for interoperable communications, the TICP can be thought of as a toolbox, as it contains the tools or interoperability connections that can be applied to an incident as needed.

See Appendix I for a list of resources available to assist in preparing/updating the RTICP.

In Nevada, three TICPs were developed, one for the Northwest, one for the Northeast and one for the Las Vegas Urban Area and the South portion of the State. The TICP for each region is applicable to all responders and all incidents that may occur in the region.

Determining hard and fast boundary lines was a challenge because each region contains overlapping boundaries of each County and the State agencies. The jurisdictions of the State agencies, like NDOT and NHP, do not follow County boundaries, and as a result the regions should not be thought of as hard boundaries, but rather general geographical areas where frequent interoperability coordination is needed.

The Northwest RTICP includes Washoe, Storey, Carson City, Douglas, Lyon, Churchill and Mineral Counties. This area overlaps with the Nevada Highway Patrol North Command and NDOT District 2.

The Northeast RTICP includes Elko, Humboldt, Pershing, Lander, Eureka, and White Pine Counties. This region overlaps with the Nevada Highway Patrol Central Command and NDOT District 3.

The Southern Region includes the Las Vegas Urban Area and Clark, Lincoln, Nye and Esmeralda Counties. This area overlaps with the Nevada Highway Patrol Southern Command and NDOT District 1.

The intent of each RTICP is to provide information on the interoperability connections available in each region that can be used when multiple agencies respond to the same incident. The RTICP documents the Federal, State and Local guidelines that must be followed when using an interoperability resource. In some cases because of the complexity of the resources, Interoperability SOPs have been developed, using the Nevada SOP Manual that further defines how the resource can be used.

Finally, a Field Operations Guide, or FOG will be made available to the each region after April of 2010 that contains a quick reference guide to the frequencies, repeater locations, dispatch center locations and other key information for each region needed by those responding to an incident.

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1 Northwest Nevada Region Information

Nevada has diverse climate, due partly to variations in latitude and elevation. Winter temperature varies from an average January temperature low of ~22°F and high temperature of ~45°F to summary averages from a low of ~51 and an average high of ~91 in the month of July.

Nevada is the driest U.S. State, with average annual precipitation (rain and melted snow) of less than an inch in Reno, while the mountains and Lake Tahoe area receive over 3 inches of annual precipitation. Much of the precipitation falls as winter snow, with the spring thaw contributing to streams and creeks flowing from the mountains.

One major interstate crosses Northwest Nevada; Interstate-80, running east-west, which is the major thoroughfare connecting the Reno/Sparks area with California and Northeastern Nevada. US 395 and US 95 traverse the northwest part of the State, north to south, and US 50 runs east to west. Within the region major interstate and highway intersections include I-80 and US 395 (Reno); I-80 and US 95 (Fernley) (Fallon); US 50 and US 95 (Fernley) (Fallon); US 95 and US 6 (Coldale); and US 395 and US 50 (Carson City).

About 80% of Nevada's land is under federal government control and managed by Bureau of Land Management (BLM), US Forest Service (USFS), or the Department of Defense (DoD). The central portion of the State contains the nation's nuclear testing grounds, and a live-weapons range used by various branches of the US military for aerial and air-to-ground combat training. The Northwest Region is serviced by Union Pacific Railroad which parallels I-80 and traverses the Northwest Region. Union Pacific Railroad also provides a spur to Hawthorne Army Ammunition Plant. The Northwest Region has two regional HAZMAT Response Teams.

Airports are located in Reno (Reno Tahoe International), Carson City, Minden, Stead, and Fallon Naval Air Station with numerous smaller airstrips throughout the region accessible for transport needs. South Lake Tahoe Airport in California services the Lake Tahoe Basin.

Table 1 Northwest Nevada Region County Statistics

County	2000 Population	2005 Population	2024 Population Projection	Square Miles	County Seat
Carson City	52,457	54,867	57,390	144	Carson City
Churchill	23,982	24,896	25,238	4,929	Fallon
Douglas	41,259	45,180	49,472	710	Minden
Lyon	34,501	53,022	74,281	1,994	Yerington
Mineral	5,071	4,684	4,328	3,757	Hawthorne
Storey	3,399	4,341	5,543	264	Virginia City
Washoe	339,486	410,443	496,226	6,342	Reno

The Northwest Nevada region covered by this plan consists of Washoe, Storey, Carson City, Douglas, Lyon, Churchill and Mineral Counties and an area roughly defined as District 2 by the Nevada Department of Transportation's region classifications, although this area is referred to as Region 1 for Nevada Master Mutual Aid. Northwest Nevada falls under FEMA Region 9.
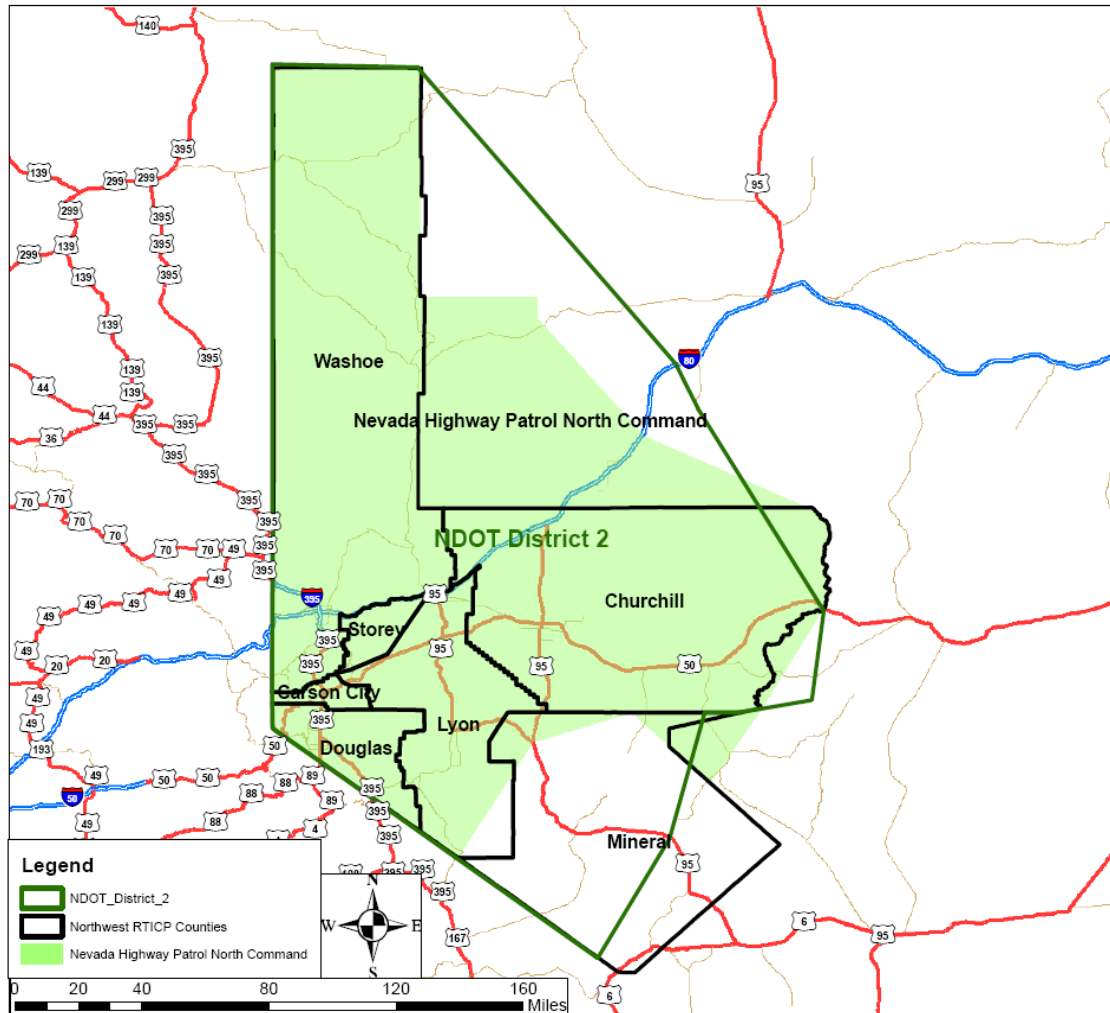
Figure 1 Northwest Nevada Regional Map

1.1   Participating Jurisdictions/Agencies/Disciplines

This Tactical Interoperability Communication Plan (TIC Plan) has been created for the Northwest Nevada Region. The plan is intended for use by first responders and may be used by governmental or non-governmental organizations and personnel requiring communications or coordination during an incident or planned event.

The jurisdictions, agencies, and disciplines represented in the TIC Plan are listed in Table 2. Additional contact information for each agency is listed in Appendix A.

Table 2 Jurisdictions, Agencies, and Disciplines Represented in the TIC Plan

Jurisdiction	Agency	Discipline
LOCAL		
Carson City	Carson City Sheriff's Office	Law Enforcement
	Carson City Fire Department	Fire, EMS, and Emergency Management
	Capitol Police Department	Law Enforcement
	Nevada State Legislature Police Department	Law Enforcement
	Carson City Public Works	Public Works
Churchill County	Churchill County Sheriff's Office	Law Enforcement
	Fallon City Police Department	Law Enforcement
	Fallon Fire Department	Fire/Rescue and EMS
	Naval Air Station Fallon Emergency Management	Emergency Management
	Fallon Paiute Tribal Police Department	Law Enforcement
	Churchill County Emergency Management	Emergency Management
	Churchill County Public Works	Public Works
	Naval Air Station Fallon Fire Department	Fire, Crash Rescue, EMS
	Naval Air Station Fallon Emergency Medical Services	EMS
	Churchill County Search and Rescue	Search and Rescue
	Banner Churchill County Hospital Emergency Medical Services	EMS
	City of Fallon Public Works	Public Works
Douglas County	Douglas County IT	Information Technology
	East Fork Fire and Paramedic District	Fire/Rescue and EMS
	Tahoe Douglas Fire Protection District	Fire/Rescue and EMS
	Douglas County Sheriff's Office	Law Enforcement
	Washoe Tribe Police Department	Law Enforcement
	Douglas County Communications	Dispatch/Infrastructure
	Douglas County Emergency Management	Emergency Management
	Douglas County Public Works	Public Works
Lyon County	Lyon County Emergency Management	Emergency Management
	Lyon County Sheriff's Office	Law Enforcement
	North Lyon County Fire Protection District	Fire/Rescue and EMS
	Central Lyon County Fire Protection District	Fire/Rescue and EMS
	Smith Valley Fire Protection District	Fire/Rescue and EMS

Jurisdiction	Agency	Discipline
	Mason Valley Fire Protection District	Fire/Rescue and EMS
	Fernley Ambulance Service	Fire/Rescue and EMS
	Lyon County Public Works	Public Works
	City of Fernley	Public Works
	Yerington Tribal Police Department	Law Enforcement
	Yerington Police Department	Law Enforcement
Mineral County	Mineral County Sheriff's Office	Law Enforcement
	Walker River Tribal Police Department	Law Enforcement
	Mineral County Public Works	Public Works
	Hawthorne Water Department	Utilities
	Mineral County Office of Emergency Management	Emergency Management
	Hawthorne Fire Department	Fire/Rescue and EMS
	Walker Lake Fire Department	Fire/Rescue and EMS
	Mina Fire Department	Fire/Rescue and EMS
	Mineral County Sheriff's Search and Rescue	Search and Rescue, Law Enforcement
	Walker River Tribal Fire Department	Law Enforcement
Storey County	Storey County Office of Emergency Management	Emergency Management
	Storey County Fire Department	Fire/Rescue and EMS
	Storey County Sheriff's Office	Law Enforcement
	Storey County Public Works	Public Works
	Storey County Communications	Communication infrastructure
Washoe County	Incline Communications	Dispatch
	North Lake Tahoe Fire Protection District	Fire/Rescue and EMS
	Pyramid Lake Tribal Police	Law Enforcement
	REMSA	EMS and Dispatch
	Reno Emergency Communications	Dispatch
	Reno Fire Department	Fire/Rescue and EMS
	Reno Police Department	Law Enforcement
	Reno Public Works	Public Works
	Reno Sparks Tribal Police	Law Enforcement
	Sierra Fire Protection District	Fire/Rescue and EMS
	Sparks Police Department	Law Enforcement
	Sparks Emergency Management	Emergency Management
	Sparks Public Works	Public Works
	Sparks Fire Department	Fire/Rescue and EMS
	Truckee Meadows Fire Protection District	Fire/Rescue and EMS
	Truckee Meadows Water Authority	Utilities
	Regional Transportation Commission (RTC)	Mass Transit

Jurisdiction	Agency	Discipline
	Reno Tahoe Airport Authority Police Department	Law Enforcement
	Reno Tahoe Airport Authority Fire Department	Fire, EMS and Crash Rescue
	Washoe County Division of Emergency Management and Homeland Security	Emergency Management
	Washoe County School District	Sheltering and Transportation
	Washoe County School District Police	Law Enforcement
	Washoe County Sheriff's Office	Law Enforcement
	Washoe County Public Works	Public Works
	Washoe County Search and Rescue	Search and Rescue, Law Enforcement
	Washoe County Animal Control	Enforcement
	Incline Village General Improvement District	Utility
	Gerlach Ambulance	EMS
	Washoe County Telecommunications	Information Technology, Communication Infrastructure
STATE		
	Capitol Police	Law Enforcement
	Nevada Air National Guard	Military
	Nevada Department of Agriculture	Public Works
	Nevada Department of Corrections	Law Enforcement
	Nevada Department of Information Technology	Information Technology
	Nevada Department of Motor Vehicles	Regulator
	Nevada Department of Public Safety	Emergency Services
	Nevada Department of Transportation	Transportation infrastructure
	Nevada Department of Wildlife	Enforcement
	Nevada Division of Emergency Medical Services	Emergency Services
	Nevada Division of Emergency Management	Emergency Management
	Nevada Division of Forestry	Wildland Fire
	Nevada Division of Investigations	Law Enforcement
	Nevada Highway Patrol	Law Enforcement
	Nevada National Guard	Military
	Nevada Office of Homeland Security	Emergency Management
	Nevada Parole and Probation	Law Enforcement
	Nevada State Fire Marshal	Investigation and Enforcement
	Nevada State Parks	Parks Management
	Office of the Attorney General	Governance
	University of Nevada, Reno Police Department	Law Enforcement

Jurisdiction	Agency	Discipline
	Truckee Meadows Community College Police Department	Law Enforcement
	Nevada OSHA	Enforcement
Federal		
	Bureau of Land Management	Wildland Fire and Law Enforcement
	United States Forest Service	Wildland Fire and Law Enforcement
	Bureau of Indian Affairs	Wildland Fire and Law Enforcement
	Federal Bureau of Investigations	Law Enforcement
	US Marshal Service	Law Enforcement
	Alcohol, Tobacco and Firearms (ATF)	Law Enforcement
	Drug Enforcement Administration (DEA)	Law Enforcement
	US Secret Service	Law Enforcement
	Immigration and Customs Enforcement (ICE)	Law Enforcement
	United States Coast Guard	Law Enforcement, Search and Rescue
	Naval Air Station Fallon Search and Rescue	Search and Rescue

1.1.1 Nongovernmental Agencies Represented in the TIC Plan

- ARES/RACES
- Nevada Broadcaster's Association (NBA)
- Nevada Hospital Association
- NV Energy
- Hospital Emergency Rooms
- Southwest Gas Corporation
- American Red Cross
- Inter-Hospital Coordination Committee (IHCC)
- Union Pacific Railroad
- Associated General Contractors (heavy equipment)

1.1.2 Tribal Entities Represented in the TIC Plan

- Pyramid Lake Paiute Tribe
- Reno Sparks Indian Colony
- Washoe Tribe
- Yerington Paiute
- Walker River Paiute
- Fallon Paiute

1.1.3   Other TIC Plans in the State

- Las Vegas Urban Area and Southern Nevada Regional TICP
- Northeastern Nevada Regional TICP

1.2   TIC Plan Point of Contact

The primary and alternate points of contact (POC) for copies of or questions regarding this Plan are:

Primary:

Agency Name:	Nevada Division of Emergency Management
POC Name:	Pete Reinschmidt
Title:	Emergency Operations Manager
Office Phone:	(775) 687-0305
E-Mail:	preinschmidt@dps.state.nv.us

Alternate:

Agency Name:	Nevada Communications Steering Committee
Title:	Chairman of NCSC
Office Phone:	(775) 684-5678
E-Mail:	

2nd Alternate:

2nd Alternate:

Agency Name:	Nevada Communications Steering Committee
POC Name:	Jack A. (Jake) Conely
Title:	Fire Captain, Sparks Fire Department
Office Phone:	(775) 353-2255
Cell Phone:	(775) 815-1252
E-Mail:	jconely@cityofsparks.us

2   Governance

2.1   Overview

The Northwest Nevada Regional TICP addresses interoperable communications equipment and planning for the region. Each agency, discipline, and jurisdiction participating in this plan is unique regarding their own interoperable communication needs and capabilities. However, proximity to one another, population, and shared incident/event responsibilities allow them to develop a single, consolidated regional TIC Plan rather than several individual, potentially incompatible plans.

The TIC Plan, therefore, consolidates information across agencies, disciplines, and jurisdictions by documenting regional communications capabilities in order to provide a usable and accurate regional tactical incident response tool.

This TIC Plan was developed under the authority of the entities represented by the participants in the Northwest Nevada Region TICP Workshop held on April 30 and May 1, 2009 at the Regional Public Safety Training Center, Reno, NV. Representatives from the following public safety, public service disciplines, and NGOs were included in the planning:

- Public Safety Communications
- Communications Infrastructure
- Emergency Management
- Emergency Medical Services
- Fire/Rescue
- Information Technology (IT)
- Law Enforcement
- Nongovernmental Organizations (NGOs)

2.2   Governing Body

Public Safety Interoperable Communications in Nevada are governed by the Nevada Commission on Homeland Security (NCHS) through the NCSC. The NCSC is comprised of voting entity representatives in addition to the fixed committee positions of Chairman and Vice Chairman. This Regional TICP was developed under the direction of the NCSC. The NCSC Chairman formed a regional ad-hoc committee who provide input to create the original Regional TICP. Since its original creation, the document has been maintained and updated by agencies represented in the Regional TICP under the direction of the NCSC.

Figure 2 Northwest Nevada Region Governance Organization Chart
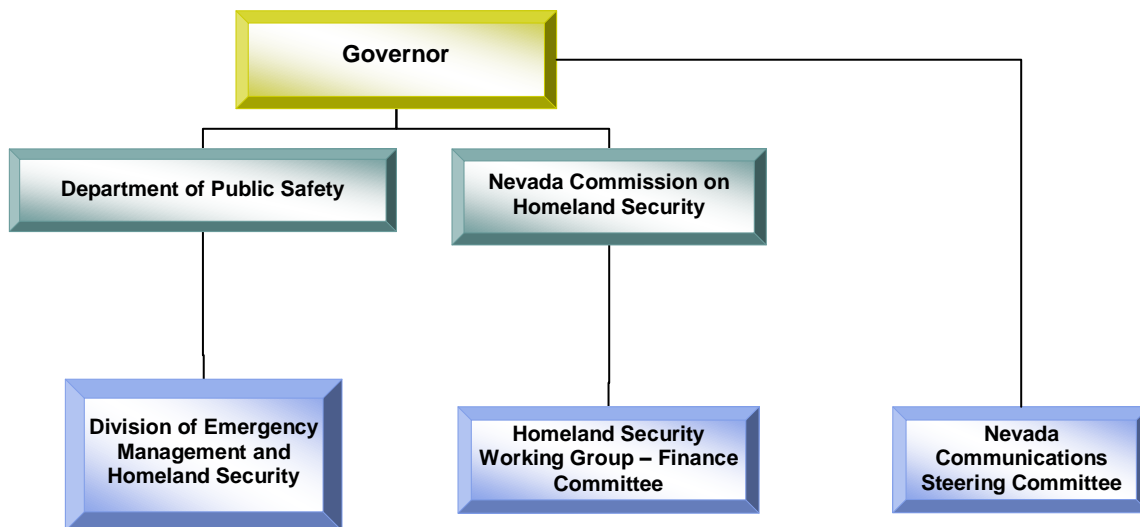
2.3   Membership

Appendix A provides POC information for members of the governing body and its subcommittees.

2.4   Responsibilities of the NCSC

The NCSC will:

- Maintain and update the RTIC Plan at regular intervals, or as critical updated information is identified.
- Disseminate updated plans to all participating agencies.

- Establish training requirements in support of the RTIC Plan.
- Promote interoperable communications capabilities through trained communications personnel.
- Initiate Memoranda of Understanding (MOUs) and Agreements for interoperable communications.
- Promote regular interoperable equipment/solutions testing; assist entities with test evaluations, and dissemination of the results.
- Re-evaluate regional requirements as technology evolves and circumstances dictate.
- Review communications related SOPs created by the included entities, to preclude conflicts or non-compliance with current standards or initiatives.
- Establish and manage interoperable communications ad-hoc user groups.
- Develop and recommend final solutions and implementations.
- Recommend chains of command for interoperable communications including Communications Unit Leaders (COML).
- Evaluate utilization of interoperable communications systems and/or equipment across the State on a regular basis to ensure that it is being used on a daily basis.
- Coordinate with SOP working group to ensure RTIC Plan objectives and concepts are incorporated into SOPs.

2.5 Meeting Schedule

Unless otherwise scheduled, the Nevada Communications Steering Committee will have bi-monthly meetings and the RTIC Plan will be a standing agenda item with reports/updates as needed. The NCSC follows the Nevada Open Meeting law.

2.6 RTICP Maintenance and Update

The NCSC has the responsibility to review this document as part of the annual SCIP review/update. Requests for modifications or additions to this document should be submitted to any NCSC member or RTIC Plan POC for distribution to the NCSC. Updates to this document can be recommended by any of the participating agencies. Agencies participating in this plan will be formally notified within 90 days of any approved modifications or additions to this RTIC Plan.

2.7 Agency Responsibilities and Rights

Agencies will retain the following rights and responsibilities:

- Agencies are responsible for considering and, if agreeing to, complying with MOUs and Agreements developed by the NCSC in coordination with their respective jurisdictions.
- Authorized representatives of agencies participating in this plan have the authority to request the use of equipment, including systems and mobile assets, in accordance with Standard Operating Procedures (SOPs).
- Where applicable, agencies will be responsible for consistently maintaining, testing, and exercising connectivity to interoperable communications.

- Agencies retain the right to decide when and where to participate in interoperable communications. For example, agencies will retain the right to accept or decline a patch to a gateway system to provide interoperable communications during an incident.

- If an agency is unable to supply a communications asset that has been requested, they should notify the Incident COML.

2.8 Prioritization and Shared Use of Regional Interoperability Assets

In response to events or incidents which cross over political jurisdictions, there will potentially be competing demands and priorities for interoperable communications assets.

Until such time as Incident Command is established, the lead agency designee (i.e., communications supervisor/command personnel), in cooperation with assisting agencies, will have the authority to designate the use of interoperable assets. Once Incident Command has been established, Command Staff or Communication Unit Leaders (when designated) direct the further coordination and delegation of the interoperable communications assets assigned to the event or incident in question.

Agencies should judiciously activate needed interoperable assets so as to both effectively respond to the event and/or incident and also minimize any negative impact on surrounding agencies or jurisdictions. Specifically, interoperable communications should be attempted with the following order of operations in mind (subject to variability based on the agencies involved and the nature of the event/incident):

1. Leverage face-to-face communications wherever appropriate. For example, the co-location of all Command and General Staff at the incident command post (ICP) provides the best direct communications and reduces the demand on interoperability resources.

2. Employ local communications assets until such time as either those assets become taxed or inadequate based on the nature and/or scope of the incident.

3. If response agencies are users of a shared system, utilize that shared system to establish interoperable communications.

4. If response agencies operate on disparate systems, utilize shared or mutual aid channels to establish interoperable communications.

5. If responding agencies do not share systems or channels, utilize a gateway solution to establish interoperable communications.

6. Where interoperable communications cannot otherwise be established between responding agencies, utilize swap or cache radios to establish operable communications for responders.

7. If no other method of interoperability can be established, relay communications through staff members.

When the same resources are requested for two or more incidents, resource assignments should be based on the priority levels listed below:

1. Disasters, large scale incidents, or extreme emergencies requiring mutual aid or interagency communications.

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 within the same priority level, the resources should be allocated with the following priorities in mind:

1. Incidents with the greatest level of exigency (e.g., greater threat to life or property, more immediate need, etc.) have priority over less exigent incidents.

2. Agencies with single/limited interoperable options have priority use of those options over agencies with multiple interoperable options.

3. When at all possible, agencies already using an interoperable asset during an event should not be redirected to another resource.

Reference to applicable policy documents, governing documents, MOUs, and sharing agreements can be found in Appendix H.

3   Interoperability Equipment, Policies, and Procedures

This section describes all interoperable communications equipment and their associated policies and procedures in the Northwest Nevada Region. In an effort to reduce the amount of information that is repeated in each section, we have consolidated a list of regional rules of use that apply in general to all interoperability assets in the region. These procedures also serve as a baseline for those agencies who are developing their own interoperability and operability resources.

All Assets Shared System Rules of Use

- **National Incident Management System** – Use an Incident Command System (ICS) compliant with the National Incident Management System (NIMS) when using any regional interoperability resource.

- **Plain Language** – All interoperable communications during multi-agency, multi-discipline incidents will be in plain language. Avoid using radio codes, acronyms, and abbreviations as they may cause confusion between agencies. Ensure that all verbal requests for assistance or backup specify the reason for the request.

- **Unit Identification** – Announce your home agency prior to announcing your unit identifier during interoperable communication situations, i.e., Sparks Engine 11, Washoe County Sheriff 2N21, etc.

All Assets Shared System Policies and Procedures

Use the following procedures when requesting, using, or discontinuing the use of shared communication systems:

- When an individual responder needs to interoperate with other agencies on their same shared system, the responder will notify their dispatch center. The dispatcher can then identify and designate an appropriate channel. Note that in cases where no dispatcher intervention is required, responders still notify dispatch that they are switching to a shared channel to maintain responder safety.

- Notify dispatch when the interoperability channels/talkgroups are no longer required and announce the return to normal operations channels.

For extended incidents requiring activation of EOC or Incident Management Team (IMT):

- The Communications Unit Leader (COML) will be briefed on the interoperability channels/talkgroups that are in use.

- Each agency's dispatch center tells additional en-route responders what interoperability channels are in use for the incident.

- The Incident Commander or their designee determines when the interoperability channels are no longer required and notifies the appropriate dispatch center.

All Assets Problem ID and Resolution

During an incident without a Communications Unit:

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- Follow agency protocols.

During an incident with a Communications Unit:

- During activation, report shared system problems to the Communications Technician (COMT) or COML/designee assigned to the incident/event, who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply to all shared systems:

- Agencies using a shared system will report any problems with that system directly to the COML or their designee. The COML or their designee will ensure an effective resolution to all reported shared system problems.

3.1 Shared Trunked Systems

Definition of a Shared Trunked System

"Shared Trunked System" refers to a single trunked radio system used to provide service to several public safety or public service agencies. The table below lists all trunked radio systems shared by more than one public safety or service agency operating in the Northwest Nevada Region. Details on each system are provided in 0.

Note: that intra-system "shared channels" refer to common frequencies/talkgroups established and programmed into radios to provide interoperable communications among agencies using the *same* shared radio system. "Channel," in this context, refers to the name of a common frequency/talkgroup visually displayed on a user's radio.

Table 3 Northwest Nevada Region Shared System(s)

Radio System Name	Make / Model	Type	Frequency Band	Owning Agency	Service Area
Nevada Shared Radio System (NSRS)	Tyco Electronics EDACS	Trunked Wide Area, Pro-Voice	800 MHz	Department of Transportation/ Sierra Pacific Resources	Statewide
Washoe County Regional Communications System (WCRCS)	Tyco Electronics EDACS	Trunked Wide Area, Pro-Voice	800 MHz	WCRCS	Washoe County Area

Trunked Shared System Policies and Procedures

The NCSC has identified shared communication systems that provide service to the Northwest Nevada Region. The policies, procedures, rules of use and trunked shared system problem ID and resolution are the same as "All Assets Policies and Procedures", and "All Assets Rules of Use" listed under Section 3.

3.1.1   Nevada Shared Radio System (NSRS) Shared System

NSRS Shared System Technology Overview

This shared system is owned and managed by Nevada Department of Transportation (NDOT), NV Energy, and University of Nevada Las Vegas. This shared system covers the State of Nevada. The number of channels is an estimate. Channels are distributed among the 90 sites across Nevada. This system covers all major highways in Nevada. General interoperable communications rules of use, policies, and procedures that apply across these systems are listed in Section 3.

NSRS Shared System Problem ID and Resolution

During an incident:

- During activation, report shared system problems to the NDOT District 2 Help Desk, who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply:

- Agencies using a shared system will report any problems with that system directly to the NDOT District 2 Help Desk, who will ensure an effective resolution of all the reported shared system problem(s).

3.1.2   NSRS Interoperability Channel/Talkgroup

Definition of an Intra-System Shared Channel/Talkgroup

Intra-system "shared channels/talkgroup" refer to common frequencies/talkgroups established and programmed into radios to provide interoperable communications among agencies using the *same* shared radio system. "Channel," in this context, refers to the name of a common frequency/talkgroup visually displayed on a user's radio.

NSRS Interoperability Channel/Talkgroup Overview

The NSRS has identified shared communication talkgroups that provide service to the Northwest Nevada Region. General interoperable communications rules of use, policies, and procedures that apply across these systems are detailed below.

Specific shared interoperable communication talkgroups available within the region are listed in the tables below. More detailed information on each channel is documented in 0.

NSRS Interoperability Channel/Talkgroup Policies and Procedures

In addition to the "All Assets Policies and Procedures" listed under Section 3, the following policy also applies.

- Verbal approval by authorized agency representatives is required for talkgroup use to create interoperability.

3.1.3   Washoe County Radio Communications System (WCRCS) Shared System

WCRCS Shared System Technology Overview

This shared system is owned and managed by Washoe County and consists of multiple sites that cover the northern urban area of Reno, Sparks and the incorporated areas in Washoe County. This shared system has interoperability with the NSRS via a Stargate switch. Channels are distributed among the 10 sites throughout Washoe County. Each site has a max channel capacity. The Reno and Sparks/Tahoe area each have simulcast systems that are part of the WCRCS.

Appendix B contains a complete list of the WCRCS Interoperability channels and talkgroup designations. The WCRCS channels/talkgroups are available on both WCRCS and NSRS systems for authorized users that have requested access to these channels through each system administrator. The number of channels is an estimate.

WCRCS Shared System Problem ID and Resolution

Agencies should identify and resolve problems in accordance with policies already established for the WCRCS system. The procedures for problem ID and resolution can be found in all Washoe County Communication Centers.

3.2   Conventional Shared Systems

"Conventional Shared System" refers to a single conventional radio system used to provide service to several public safety or public service agencies. In the case of the radio systems currently in place for Churchill, Mineral, Lyon, Douglas, Storey and Carson City County these systems have stand alone repeaters at each site. Radio users must select the correct repeater site based on their location in the county using a unique PL Tone. In most cases the radio sites are linked back to the communication center via microwave and the dispatcher has the ability to select any of the repeater sites in their respective county.

The four counties of Lyon, Douglas, Storey and Carson City County are currently developing a Quad County System that will interconnect the four county communications centers via microwave and allow dispatchers the ability to select any radio site in the four counties. Details on each system are provided in each section below and in Appendix C.

Table 4 Conventional Shared System(s)

Radio System Name	Make / Model	Type	Frequency Band	Owning Agency	Service Area
Lyon County VHF Public Safety	Motorola Gold Elite	Conventional Simulcast	VHF	Lyon County Sheriff's Office	Lyon County
Douglas County VHF Public Safety	Motorola Gold Elite	Conventional Simulcast	VHF	Douglas County	Douglas County
Storey County VHF Public Safety	Motorola Gold Elite	Conventional Simulcast	VHF	Storey County	Storey County
Carson City VHF Public Safety	Motorola Gold Elite	Conventional Simulcast	VHF	Carson City	Carson City
EMS Radio Network	Mixed	Conventional Simulcast	UHF	Nevada EMS	Statewide
Churchill County VHF	Mixed	Conventional	VHF	Churchill County	Churchill County
Mineral County VHF	Mixed	Conventional	VHF	Mineral County	Mineral County
Nevada Division of Forestry (NDF) VHF	Mixed	Conventional	VHF	NDF	Regional
Nevada Division of Wildlife (NDOW) VHF	Mixed	Conventional	VHF	NDOW	Statewide
Nevada Division of State Parks VHF	Mixed	Conventional	VHF	NDSP	Statewide

Conventional Shared System Policies and Procedures

The policies, procedures, rules of use and conventional shared system problem ID and resolution are the same as "All Assets Policies and Procedures", "All Assets Rules of Use", and "All Assets Problem ID and Resolution" listed in Section 3.

3.2.1 Lyon County VHF Public Safety Conventional Shared System

Lyon County VHF Public Safety Conventional Shared System Technology Overview

The Sheriff's Office has 2 repeater channels (4 frequencies) and one tactical channel. The Yerington Police have 2 VHF frequencies. The fire department has one repeater channel (2 frequencies) and one tactical frequency. The jail uses the Sheriff's Office tactical frequency. The Central Lyon Fire District has one additional repeated channel and one tactical frequency

The Lyon Fire repeaters are located at the following sites: Bald, Schurz Mtn., Como, Eagle Ridge, and Pond Peak. The Sheriff's Office repeater sites are: Bald, Schurz, Como, Eagle Ridge, and Pond Peak. Different PL tones are used to access each repeater.

The channels allocated for the Lyon County VHF system are listed in Appendix C.

3.2.2 Douglas County VHF Public Safety Conventional Shared System

Douglas County VHF Public Safety Shared System Technology Overview

The Sheriff's Office has one repeated channel at 3 sites: Hilltop, Topaz Hill and Glenbrook. There is another repeated channel at East Peak, which has the same receive frequency but a different transmit frequency than the other 3 transmit sites. There are also auxiliary receive sites at Minden, Stateline, Scarcelli, Station 4, Topaz, and Station 12. These sites are linked to the voter at the PSAP by either a UHF link or a wireline. There is also a repeated tactical channel. The jail has their own frequency.

The Tahoe District Fire Protection District (TDFPD) radio system has one repeated channel at Meeks Bay. There are 4 auxiliary receive sites at Glenbrook, Stateline, Ridge Tahoe, and Station 12. The voter is located at Station 3. The repeater has a UHF link to the voter; the auxiliary receive sites are linked via wireline, TDFPD also has a repeater at Station 3 on the same channel.   They also have a simplex tactical channel.

The East Fork Fire and Paramedic District (EFFPD) has one repeated channel at 2 sites: Topaz Lodge and Leviathan. There are also 3 auxiliary receive sites Station 12, Station 4 and Minden. The receive audio is voted at the PSAP. These sites are linked to the voter at the PSAP by either a UHF link or a wired line

The channels allocated for the Douglas County VHF system are listed in Appendix C.

3.2.3 Storey County VHF Public Safety Shared System

Storey County VHF Public Safety Shared System Technology Overview

The Storey County System is a 150 MHz VHF System. The system consists of three Mountain Top Repeaters on a basic analog network. The repeater sites are strategically located on Ophir Peak, Como and Pond Peak for optimal coverage throughout the county. All of these sites are shared with other county and state agencies.

The channels allocated for the Storey County VHF system are listed in Appendix C.

3.2.4   Carson City VHF Public Safety Shared System

Carson City VHF Public Safety Conventional Shared System Technology Overview

The Sheriff's Office has two repeated channels for their patrol group and a repeated channel for the jail. They also have two tactical channels. The Fire Department has one repeated and 2 tactical channels. Public works has one repeated channel and 2 simplex channels. These repeaters are operating wideband, however, they are narrowband capable. There is also a city-wide narrowband encrypted channel used by both fire and law enforcement. There is one repeater site at Duck Hill.

The channels allocated for the Carson City County VHF system are listed in Appendix C.

3.2.5   EMS Radio Network UHF Conventional Shared System

EMS Radio Network UHF Public Safety Shared System Technology Overview

The EMS Radio Network UHF Conventional Shared System is a statewide system designed to provide emergency medical communications between Emergency Medical Service (EMS) personnel in the field and hospitals. This system is based on the Federal Communications Commission (FCC) design of ten UHF channels "National Contiguous System" for exclusive use of emergency medical services for dispatching and "medical control" communications. There are multiple mountain top repeaters that can be accessed with the use of Private Line (PL) codes specific to the hospital to which the EMS personnel wish to communicate. In addition, this system has six mountain top repeaters located throughout the region which are linked to the REMSA Communications Center located in Reno, NV which can be directed to the hospitals located in Reno and Sparks via a patch matrix system.

The rural EMS agencies are in the process of migrating to the Nevada Shared Radio System. This migration will be completed by the end of 2010. The planned Rural EMS talkgroups will be in the 800 MHz frequency band and are included in Appendix C. In addition, see Appendix C for full list of accessible UHF channels and PL codes.

3.2.6   Churchill VHF Public Safety Shared System

Churchill VHF Public Safety Conventional Shared System Technology Overview

The Sheriff's Office has a single channel (frequency pair) on three repeaters. Each repeater uses a different PL tone. They also transmit locally in simplex mode. The Fallon/Churchill County Fire Department uses the Sheriff's frequencies. The jail uses the Sheriff's local frequency. The Fallon Police Department has their own VHF channel (frequency pair).

The three repeaters are located at: Desert Peak, Fairview Peak, and Rattlesnake. Rattlesnake is the primary dispatch site. There is a fiber connection from the PSAP to Rattlesnake.

The channels allocated for the Churchill County VHF system are listed in Appendix C.

3.2.7 Mineral VHF Public Safety Shared System

Mineral VHF Public Safety Conventional Shared System Technology Overview

The Sheriff's Office has one channel (a frequency pair) located at four repeater sites: Cory, Pilot Peak, Schurz, and Kincaid. One of the frequencies is also used in simplex mode, which the jail also uses. The Sheriff's Office has a task force which uses some car-to-car frequencies. There is a remote base station on Vortec.

The Fire Department has one pair of frequencies on one repeater at Kincaid. They use simplex in the valley. If they can't talk on their channel, then they use the Sheriff's. The Fire radios are programmed for the surrounding counties, as well as the Fire White 1 – 3 and Red 1-3, BLM, USFS and NDF.

The channels allocated for the Mineral County VHF system are listed in Appendix C.

3.2.8 Nevada Division of Forestry (NDF) VHF Conventional Shared System

NDF Conventional Shared System Technology Overview

The NDF radio system consists of one frequency pair accessed via different PL tones. There are 36 repeaters and base stations. The Tonopah subgroup of repeaters uses a different repeater pair than the other sites. 5 Daniels repeaters and 5 Motorola repeaters are digital / narrowband capable. The other 26 Daniels repeaters are analog.

The main radios (base stations) are on McClellan Mt. (Reno, Carson City), Angel Peak (Las Vegas), Montezuma Peak (Tonopah), Winnemucca Mt. (Winnemucca), Elko Mt. (Elko), and Cave Mt. (Ely). The main radios are microwaved to the Minden and Elko Dispatch centers. The base stations are able to pick up every repeater. The NDF sites are either located in DoIT shelters, co-located with BLM or USFS sites, or arrangements have been made with private entities.

There are two dispatch centers: The Sierra Front Interagency Dispatch in Minden and the Elko Interagency Dispatch Center. Elko dispatch controls the radios in Elko, Humboldt, and White Pine County, Lander and Eureka Counties. Minden has the responsibility for the rest of the NDF radio system in the state. The two dispatch centers are co-located with BLM and USFS. The Interagency Dispatch Center in Elko dispatches for numerous federal, state, and tribal wildland fire agencies and all-risk activities for Elko County for NDF.

Central Dispatch is collocated in the same building but is a completely separate entity that serves as the 911 / PSAP for Elko County.

The channels allocated for the NDF VHF system are listed in Appendix C.

3.2.9 Nevada Department of Wildlife (NDOW) VHF Conventional Shared System

NDOW Conventional Shared System Technology Overview

NDOW has three regions. Each region has two areas, each equipped with a base station at a repeater site; each area has several repeaters. NDOW has two repeater frequencies – one for repeater transmit and the other for mobile/portable transmit. PL tones transmitted from the base

station provide repeater steering. Radio users provide their ID number and their repeater site when communicating. The dispatchers then select the appropriate repeater for transmit. The dispatch center is linked to the base stations via a T1 to Highway Patrol, and then onto the DoIT microwave. The base stations, and most of the repeaters, are located at DoIT shelters present at the sites.

The dispatch center is located in Reno and dispatches statewide for the agency. They support BLM and the U.S. Forest Service for law enforcement dispatch. They support air operations, performing hourly checks or whatever is required. The dispatch center is open from 6:00 A.M. until 11:00 P.M.

The channels allocated for the NDOW VHF system are listed in Appendix C.

3.2.10 Nevada State Parks VHF Conventional Shared System

Nevada Division of State Parks Conventional Shared System Technology Overview

State Parks has 9 repeater sites: 6 high level sites and 3 low level sites. The repeater sites are not linked. The low level sites are located in state parks to enhance coverage. There are also 35 base stations, one in each State Park. State Parks is comprised of two regions – Northern and Southern, with 24 parks in 13 of the 17 Nevada counties. Only Storey, Lander, Eureka. And Esmeralda Counties do not have state parks.

State Parks has 3 VHF frequencies licensed as statewide mobile channels. DPS provides dispatch for all but one State Park. The DPS Dispatch Centers are located in Las Vegas, Carson City and Elko. Lyon County Sheriff's Office provides dispatch for Lahontan State Recreation Area.

The channels allocated for the Nevada State Parks VHF system are listed in Appendix C.

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3.3   Inter-system Shared Channel

Definition of an Inter-System Shared Channel

Inter-system "shared channels" refer to common frequencies/talkgroups established and programmed into radios to provide interoperable communications among agencies using different radio systems. "Channel," in this context, refers to the name of a common frequency/talkgroup visually displayed on a user's radio.

Specific shared interoperable communication channels available within the region are listed in the tables below. More detailed information on each channel is documented in Appendix C.

The policies, procedures, rules of use and conventional shared system problem ID and resolution are the same as "All Assets Policies and Procedures", "All Assets Rules of Use", and "All Assets Problem ID and Resolution" listed in Section 3.

Responding agencies can contact requesting agency for channel assignment listed in Appendix A, Section A.1. Responding agencies can also contact nearby dispatch centers in case of en route emergencies. The Nevada Tactical Crossband repeaters described below also provide an interoperability resource throughout the Northwest Region

3.3.1   Nevada Tactical Crossband Repeaters Shared Channel

Nevada Tactical Crossband Repeater Technology Overview

The Nevada crossband repeaters network will enable VHF and 800 MHz users to talk directly to each other without the intervention of a technician or a dispatch operator. To use a crossband repeater, a radio user simply changes to the interoperability channel.

The statewide tactical crossband repeaters are designed to interconnect 800 MHz and VHF narrowband conventional channels. Currently, approximately 38 crossband repeater sites have been identified throughout the state, 19 of which will be operational in early 2010.

Each repeater site will have a total of six channels, one calling channel and two tactical channels in both VHF and 800 MHz. When responding to or reporting a mutual aid incident, these calling channels are the primary communications path used to respond to the incident.

Nevada Tactical Crossband Repeater Channel Policies and Procedures

A typical scenario is for an emergency responder to contact a Communications/Dispatch Center on the calling channel and then expect to be directed to the appropriate tactical channel. The responder will be able to reference the Regional Tactical Interoperable Communication Plan (RTICP) to determine the calling channel for their region. In some cases, during early deployment of the crossband repeaters, a dispatch / communication center may not be actively monitoring the calling channel. In this case the responder should follow established SOPs in order to access the crossband repeater.

Every entity with emergency responder responsibilities should develop or participate in an SOP that covers the use of the statewide crossband repeater network. Each SOP must specify the procedures for monitoring the calling channels and outline specific procedures for using both calling and tactical channels.

Applicable Incidents or Events

Any day to day, planned, or major incident involving more than one emergency response agency.

Applicable Disciplines and Entities

Any agency who desires to use these channels must sign an MOU with the Nevada Division of Emergency Management and Homeland Security.

Applicable Locations

Applicable within the coverage area of any one of the crossband repeater sites in the State of Nevada. In the Northwestern Region of Nevada these sites primarily cover the major population centers and travel corridors within the region. Appendix D contains a list of the Nevada Tactical crossband repeater locations.

Levels of Activation

System is activated according to priority:

Priority 1: Involves a life-threatening emergency that requires immediate assistance of more than one agency and direct communication between agencies is essential to the emergency.

Priority 2: Involves a serious incident of life-threatening or potentially life-threatening circumstances that requires the assistance of more than one agency that will be beneficial to the emergency.

Priority 3: Involves incidents of a serious nature that requires the assistance of more than one agency and direct communication between agencies will assist in the response to the incident.

In the event of a second incident that requests use of Tactical Crossband Repeater Channel that is currently in use, a request will be made directly to the Incident Commander of the first incident to determine if their situation is sufficiently contained to allow a second incident to come up on the channel. The priority, severity, scope and nature of the second incident will be given due consideration in determining release of the tactical channel for the second or concurrent incident.

Nevada Tactical Crossband Repeater Channel Rules of Use

Activation Procedure

1) Incident that requires more than one emergency response agency.

2) User will switch to a crossband repeater tactical channel and ask if channel is in use.

3) After User finds an open channel, they will contact the user's Communication Center on their primary dispatch channel and notify them of the Crossband Repeater Tactical Channel in use for the incident.

4) Communication Center should notify the communication center of the responding agencies and notify them of the tactical channel in use for the incident.

5) Additional users will contact their communication center and will be directed to the correct crossband repeater channel.

6) Users are advised that their Communication Center may not be able to monitor the crossband repeater channels.

Transfers and Changes.

Any transfer to another channel will be coordinated through the agency dispatch centers.

User Notification Method:

Activation

Coordinate through the user's Communication Center and Incident Commander.

Change or transfer of interoperability control

The Incident Command and the Incident Commander's communication center will coordinate the transfer of interoperability control.

Instructions for access

The Tactical Crossband Repeater Network is accessible by all users in the coverage footprint provided the channels are programmed into the radios. At the time of the writing of this SOP, the frequencies and Tactical Crossband Repeater locations were not known. This SOP will be updated in December 2009 to reflect these updates.

Alternate and/or secondary solution activation

Primary Dispatch Channels will be used to coordinate activation of an alternate or secondary solution.

Deactivation Procedure

Users should be notified of Deactivation as follows:

1) Incident Commander makes the determination that the Tactical Crossband Repeater channel is no longer needed and contacts their communication center.
2) The Incident Commander's communication center will notify other agency dispatch centers that the interoperability resource is being deactivated.
3) Each communication center will notify their users to return to the normal dispatch channel.
4) Roll call should be made on the primary channel

Nevada Tactical Crossband Repeater Problem ID and Resolution

Following an event that activated a channel on the Tactical Crossband Repeater Network, the requesting agency and the Incident Commander will complete the following and send the completed feedback information to the NCSC.

1) Nature of the Problem

2) Duration of the Problem

3) Any recommended solutions, especially if the problem was of an operational nature.

3.4 Gateways

"Gateway" systems interconnect channels of disparate systems (whether on different frequency bands or radio operating modes), allowing first responders using their existing radios and channels to be interconnected with the channels of other users outside of their agency. Dispatch consoles that are able to create patches will also be captured as gateways. Gateways are listed in the following table. More detailed information on each gateway is provided in Appendix E.

Table 5 Northwest Nevada Region Gateway Systems

Gateway Name	Owning Agency	Day-to-Day or Incident / Event	Make / Model	Fixed / Mobile	No. of Simultaneous Nets	No. of Ports
WCRCS Conventional Interface	Washoe County Telecomm.	Day-to-Day and/or Major Incident	4 Wire Tone Control	Fixed and/or mobile	24	17
Incline Village	North Lake Tahoe FPD	Day-to-Day	Tyco Electronics Conventional Interface	Fixed	24	17
Fallon Police Department	Fallon Police Department	Major Incident	Communications Applied Tech	Mobile	5	7

Note: The assets in the above table are pending. The following sections have not been created and need modification.

3.4.1 Gateway Policies and Procedures

Gateway Policies and Procedures

The policies, procedures, rules of use and are the same as "All Assets Policies and Procedures" listed in Section 3.

Gateway Rules of Use

The rules of use are the same as "All Assets Rules of Use" listed in Section 3. The following policies and procedures also apply.

- **Encryption** – All encrypted radios users must operate in a "clear" mode when a gateway is used, unless otherwise arranged in advance. **Never assume encryption carries across the gateway.**
- **Monitoring** – The Incident Commander, or their designee, will ensure that each activated interoperability channel is monitored consistently while in use.
- **Gateway users shall refrain from using primary dispatch talkgroups/channels.**

Gateway Communications Request

The COML and/or Incident Commander must be aware that activating multiple gateways to support an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways.

The agency requesting the use of a fixed or mobile gateway device for incident/event communications support should document and will provide the following information to the owning gateway agency POC, on request:

- Requesting agency
- On-scene agencies requiring interoperability
- Incident/event type (e.g., wildland fire, etc.)
- Equipment required
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested (e.g., gateway operator, generator, etc.)

Gateway Activation

Once the owning agency grants authorization to use their gateway, the procedures for establishing communications connectivity are:

- Select a channel or talkgroup on the home system for use in the gateway patch.
- Verify the system-wide availability of required resources (coordinate among control point dispatchers).
- Provide radio call sign/designator information to connected agencies as needed.
- Assign the requested unit/agency to that channel or talkgroup.
- Connect the agency to the appropriate talkgroup.
- Announce to users that interoperability is activated.
- Identify users on the interoperability channel using their agency name and unit identifier through *a roll call*.
- The Incident Commander, or their designee, will ensure that each activated interoperability channel is monitored consistently while in use.

Mobile Gateway Deployment Procedure

Upon receiving a request for the deployment of a mobile gateway, the owning agency dispatcher should follow these deployment procedures:

- Contact the on-call mobile gateway operator/technician responsible for mobile gateway deployment.
- Dispatch the mobile gateway operator to the incident scene.
- Inform the requesting agency that the mobile gateway is en route and provide an estimated time of arrival (ETA), if available.

The mobile gateway operator should follow these deployment procedures:

- Provide dispatch with an ETA at the incident and method of communications while en route (e.g., designated radio channel, cell number).

- Retrieve the dedicated unit and mobile gateway from its storage location and deliver it to the incident scene

- Report to the Incident Commander or Check-in on arrival.

- Once on-scene, establish patches via the mobile gateway in accordance with the Gateway Activation Procedures listed above.

Gateway Deactivation

When the gateway connection(s) is (are) no longer required, agencies should follow these deactivation procedures:

- Contact the monitoring dispatcher (for fixed gateways) or the mobile gateway operator (for mobile gateways) to request patch/gateway deactivation.

- Announce over all patched channels/talkgroups that connections will be deactivated prior to the connection being disabled.

- Return all personnel to their appropriate home system channel assignments.

Gateway Problem ID and Resolution

During an incident:

- Report gateway problems to the owning agency dispatcher (for fixed gateways) or mobile gateway operator (for mobile gateways), who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply to all regional gateways:

- Report any problems with the gateway to the appropriate POC for that agency listed in Appendix E. The POC will be responsible for ensuring effective resolution to problems that exist with the gateway.

- Report unresolved gateway problems directly to the COML or their designee. The COML or their designee will ensure effective resolution to reported gateway problems.

Gateway Limitations

Interoperability provided through a gateway can connect participating agency responders but has the following limitations:

- The number of simultaneous patches that can be supported by the gateway will be limited by switch capacity and the number of lines connecting control centers and consoles. As a result, a limited number of patches involving resources at different control points can be supported simultaneously. Likewise, a limited number of patches involving resources that are accessed through a communications center console may be supported simultaneously.

- Home system coverage may limit communications. Gateway users must be within their coverage area.

- Agencies not permanently configured on a given gateway will require additional planning to establish interoperable communications through that gateway.

Gateway Test Procedures

To ensure that equipment components of the gateway operate properly, each agency will participate in the following testing procedure:

- The owning agency shall ensure each gateway is tested on a regular basis.
- Testing should include deployment (mobile only), setup, operation, and deactivation of each gateway.
- If an issue or problem is identified during the testing procedure, determine who will take corrective action. If the issue or problem cannot be resolved, contact the appropriate technical personnel to address the issue or problem.

3.5   Radio Cache(s)

Cache radios, also known as "swapped radios," refer to maintaining a cache of standby radios that can be deployed to support regional incidents. These radios may be from a regional cache or from a participating agency. These radios allow all responders to use common, compatible equipment during an incident. Specific caches within the Northwest Nevada Region are listed in the following table. Detailed information on cache radios can be found in Appendix F.

Table 6   Northwest Nevada Region Radio Cache(s)

Radio Cache Name	Make / Model	Owning / Managing Agency	Frequency Band	Quantity
Washoe County Radio Cache	Tyco Electronics 7200 with vehicular charger, lithium chargeable battery, clamshell and lithium AA batteries	Washoe County Emergency Operations Center	800 MHz / 700 MHz Trunked Conventional P25 Open Sky	43
Fallon Police Department	Bendix King, w/ spare battery, speaker, mic and charger	Fallon Police Department	VHF Analog	5
Sparks Fire Department	Motorola MTS2000	Sparks Fire Department	800 MHz Conventional Analog	21
Sparks Fire Department	Motorola JT1000	Sparks Fire Department	VHF Conventional Analog	13

3.5.1   Radio Cache Policies and Procedures

Radio Cache Policies and Procedures

The policies, procedures are the same as "All Assets Policies and Procedures" listed in Section 3.

Northwest Nevada Region radio caches have the following characteristics:

- Portable radios are fully charged and maintained, ready for immediate deployment.
- Radios with clamshell battery systems will be maintained with an adequate supply of fresh spare batteries to support 72 hours of deployment.
- Deployed equipment may include rechargeable batteries and battery chargers to support extended deployments.
- Personnel may be available to transport equipment to the incident scene. However, the requesting agency may be required to pick up the radio cache.
- Personnel or technicians may be available for on-scene support during the deployment..

800/700 MHz Radio Cache

Responding agencies can contact requesting agency for channel assignment listed in Appendix A, Section A.1. Responding agencies can also contact nearby dispatch centers in case of en route emergencies.

VHF Radio Cache

All Northwest Nevada Region VHF radio caches are required to have the interoperability channels identified in Appendix F programmed into the cache. These channels were selected based on the interoperability needs and capabilities of the region.

Radio Cache Rules of Use

The rules of are the same as "All Assets Rules of Use" listed in Section 3. The following rules of use also apply.

- **Equipment Return** – The requesting agency is responsible for the return of any cache radios/equipment in the condition that they were received. **OR** Responsibilities for lost or damaged equipment lie with the appropriate agency or as dictated by existing Memoranda of Understanding (MOU) or Memoranda of Agreement (MOAs).

Radio Cache Request

The Incident Commander, or their designee, determines when a situation exists that requires the use of a regional radio cache and notifies the appropriate dispatch center. The dispatch center will follow internal agency procedures to contact the COML or Radio Cache Agency POC and relay pertinent information regarding the event. The requesting agency documents and provides the following information to the Radio Cache Agency POC, on request:

- Requesting agency
- On-scene agencies requiring interoperability
- Incident/event type of event (e.g., wild land fire, etc.)
- Equipment requirements
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested (e.g., technician, chargers, etc.)

The Radio Cache Agency determines what radio caches are available for use, identifies a specific cache, activates that cache, and coordinates the cache deployment with the requesting agency Incident Commander or their designee.

Radio Cache Equipment Activation

Upon receiving a request for the deployment of a radio cache, the owning agency **dispatcher** should follow these deployment procedures:

- Contact the on-call technician responsible for radio cache deployment.
- Dispatch the radio cache technician (or an approved designee) to the incident scene.
- Inform the requesting agency that the radio cache is en route and provide an estimated time of arrival (ETA), if available.

The **radio cache technician (or designee)** should follow these deployment procedures:

- Provide dispatch with an ETA at the incident.
- Retrieve the radio cache from its storage location and deliver it to the incident scene.
- Report to the Incident Commander or Check-in on arrival.
- Once on-scene, sign the cache over to the requesting agency for incident use or, if assigned to remain on scene, coordinate radio cache deployment procedures with the Communications Unit.
  - Each radio in the radio cache will have a unique identification number for inventory tracking. Ask the receiving agency to sign a property transfer form when they take responsibility for managing the radio cache on scene.
  - The requesting Incident Commander, or their designee, will be responsible for:
    - Supporting radio deployments on-scene
    - Maintaining a record of each user and agency to whom a radio and associated accessories have been distributed
    - Documenting the identification number of each radio deployed
    - Documenting the channel(s) in use
- Each user and/or agency that receives a radio from the radio cache will be responsible for returning that radio and all associated accessories to the cache at the end of the incident.

Equipment Deactivation

When the radio cache is no longer required, agencies should follow these deactivation procedures:

- Coordinate the return of all cache radios to the Communications Unit through the Incident Commander or their designee.
- The Communications Unit will be responsible for inventorying all radios and accessories returned to the cache. Before leaving the incident scene, the Communications Unit will determine if any radios have not been returned to the radio cache and note the user and agency to which the radio was distributed. Provide this information to the Incident Commander or their designee.
- If the missing radios cannot be recovered at the incident scene, the Communications Unit will provide this information to the Radio Cache Agency POC for resolution.

Radio Cache Problem ID and Resolution

During an incident:

- Report radio cache problems to the radio cache technician or their designee who will follow established agency procedures to resolve the problem.

Following an incident, the following general problem ID and resolution processes apply to all regional radio caches:

- Report any problems with the radio cache to the appropriate POC for the owning agency listed in Appendix E. The POC will be responsible for ensuring effective resolution to problems that exist with the radio cache.

- Report unresolved radio cache problems directly to the Northwest Nevada Region COML. The Northwest Nevada Region will ensure effective resolution to reported radio cache problems.

3.5.2   Washoe County Telecommunications Radio Cache

Washoe County Telecommunications Technology Overview

800 MHz, portable radios programmed for shared talk groups and talk around. This radio cache is intrinsically safe and encryption capable.

Washoe County Telecommunications Radio Cache Interoperable Communications Request

Must contact Regional Operations Manager at 775-337-5898 to arrange sign-out and approval.

- The appropriate Office of Emergency Management will follow internal agency procedures and relay pertinent information regarding the event.

- The Communications Unit Leader determines what regional interoperability resources are available for use and identifies a specific resource.

- The Radio Cache Agency coordinates the deployment by providing the contact information for the radio cache to the Incident Commander or their designee

Washoe County Telecommunications Radio Cache Equipment Activation Procedures

- The cache provider's Office of Emergency Management will provide an estimated response or activation time, which will be relayed to the Office of Emergency Management of the agency having jurisdiction over the event and/or the Incident Commander.

- The radio cache and a knowledgeable support person may be sent to the incident scene. The Incident Commander or their designee will be responsible for supporting the radios.

- The Incident Commander or their designee will be responsible for keeping a record of each user to whom a radio and associated accessories has been distributed, the agency of the user and the identification number of the radio(s) provided to that individual, and frequency/channel of use.

- The requesting agency that has received a cache will be responsible for the return of the cache in the same condition that it was received at the end of the incident.

Washoe County Telecommunications Radio Cache Equipment Deactivation Procedures

- The Incident Commander or their designee will determine when the radio cache is no longer required.

- The Incident Commander or their designee will be responsible for coordinating the return of cache radios to the appropriate on-scene support personnel or designee.

- At the end of the incident, the EOC Manager or their designee will be responsible for inventorying all radios and accessories, returned to the cache.

- The EOC Manager will ensure all radios are serviced and ready for immediate deployment after the incident.

Washoe County Telecommunications Radio Cache Equipment Problem ID and Resolution

During an incident:

- During deployment, problems with individual radios will be reported to the Incident Commander or their designee.

Following an incident or during post incident debriefing:

- Agencies using cache radios shall report any problems with the cache to the appropriate Office of Emergency Management.
- The appropriate Office of Emergency Management will be responsible for ensuring effective resolution to problems that exist with the radio cache.
- The Office of Emergency Management shall bring to the attention of the using agency information on missing or damaged radio equipment.
- The requesting agency is responsible for the return of any cache radios/equipment in the condition that they were received. **OR** Responsibilities for lost or damaged equipment lie with the appropriate agency or as dictated by existing Memoranda of Agreement (MOAs).

3.6   Mobile Communications Units

A mobile communications Unit (MCU) (also known as a Mobile Communications Center (MCC) or Mobile EOC) refers to any vehicular asset that can be deployed to provide or supplement communications capabilities to an incident area. Examples of the types of communications devices an MCU can house are: subscriber and base station radios of various frequency bands, gateway devices, satellite phones, wireless computer networks, video broadcasting/receiving equipment, etc. Typically these communications devices are permanently [located/stored] in the MCUs when not used. The MCU should also be able to temporarily provide the electrical power required to operate the communications devices. More detailed information on each MCU is provided in Appendix G.

Table 7 Northwest Nevada Region Mobile Communications Unit(s)

Unit ID / Designator	Type	Owning Agency	Deployment Area
Comm 1	FEMA Type 1	Carson City Fire Department	City of Carson Only
SAR	FEMA Type 3	Lyon County SO	Lyon County
MCU-1	Non-typed Converted Ambulance	Lyon County SO	Lyon County
Unit #14 Converted Ambulance	Non-typed Converted Ambulance	Fallon Police Department	Churchill County
Reno Command Van	FEMA Type 1	Reno Fire Department	Washoe County – outside area with authorization
Sparks Police MCC	FEMA Type 3	Sparks Police Department	Washoe County – outside area with authorization
Unit 900	FEMA Type 1	Douglas County	Within Mutual Aid Region 1
Nevada Highway Patrol			
Reno Police Department			
Washoe County			
Nevada Division of Environmental Protection (NDEP)			
BLM			
Sierra Front Wildfire Cooperators	Non-type Trailer	Sierra Front Cooperators, Minden Dispatch	Sierra Front response area
University of Nevada, Reno (UNR)			
Washoe County School District			
Nevada DEM			

3.6.1 Mobile Communications Unit Policies and Procedures

All Mobile Communication Units

Mobile Communications Unit Technology Overview

For specific information on each MCU, see Appendix G.

Mobile Communications Unit Rules of Use

The Communications Unit is part of the Logistics function and is managed through the Incident Command System. Dispatchers (radio operators) and communications technicians serving the incident will also be part of the unit, as requested.

Communications will be integrated into ICS-based management systems used by this region through the assignment of Communications Unit Leader responsibilities. Incident Commanders should ensure communications are integrated into the incident action planning. Early involvement ensures the response is well supported by communications and reinforces the chosen command structures and operating principles generally embodied in the Incident Command Structure and NIMS.

The Communications Unit Leader (abbreviated as COML within the NIMS) has the responsibility to assign resources, including radio channels/talkgroups and equipment during an incident, based on the circumstances, agencies involved and available resources. The COML must be part of the planning process and determine the communications resources required to support the objectives and tactics of the Incident Action Plan. In the absence of a COML, the Incident Command System will absorb the duties through the normal chain of command.

Communications resources among simultaneous incidents are coordinated by a Communications Coordinator (COMC) through the NIMS Multi-Agency Coordination System if available.

Mobile Communications Unit Interoperable Communication Request

The Incident Commander, or their designee, determines when a situation exists that requires the use of an MCU and notifies the appropriate dispatch center. The dispatch center will follow internal agency procedures to contact the COML or MCU POC and relay pertinent information regarding the event. The requesting agency documents and provides the following information to the MCU POC, on request:

- Requesting agency
- Agencies requiring interoperability
- Incident/event type (e.g., wildland fire, etc.)
- Expected duration of event
- Location required/access information
- Incident POC
- User/requestor and/or servicing dispatch contact phone number
- Additional support services requested
- Special circumstances related to the incident
- Specify under which aid/agreement the resource is being requested

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The MCU Agency determines if the MCU is available for use and coordinates the deployment with the requesting agency Incident Commander or their designee.

In preparing for the tactical phase of an incident response, it is anticipated that a number of talk paths will be required to adequately support emergency personnel.

Mobile Communications Unit Activation Method

Upon receiving a request for the deployment of an MCU, the owning agency **dispatcher** should follow these deployment procedures:

- Contact the responsible POC for MCU deployment.
- Dispatch the MCU to the incident scene.
- Inform the requesting agency that the MCU is en route and provide an estimated time of arrival (ETA), if available.

The **MCU response personnel** should follow these deployment procedures:

- Provide dispatch with an ETA at the incident.
- Retrieve the MCU from its location and deliver it to the incident scene.
- Check-in upon arrival.

Mobile Communications Unit Deactivation

When the MCU is no longer required, agencies should follow these deactivation procedures:

- Follow the demobilization process of the ICS.

Mobile Communications Unit Problem ID and Resolution

During an incident:

- Follow the Incident Command structure to report and resolve any problems.

3.7   ARES/RACES

The EOC Amateur Radio Team will consist of volunteers from the ARES and RACES communities.   ARES/RACES members will follow established guidelines in their local Emergency Operations Plan.

Radio Teams consist of volunteers committed to the operations of the EOC but possibly unable to respond immediately to a deployment. There are several Points of Contact for the Radio Teams listed below in order of contact that will enable the Radio Teams to be deployed in the fullest and fastest manner.

The Radio Teams are composed of individuals familiar with various aspects of radio communications in their area of responsibility and will provide multiple and redundant communication avenues in case of emergency deployment and will be able to address problems/issues associated with their radio systems that may arise as a result of the emergency.

Amateur radio equipment in the EOC is capable of operating on frequencies ranging from 1.8 MHz to 1200 MHz and above.   These frequencies allow for communications locally and across the country. Communication modes include analog and digital voice, digital text, and digital image.

Radio Amateur Civil Emergency Services (RACES) is activated by the Radio Officer under local jurisdiction. The Radio Officer is appointed in writing by the local jurisdiction. The Radio Officer appoints RACES Operators under the Presidents War Emergency Powers, Provision Section 706 of the Communications Act of 1934. This allows the Amateur Radio Operators to communicate with other RACES and Government Stations.   Amateur Radio communications will be in compliance with FCC Rules and Regulations, Part 97.407.

Amateur Radio frequencies are open and not subject to the non-disclosure rules of other radio services. Therefore, these communications should be treated as "open mike" communications and sensitive information should not be sent via Amateur Radio.

Amateur Radio Operators will also operate the Shared Resources High Frequency Radio Program (SHARES). These are Government HF (1.8 - 30 MHz) frequencies that provide a single agency emergency message handling system for worldwide communications.   SHARES communications will be in compliance with FCC Rules and Regulations.

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4   Regional Emergency Resource Staffing

Emergency Resource Directory

The Emergency Resource Directory establishes a list of personnel who will respond to fill the Communication Unit positions.

Identified personnel must train and exercise to a regional response level.

Contact information:

Washoe County Telecommunications	(775) 858-5950
City of Sparks Fire Department	(775) 353-2255
Carson City Fire Department	(775) 887-2210
North Lake Tahoe Fire Protection District	(775) 831-0351
Lyon County Office of Emergency Management	(775) 463-6551
Lyon County Sheriff's Office	(775) 463-6600
Fallon Police Department	(775) 423-1345
Mineral County Sheriff	(775) 945-2434
Sierra Fire Protection District	(775) 849-1108
Douglas County	(775) 782-9911
Storey County	(775) 847-0950
Sierra Front Interagency Dispatch (Minden)	(775) 883-5995

Job descriptions and qualified personnel for each Communications Unit position are detailed below.

Dispatch Center

Communications Coordinator (COMC) – The COML will work with the COMC to coordinate communications with other dispatch centers and the incident communication plan. Locally, the jurisdictional dispatch center supervisor or dispatcher will act as the Communications Coordinator. Coordinators may also be located at the region/county, State, and Federal level.

At an Incident/Event

Communications Unit Leader (COML) –Manages the technical and operational aspects of the Communications Function during an incident or event. Develops National Incident Management System (NIMS)/Incident Command System (ICS) Form 205 Incident Radio Communications Plan and supervises the communication unit.

Technical Specialist (THSP) – Allows for the incorporation of personnel who may not be formally certified in any specific NIMS/ICS position. THSPs may include Local Agency Radio Technicians (as opposed to the COMT), Telephone Specialists, Gateway Specialists, Data/IT Specialists, and or Cache Radio Specialists.

Incident Communications Technician (COMT) – Deploys advanced equipment and keeps it operational throughout the incident/event.

Incident Communications Center Manager (INCM) – Supervises the operational aspects of the Incident Communications Center (ICC) (Mobile Unit and/or Fixed Facility). During an incident, the ICC is designed to absorb incident traffic in order to separate that traffic from the day-to-day activities of the dispatch center. The ICC is typically located at the Incident Command Post (ICP) in a fixed site, tent, trailer, mobile communications unit.

Incident Dispatchers (INDI) - The Incident Dispatcher along with the Incident Communications Manager is responsible for receiving and transmitting radio and telephone messages among and between personnel and to provide dispatch services at the incident.

Radio Operator (RADO) - Staffs a radio at the ICC and is responsible for documenting incoming radio and telephone messages. Incident Dispatchers or Tactical Dispatchers are used as RADOs.

Incident Dispatch Team

The following table lists contact information of the Regional Emergency Resource Personnel available to function in each Communications Unit position.

Table 8 Regional Emergency Resource Personnel

	Name	Agency	Address	Phone	Email
COMC					
COML	Shawn Tayler (Trainee)	WCRCS	5195 Spectrum Blvd. Reno, NV 89512	775-858-5952	stayler@washoecounty.us
	Jake Conely	Sparks Fire	1605 Victorian Ave Sparks NV 89431	775-815-1252	jconely@cityofsparks.us
INCM					
RADO					
Cache THSP					
Gateway THSP					
Other THSP					
INDI					

5   CASM

5.1   Overview

The Communication Assets Survey and Mapping (CASM) tool provides the ability for representatives of public safety agencies within an urban area or State to collect, store, and visualize data about agencies, communication assets, and how agencies use those assets.

The purpose of CASM is to:

- Provide a single repository for information about land mobile radio systems, other interoperability methods, and how they are used by public safety agencies within a state or urban area.
- Provide a method to display the data.
- Provide tools to analyze the data and visualize interoperability gaps in accordance with the Interoperability Continuum framework.

The CASM tool is composed of two components: the Communication Assets Survey (CAS) and the Communication Assets Mapping (CAM) tool. The CAS component provides a means to enter, edit, and delete information about agencies, communication assets (such as radio systems, dispatch centers, mutual aid channels/systems, gateways and radio caches), and agency usage of those assets. The CAM component provides a means to display this information in a map-based interface and provides analysis tools for displaying agency-to-agency interoperability, including interoperability gaps, in various ways.

The CASM tool is web-based and requires the user to have an active internet connection in order to access both the CAS and CAM components. CAS is a website that may be accessed via any internet browser, such as Internet Explorer, Netscape Navigator, or Mozilla Firefox. CAM is a client application that must be downloaded, installed, and executed on the user's computer. A user must have internet access in order to operate CAM.

Authorization to view data for a particular urban area or State is controlled by the Northwest Nevada Region Administrative Manager (AM); each user must have a user name and password in order to login.

The CASM AM POC is listed in the following table:

Table 9 CASM AM POC Information

Name	Phone	Email	Area of Responsibility
Jeff Page	775-463-6551 X10	jpage@lyon-county.org	Lyon County
Kathey Heston	775-463-6600	kheston@lyon-county.org	Lyon County

Appendix A   Points of Contacts

A.1   Public Safety

Table A - 1 Public Safety Points of Contact

Location	County	Agencies Served	Agency	Contact Phone Number
LOCAL				
Carson City	Carson City County	All agencies in Carson City, including Sheriff's Office, Animal Control PD, 2 FD/EMS, City departments, and Washoe Tribal PD	Carson City Sheriff's Office	775-887-2020
City of Fallon	Churchill County	County Fire, EMS, Sheriff's Office (primary); BLM, State Parks Department, NDOW (secondary); Churchill County Sheriff's Office, Banner Health (ambulance) Fallon/Churchill	Churchill County SO	775-423-3116
City of Fallon	Churchill County	Fallon Police Department & Fallon Department Works (after hours)	Fallon PD	775-423-4904
Douglas County 911 Emergency Services	Douglas County	Primary agencies: Douglas County Sheriff's Office, East Fork Fire & Paramedic Districts, Tahoe Douglas Fire District, Alpine County Sheriff's Office, Alpine County Fire & EMS (which includes, Markleeville-Woodfords VFD, Kirkwood VFD & Ebbetts Pass VFD [CALFire]), Washoe Tribe Police Department, Washoe Tribe Animal Control, Douglas County Search & Rescue, Douglas County Animal Services

 Secondary agencies: Nevada State Parks – LTNSP Cave Rock, Nevada Highway Patrol (when their radio is in-op), California Highway Patrol (when in Alpine area), Douglas County road & signal maintenance, All county GID's – after hours emergency contact, All towns – after hours emergency contact | Douglas County | 775-782-9977 |
Minden	Douglas County	NDF/BLM/USFS All-Risk Fire Station for Washoe, Pershing, Churchill, Mineral, Esmeralda, Nye Lincoln and Clark Counties	Sierra Front Interagency Dispatch Center	775-782-6281
Yerington	Lyon County	Lyon County Sheriff, Lyon County Juvenile Probation, Lyon County Animal Services., Lyon county Road Department, Yerington PD (contracted from County), Yerington Paiute Police Department, Central Lyon County Fire District, Mason Valley Fire District, North Lyon county Fire District, Smith Valley Fire District, Fernley Volunteer Fire Department – EMS, Nevada State Parks, Walker River Justice Court, Dayton Justice Court, Fernley Justice Court, City of Yerington, City of Fernley	Lyon County SO	775-463-6616 775-463-6620
Hawthorne	Mineral County	Mineral County Sheriff's Office, Mineral County Fire and EMS, Walker River Tribal Police, and Schurz Fire	Mineral County SO	775-945-2434 775-945-2497

Location	County	Agencies Served	Agency	Contact Phone Number
		Department and EMS.		
Virginia City	Storey County	All agencies in county	Storey County	775-847-0950
Paiute Tribal Government	Washoe County	Paiute PD	Paiute Tribal Police	775-574-1014
Reno	Washoe County	All EMS in Washoe County except Incline and Gerlach	REMSA	775-858-5700
Reno E-Comm	Washoe County	Reno PD, University of Nevada-Reno, Truckee C-Comm, Washoe County Sheriff, Reno Marshal's Office, Reno FD, Sierra FD, Truckee Meadows FD, Reno/Sparks Tribal FD, Pyramid Lake Tribal FD	Reno Police Department	775-334-3845
Incline Substations	Washoe County	North Tahoe FPD/EMS, Washoe County Animal Services, Reno/Sparks Tribal PD, Pyramid Lake Tribal PD	North Lake Tahoe Fire Protection District	775-832-4110
City of Sparks	Washoe County	All City agencies	Sparks Police Department	775-353-2231
Reno	Washoe County	School District PD	Non-Emerg. Dispatch	775-348-0285 Extension 1
STATE and FEDERAL				
Nevada	Carson City	Nevada Highway Patrol	Nevada Department of Public Safety	Need a number
Nevada		Nevada Department of Transportation	NDOT	
California	Tahoe National Foerest in Nevada, Yuba, and Placer Counties	National Interagency Fire agencies in Northern California. Truckee, Northstar, Meeks Bay, North Tahoe Fire District, and Squaw Valley.	Grass Valley ECC	530-477-0641
California	El Dorado County	CALFIRE agencies on Western Slope of Sierra Nevadas in El Dorado County	Camino Dispatch	530-642-5170
Federal		U.S. National Park Service		202-208-6843
Federal		U.S. Bureau of Reclamation		202-513-0501
Federal		U.S. Postal Inspectors		626-405-1200
Federal		U.S. Secret Service		202-406-5708
Federal		U.S. Immigration and Customs Enforcement		202-305-2734
Federal		Bureau of Indian Affairs		202)208-7163
Federal		U.S. Drug Enforcement Agency (DEA)		202-305-8500
Federal		U.S. Parole and Probation		301-492-5990
Federal		Federal Aviation Administration		866-835-5322
Federal		U.S. Transportation Security Administration		866-289-9673
Federal		National Weather Service		775-778-6718

A.2   Nongovernmental Agency Contact Information

Table A - 2 Nongovernmental Agency Contact Information

Agency	Name	Phone	Email
ARES	Greg Barker	Need a number	gbarker@frontiernet.net
Nevada Hospital Association	Ken McKim Angela Krutsinger	775-827-0184	ken@nvha.net angela@nvha.net

A.3   NCSC Member Information

Table A - 3 NCSC Contact Information

Agency	Name	Position	Phone	Email
Elko County Sheriff's Office	Dale Lotspeich	Chairman of NCSC; Sheriff	(775) 777-2501	dlotspeich@elkocountynv.net
City of Las Vegas Fire Department	Louis Amell	Director of Communications	(702) 229-0237	lamell@lasvegasnevada.gov
Nevada Department of Transportation	Robert Chisel	Assistant Director	(775) 888-7440	rchisel@dot.state.nv.us
Carson City Sheriff	Steve Albertsen	Under Sheriff		salbertsen@ci.carson-city.nv.us
City of Sparks Fire Department	Jake Conely	Captain	(775) 815-1252	jconely@cityofsparks.us
Nye County Sheriff's Office	Anthony (Tony) DeMeo	Sheriff		ademeo@nyecounty.net
Las Vegas Paiute Police Department	Donald Belcher	Chief		dbelcher@lvpaiute.com
Nevada Health Division	Mark Foxen	Computer Network Specialist		mfoxen@nvhd.state.nv.us
Lincoln County	Ronda Hornbeck	County Commissioner		ronda@lcturbonet.com
Reno Police Department	Dale Evans	Lieutenant	775-334-3844	evansdj@ci.reno.nv.us
Washoe County Sheriff's Office	Tim Kuzanek	Lieutenant		tkuzanek@washoecounty.us
Clark County	Lester Lewis	CIO		llewis@co.clark.nv.us
Nevada Army Guard	Vernon Scarbrough			Vernon.scarbrough@us.army.mil
City of Yerington	Dan Newell	City Manager		manager@yerington.net
Department of Public Safety – Nevada Highway Patrol	Chris Perry	Colonel		cperry@dps.state.nv.us
Las Vegas Metropolitan Police Department Division	Phil Roland	Communications and Technology Services Division Director		p3991r@lvmpd.com
Conservation & Natural Resources	Kay Scherer	Deputy Director		kscherer@dcnr.nv.gov
Douglas County	Tammy James	Communications Manager		tjames@co.douglas.nv.us
City of North Las Vegas	Dan Lake			laked@cityofnorthlasvegas.com

A.4   Subcommittee Working Group Member Information

Table A - 4 Subcommittee Working Group Member Information

Agency	Name	Position	Phone	Email
Washoe County	Aaron Kenneston	Manager of Regional Emergency Operations	775 337-5898	akenneston@washoecounty.us
Lyon County Sheriff's Office	Capt. Kathy Heston	Captain – Administrative Services Bureau	775 463-6600 or 775 463-6620	kheston@lyon-county.org
Storey County	Cherie Nevin	Assistant Director of Communications	775 847-1209	cnevin@storeycounty.us
Washoe County	Craig Harrison	Manager Washoe County Telecommunications	775 858-5991	charrison@washoecounty.us
Mineral County Sheriff	Craig Nixon	Emergency Manager	775 945-2497	firechief@mineralcountynv.org
Mineral County Sheriff	Ed Smith	Sheriff	775 945-2434	mcsosheriff@mineralcountynv.org
Carson City Fire Department	Eric Bero	Fire Captain	775 887-2226	ebero@ci.carson-city.nv.us
Fallon Police Department	Frank Shyne	Captain	775 423-2111	FShyne@ci.fallon.nv.us
Carson City Fire Department	Gary Dunn	Emergency Manager	775 887-2210	gdunn@ci.carson-city.nv.us
Mineral County Sheriff	Glenn Bunch	TICP POC	775 945-2289	glen@thebunch.hawthorne.nv.us
City of Sparks Fire Department	Jake Conely	Captain	775 815-1252	jconely@cityofsparks.us
Lyon County Office of Emergency Management	Jeffery A. Page	Emergency Manager	775 463-6551 ext. 10 775 302-7088	jpage@lyon-county.org
Lyon County	Joe Sanford		775 463-6600	jsanford@lyon.county.org
REMSA	Michael Flatt		775 691-0532	mflatt@remsa-cf.com
Nevada Department of Transportation	Robert Chisel	Assistant Director	775 888-7440	rchisel@dot.state.nv.us
Churchill County	Ron Jaill		775 423-4188	ccem@phonewave.net
North Lake Tahoe Fire Protection District	Ryan Sommers	Battalion Chief	775 831-0351 ext. 8103	rsommers@nltfpd.net

Agency	Name	Position	Phone	Email
Washoe County	Shawn Tayler	Systems Administrator	775 858-5952	stayler@washoecounty.us
Carson City Fire Department	Stacey Giomi	Fire Chief	775 887-2210	sgiomi@ci.carson-city.nv.us
Fallon Police Department	Steve Endacott	Emergency Manager	775 423-1345	sendacott@sci-nevada.com
Tahoe Douglas Fire	Van Ogami		775 586-1677	vogami@tahoefire.com
Nevada DPS	Edward "Otto" Tune	Communications System Specialist	775 220-5450	etune@dps.state.nv.us
Fernley Ambulance	Dan Vandercook	NREMT-P	775-980-5961	ferleydirector@att.net
Sierra Fire Protection District	Tim Leighton	Acting Battalion Chief	775-315-6649	tleighton@washoecounty.us
Care Flight	Temple Fletcher	Operations Manager		tfletcher@remsa-cf.com
East Fork Fire and Paremadic Disctrcits	David Fogerson	Deputy Chief	775 782-9096 775 230-0672	dfogerson@co.douglas.nv.us

Appendix B   Trunked Shared Systems

Detailed information on shared systems available for use within the region is listed in subsequent pages of Appendix B. The table below lists the shared system(s).

Table B - 1 Northwest Nevada Region Shared System(s)

Radio System Name	Make / Model	Type	Frequency Band	Owning Agency	Service Area
Nevada Shared Radio System (NSRS)	Tyco Electronics EDACS	Trunked Wide Area, Pro-Voice	800 MHz	Department of Transportation/ Sierra Pacific Resources	Statewide
Washoe County Regional Communications System (WCRCS)	Tyco Electronics EDACS	Trunked Wide Area, Pro-Voice	800 MHz	WCRCS	Washoe County Area

B.1   Nevada Shared Radio System (NSRS)

Responsible Agency

This radio system is owned or managed by: Nevada Department of Transportation

Name: Robert Chisel
Title: Assistant Director, NDOT
Phone: (775) 888-7440
24/7 Phone: TBD
Email: rchisel@dot.state.nv.us

Number of Radios

No. of Mobile Radios on this System:	
No. of Portable Radios on this System:	

System Type

Radio System Make:	M/A COM
Trunked / Conventional/Both:	Trunked
Radio System Model:	EDACS Wide Area, Pro-Voice
Radio System Frequency Band:	800MHz
P25 Compliancy:	Yes
Number of Channels:	Average of 5 per site
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Repeated
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Wideband
Voted:	
Simulcast:	No, Multisite

Service area

This shared system covers the State of Nevada. The number of channels is an estimate. Channels are distributed among the 90 sites across Nevada. Each site has a max channel capacity.

Participating Agencies

- Office of the Attorney General
- Nevada Secretary of State
- Nevada Department of Agriculture
- Nevada Department of Corrections
- Nevada Department of Information Technology
- Nevada Department of Motor Vehicles
- Nevada Department of Transportation
- Nevada Department of Public Safety
- Nevada Division of Emergency Management
- Nevada Highway Patrol
- Nevada Division of Investigations

- Nevada Parole and Probation
- Nevada State Fire Marshal
- Capitol Police
- Dignitary Protection Detail
- Nevada Division of Forestry
- Nevada National Guard
- University of Nevada, Las Vegas
- Nevada State Park
- Transportation Services Authority
- Nevada Taxicab Authority
- Lakes Crossing Mental Health
- Nevada OSHA
- Nevada Power Company
- Sierra Pacific Power Company

Shared Channels

Table B - 2 NSRS Shared Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M

Shared Talk Groups

Table B - 3 NSRS Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

 [Add notes]

B.2 Washoe County Regional Communications System (WCRCS)

Responsible Agency

This radio system is owned or managed by: Washoe County

Name: Craig Harrison
Title: Manager Washoe County Telecommunications
Phone: (775) 858-5951
24/7 Phone: 858-2525
Email: charriso@mail.co.washoe.nv.us

Number of Radios

No. of Mobile Radios on this System:	1649 plus NSRS radios
No. of Portable Radios on this System:	2954 plus NSRS radios

System Type

Radio System Make:	M/A COM
Trunked / Conventional/Both:	Both
Radio System Model:	EDACS Wide Area, Pro-Voice
Radio System Frequency Band:	800Mhz.
P25 Compliancy:	Yes
Number of Channels:	101
Encryption Protocol:	Limited (AES/DES)
Year Installed:	2002
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Both
Wideband / Narrowband / Both:	Wideband
Voted:	Yes
Simulcast:	Yes/**Both**

Service area

This shared system has interoperability with the NSRS via a Stargate switch. The number of channels is an estimate. Channels are distributed among the 10 sites throughout Washoe County. Each site has a max channel capacity. The Reno and Sparks / Tahoe area each have simulcast systems that are part of the WCRCS.

Participating Agencies

- City of Reno
- City of Sparks
- Nevada air National Guard
- Nevada Department of Transportation
- North Lake Tahoe Fire Protection District
- Pyramid Lake Paiute Tribe
- Regional Emergency Medical Services
- Reno Sparks Indian Colony
- Reno Tahoe Airport Authority
- Sierra Fire Protection District
- Truckee Meadows Community College
- Truckee Meadows Fire Protection District
- Truckee Meadows Water Authority
- Hospital Emergency Rooms
- University of Nevada, Reno
- Washoe County
- Washoe County School District
- Incline Village General Improvement District
- Storey County (limited)
- FBI (limited)
- Placer County (limited)

Shared Channels

Table B - 4 WCRCS Shared Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M

Shared Talk Groups

Table B - 5 WCRCS Shared Talkgroup Information

Talkgroup Name	Primary Use	Agencies Supported	Frequency/Band
PS-LE1	Day-to-Day	Public safety law enforcement	800 MHz Trunked
PS-LE2	Day-to-Day	Public safety law enforcement	800 MHz Trunked
PS-FIRE1	Day-to-Day	Public safety fire	800 MHz Trunked
PS-FIRE2	Day-to-Day	Public safety fire	800 MHz Trunked
WCRCS1	Day-to-Day	Washoe County shared	800 MHz Trunked
WCRCS2	Day-to-Day	Washoe County shared	800 MHz Trunked
WCRCS3	Day-to-Day	Washoe County shared	800 MHz Trunked
WCRCS4	Day-to-Day	Washoe County shared	800 MHz Trunked
PS EVNT1	Day-to-Day	Washoe County shared	800 MHz Trunked
PS EVNT2	Day-to-Day	Washoe County shared	800 MHz Trunked
PS EVNT3	Day-to-Day	Washoe County shared	800 MHz Trunked
PS EVNT4	Day-to-Day	Washoe County shared	800 MHz Trunked
RF TMSLD	Day-to-Day	All Washoe County Fire Agencies	800 MHz Trunked/ 150 Conventional
RF TMPVN	Day-to-Day	All Washoe County Fire Agencies	800 MHz Trunked/ 150 Conventional

Talkgroup Name	Primary Use	Agencies Supported	Frequency/Band
RF TMVP	Day-to-Day	All Washoe County Fire Agencies	800 MHz Trunked/ 150 Conventional
RF TMGER	Day-to-Day	All Washoe County Fire Agencies	800 MHz Trunked/ 150 Conventional
RF GOLD	Day-to-Day	All Washoe County Fire Agencies	800 MHz Trunked/ 150 Conventional
RF SILVER	Day-to-Day	All Washoe County Fire Agencies	800 MHz Trunked/ 150 Conventional
WCREOC	Incident/Event Use	Washoe County Regional Emergency Operations Center	800 MHz
STATEEOC	Incident/Event Use	Nevada Emergency Operations Center	800 MHz
EOCTAC1	Incident/Event Use	Nevada Emergency Operations Center	800 MHz
EOCTAC2	Incident/Event Use	Nevada Emergency Operations Center	800 MHz

NOTE: All of the above channels/talkgroups are available on both WCRCS and NSRS systems for authorized users that have requested access to these channels through each system administrator.

Other Shared Channel/Talkgroup Notes:

Appendix C   Conventional Shared Systems

Detailed information on shared systems available for use within the region is listed in subsequent pages of Appendix B. The table below lists the shared system(s).

Table C - 1 Northwest Nevada Conventional Shared Systems

Radio System Name	Make / Model	Type	Frequency Band	Owning Agency	Service Area
Lyon County VHF Public Safety	Motorola	Conventional	VHF	Lyon County Sheriff's Office	Lyon County
Douglas County VHF Public Safety	Motorola	Conventional	VHF	Douglas County	Douglas County
Storey County VHF Public Safety	Motorola	Conventional	VHF	Storey County	Storey County
Carson City VHF Public Safety	Motorola	Conventional	VHF	Carson City	Carson City
EMS Radio Network	Mixed	Conventional	UHF 800 MHz	Nevada EMS	Statewide
Churchill County VHF	Mixed	Conventional	VHF	Churchill County	Churchill County
Mineral County VHF	Mixed	Conventional	VHF	Mineral County	Mineral County
Nevada Division of Forestry (NDF) VHF	Mixed	Conventional	VHF	NDF	Regional
Nevada Department of Wildlife (NDOW) VHF	Mixed	Conventional	VHF	NDOW	Statewide
Nevada Division of State Parks VHF	Mixed	Conventional	VHF	NDSP	Statewide

C.1 Lyon County VHF Public Safety)

Responsible Agency

This radio system is owned or managed by: Lyon County Sheriff's Office

Name: Kathy Heston
Title: Captain
Phone: (775) 463-6600
24/7 Phone: (7750 463-6620
Email: kheston@lyon-county.org

Number of Radios

No. of Mobile Radios on this System:	400
No. of Portable Radios on this System:	550

System Type

Radio System Make:	Motorola
Trunked / Conventional/Both:	Conventional
Radio System Model:	Gold Elite
Radio System Frequency Band:	VHF
P25 Compliancy:	Partial
Number of Channels:	9 Law, 6 fire, 2 public works
Encryption Protocol:	none
Year Installed:	1998
Repeated/Simplex/Both:	both
Analog / Digital / Both:	analog
Wideband / Narrowband / Both:	Wide with narrow by 2011
Voted:	No
Simulcast:	yes

Service area

All Lyon County

Participating Agencies

Lyon County Sheriff's Office, Lyon County Juvenile Probation, Lyon County Animal Services., Lyon County Road Department, Yerington PD (contracted from County), Yerington Paiute Police Department, Central Lyon County Fire District, Mason Valley Fire District, North Lyon county Fire District, Smith Valley Fire District, Fernley

Volunteer Fire Department – EMS, Walker River Justice Court, Dayton Justice Court, Fernley Justice Court, City of Yerington, City of Fernley.

Shared Channels

Table C - 2 Lyon County VHF Shared Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Lyon County Dispatch
SO1 Local	Law		154.7700	CSQ	154.7700	146.2	Wide	A	YES
SO1 Eagle Ridge	Law		154.7700	CSQ	156.1500	114.8	Wide	A	YES
SO1 Como	Law		154.7700	CSQ	156.1500	100.0	Wide	A	YES
SO1 Bald Mt	Law		154.7700	CSQ	156.1500	110.9	Wide	A	YES
SO2 Local	Law		159.2100	CSQ	159.2100	146.2	Wide	A	YES
SO2 Eagle Ridge	Law		159.2100	CSQ	156.1050	136.5	Wide	A	YES
SO2 Como	Law		159.2100	CSQ	156.1050	127.3	Wide	A	YES
SO2 Bald Mt	Law		159.2100	CSQ	156.1050	110.9	Wide	A	YES
SO Tac	Law		154.7250	CSQ	154.7250	CSQ	Wide	A	YES
NASAR			155.1600	CSQ	155.1600	CSQ	Wide	A	YES
Fire Local	Fire		155.1000	CSQ	155.1000	CSQ	Wide	A	YES
Fire Eagle Ridge	Fire		155.1000	CSQ	155.9250	114.8	Wide	A	YES
Fire Como	Fire		155.1000	CSQ	155.9250	100.0	Wide	A	YES
Fire Bald Mt	Fire		155.1000	CSQ	155.9250	110.9	Wide	A	YES
Fire Pond	Fire		155.1000	CSQ	155.9250	141.3	Wide	A	YES
Fire Tac	Fire		154.4000	CSQ	154.4000	CSQ	Wide	A	YES
YeringtionP.W.1	Public Works		153.8750	CSQ	158.5000	CSQ	Wide	A	If requested
YeringtionP.W.2	Public Works		153.9350	CSQ	156.2400	CSQ	Wide	A	If requested
LyonCoRoads Lcl	Roads		153.9350	CSQ	153.9350	CSQ	Wide	A	If requested
LyonCoRoads Rpt	Roads		153.9350	CSQ	156.2400	CSQ	Wide	A	If requested
Emergency Management 1	EMS		155.1450	CSQ	155.1450	CSQ	Wide	A	NO
Emergency Management 2	EMS		155.6550	CSQ	155.6550	CSQ	Wide	A	NO

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio.   Repeater and base stations must be programmed with the Rx and Tx reversed.

Other Shared Channel/Talkgroup Notes:

> **Agencies with access to SO1 & SO2** – NHP, P&P, Yerington Tribal Police, Yerington Police Department, Lyon County S.O., Lyon County SAR, Carson City S.O., Churchill County S.O., Mineral County S.O., Walker River Tribal Police,

Storey County S.O., Douglas County S.O., Washoe County S.O., Nevada State Parks, Nevada Department of Corrections

Agencies with access to Fire & Fire Tac – Mason Valley Fire, Central Lyon Fire, North Lyon Fire, Smith Valley Fire, LCSO, YPD, Lyon County Road Dept., East Fork Fire, Tahoe Douglas Fire, Carson City Fire, Fallon Fire, Fallon NAS, Mineral County Fire, Walker River Tribal Fire, NDF,

Agencies with access to STATE MUTUAL AID – All response agencies within and outside of Lyon County.

Agencies within Lyon County use channels as assigned by discipline and policy. Agencies outside of Lyon County use channels as requested by Lyon County agency during a Lyon County emergency or planned event.

C.2   Douglas County VHF Public Safety

Responsible Agency

This radio system is owned or managed by: Douglas County, Nevada

Name: Tammy James
Title: Communications Manager
Phone: (775) 782-6290
24/7 Phone: (775) 782-9911 (Douglas Dispatch)
Email: tjames@co.douglas.nv.us

Number of Radios

No. of Mobile Radios on this System:	300
No. of Portable Radios on this System:	400

System Type

Radio System Make:	Motorola
Trunked / Conventional/Both:	Conventional
Radio System Model:	Gold Elite
Radio System Frequency Band:	VHF – Hi 150MHz
P25 Compliancy:	Partial
Number of Channels:	6 law; 7 fire; 2 public works
Encryption Protocol:	None
Year Installed:	Unknown
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Wide with narrow by 2011
Voted:	Yes
Simulcast:	Yes

Service area

Douglas County, Alpine County, South Lake Tahoe (CA)

Participating Agencies

- Douglas County Sheriff Office
- Tahoe Douglas Fire District
- East Fork Fire and Paramedic Districts

- Douglas County
- Douglas County Search and Rescue
- Douglas County Sheriff's Posse
- Douglas County Public Works
- Douglas County Area Transit
- Douglas County Animal Control
- Alpine County Sheriff (after hours and weekends)
- Washoe Tribal Police
- Markleville Volunteer Fire Department (after hours and weekends)
- Woodsford Volunteer Fire Department (after hours and weekends)
- Nevada Highway Patrol
- Nevada Division of Forestry
- Douglas County School District
- Douglas County Juvenile Probation
- Douglas County Emergency Management
- Nevada Division of Parole and Probation

Shared Channels

Table C - 3 Douglas County VHF Conventional Talkgroup Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Douglas County Dispatch
DCSO Valley	Law	DCSO, SAR, Washoe Tribe, Posse, NHP, P&P	154.7400	CSQ	155.6250	100	Wide	A	X
DCSO North/South	Law	Same as above	154.89 00	CSQ	155.6250	100	Wide	A	X
East Fork Fire	Fire	East Fork Fire; East Fork Paramedic; Douglas County Emergency Management, Tahoe Douglas Fire	155.0850	CSQ	155.7750	100	Wide	A	X
Tahoe Douglas Fire	Fire	Tahoe Douglas Fire, East Fork Fire	155.0250	CSQ	158.7750	167.9	Wide	A	X
DC Public Works	Public Works	Douglas County General Government	155.1150	CSQ	155.8500	100	Wide	A	X
DCSO SAR	Law	DCSO, Tahoe Douglas Fire, Posse, SAR, East Fork Fire, DC Emergency Management	156.2250	CSQ	159.0375	141.3	Narrow	A	X
East Fork Fire Tac	Fire	East Fork Fire; East Fork Paramedic; Douglas County Emergency Management, Tahoe Douglas Fire	155.1300	CSQ	155.8500	100	Wide	A	
NLEMA	Law	Mutual aid providers	155.6550	CSQ	Same		Wide	A	
LLEMA	Law	Mutual aid providers	155.4750	CSQ	Same		Wide	A	
White 1	Fire	Mutual aid providers	154.2800	CSQ	Same		Wide	A	X
White 2	Fire	Mutual aid providers	154.2650	CSQ	Same		Wide	A	X
White 3	Fire	Mutual aid providers	154.2950	CSQ	Same		Wide	A	
Mutual Aid 4	Fire	Mutual aid providers	155.1450	CSQ	Same		Wide	A	
Mutual Aid 9	Fire	Mutual aid providers	156.0750	CSQ	Same		Wide	A	
Tahoe Douglas Channel 2	Fire	Crew Net for Tahoe Douglas Fire	155.0550	CSQ	155.0550	100	Wide	A	
Mutual Aid 5	Fire	Mutual aid providers	155.7150	CSQ	Same		Wide	A	
DCSO SAR	Law	DCSO, Tahoe Douglas Fire, Posse, SAR, East Fork Fire, DC Emergency Management	155.1600	CSQ	Same		Wide	A	X
Public Works – TRE	Public Works	Douglas County General Government	155.9100	CSQ	Same		Wide	A	

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

NOTES:

Effective late 2009, a new system will be in place with narrow-banded capabilities. Existing system will remain in place to serve as a backup.

Quad Counties (Douglas, Carson, Lyon and Storey) are working on a microwave interconnect for voice and data for back up of dispatch centers (to start with). This will allow the radio traffic to travel to all four counties.

System can be multi-cast by dispatcher currently. Under new system (note 1 above) system will be multi-cast for valley and lake portions of the county.

Agencies also use a UHF medical system for communications to receiving medical facilities. Current state plan is to transition to the NSRS early 2010.

All agencies have mutual aid agreements with surrounding cooperators allowing communications on home channels.

All agencies have multi-bank/multi-channel radios with Northern Nevada and Northeastern California radio channels to assist in interoperability.

Douglas County Dispatch can monitor many frequencies, depends upon staffing levels in dispatch.

Douglas County Dispatch has a mobile communications vehicle that can be staffed with a tactical dispatcher for fire, law, emergency management and SAR events/incidents.

Douglas County employs their own Communications Staff (2 communication technicians and one manager) rather than outsource this to a private company. These personnel are available as needed to manage system emergencies.

Douglas County Dispatch serves as the dispatch center for Alpine County (CA) after hours and on weekends. They have the ability to switch E911 lines to and from the Alpine PSAP. They also have the ability to work on the Alpine County frequencies.

C.3   Storey County VHF Public Safety

Responsible Agency

This radio system is owned by and managed by ….

Name: Dave Ballard
Title: Storey County Communications
Phone: 775-847-1210
24/7 Phone: 775-847-0950
Email: dballard@storeycounty.org

Alternate Contact
Name: Joe Curtis
Title: Storey County Director of Emergency Management
Phone: 775-847-0954 or 775-691-5333
24/7 Phone:
Email: jcurtis@storeycounty.org

Additional contacts:

NAME	DEPARTMENT	PHONE	EMAIL
Gary Hames	Fire Department	775-847-0954	ghames@storeycounty.org
James Miller	Sheriff	775-847-0959	jmiller@storeycounty.org
Cherie Nevin	Communications Emergency Management	775-847-1209	cnevin@storeycounty.org
Mike Nevin	Public Works	775-847-0958	mnevin@storeycounty.org

Number of Radios

No. of Mobile Radios on this System:	110
No. of Portable Radios on this System:	150

System Type

Radio System Make:	
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No

Number of Channels:	1 – Law, 1 - Fire
Encryption Protocol:	None
Year Installed:	
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Wideband
Voted:	No
Simulcast:	No

Service area

Storey County

Participating Agencies

Storey County Sheriff's Department
Storey County Fire

Shared Channels

Table C - 4 Storey County VHF Conventional Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Storey County Dispatch
FD (Como)	Fire	Fire Department	155.0700	79.7	155.8650	79.7	Wide	A	X
FD (Ophir)	Fire	Fire Department	155.0700	79.7	155.8650	73.8	Wide	A	X
FD (Pond)	Fire	Fire Department	155.0700	79.7	155.8650	186.2	Wide	A	X
SO (Como)	Law	Sheriff's Office	155.6100	85.4	155.2950	85.4	Wide	A	X
SO (Ophir)	Law	Sheriff's Office	155.6100	85.4	155.2950	186.2	Wide	A	X
SO (Pond)	Law	Sheriff's Office	155.6100	85.4	155.2950	173.8	Narrow	A	X

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

Other Shared Channel/Talkgroup Notes:

The Sheriff's Office has one repeated frequency pair at three sites: Como, Ophir, and Pond. Different PL tones select the appropriate repeater. Similarly, the Fire Department also has one repeated frequency pair at the same mountain top sites, using different PL tones. The Sheriff's Office also has three narrowband tactical channels. One of these is used by the jail.

All the first responders use the same mobiles and portables: Kenwood TK 2170, Motorola CDM1550LS. The first nine zones are programmed identical. Public Works frequency is programmed in both the Fire and Sheriff's Office radios.

The Sheriff's Office has a small portable bridge to connect an 800 MHz handheld to a Kenwood. This is used for working at incidents.

C.4   Carson City VHF Public Safety

Responsible Agency

This radio system is owned by and managed by the Carson City County.

Name: Stacey Giomi
Title: Fire Chief
Phone:
24/7 Phone:
Email: sgiomi@ci.carson-city.nv.us

Number of Radios

No. of Mobile Radios on this System:	300
No. of Portable Radios on this System:	415

System Type

Radio System Make:	
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No
Number of Channels:	3 Law, 1 fire, 2 Simplex Public Works
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Both
Voted:	Yes
Simulcast:	No

Service area

Carson City County

Participating Agencies

Carson City County Sheriff

Carson City County Fire

 Shared Channels

Table C - 5 Carson City VHF Public Safety Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Carson City County Dispatch
CCFDMAINRP	dispatch	fire	154.4300	71.9	153.8450	71.9	Wide	A	X
CCFDMAINSM	dispatch	fire	154.4300		154.4300	71.9	Wide	A	X
CCFD TAC 1	tactical	fire	154.1450		154.1450		Wide	A	
CCFD TAC 2	tactical	fire	155.6850		155.6850		Wide	A	
CITY TAC 1	EOC	local government	159.4725	071	159.4725	071	Wide	A	
CCSOPRIMRY	command	law enforcement	155.9700		155.2500	127.3	Wide	A	X
CCSOSECOND	dispatch	law enforcement	154.1750		154.5350	127.3	Wide	A	X
CCSO TAC 1	tactical	law enforcement	154.2575	073	154.2575	073	Narrow	A	
CCSO TAC 2	tactical	law enforcement	155.8575	072	155.8575	072	Narrow	A	
CCSO JAIL	tactical	law enforcement	155.9400		158.8200	127.3	Wide	A	
CC SAR	tactical	search and rescue	155.1750		155.1750	156.7	Wide	A	X
CC LG 1	dispatch	public works	155.8800		155.8800		Wide	A	
CC LG 2	tactical	public works	155.8350		155.8350		Wide	A	
CC LG 3	dispatch	public works	155.8800		154.9800	151.4	Wide	A	
CC LG 4	tactical	public works	156.0150		156.0150		Wide	A	

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio.   Repeater and base stations must be programmed with the Rx and Tx reversed.

Other Shared Channel Notes:

The Fire Department radios have complex programming to meet their interoperability needs. They have the dispatch and tactical channels of neighboring counties. They also have the Fire White channels, as well as USFS, BLM, NDF and California channels. Fire uses interoperability daily for mutual aid response.

Law enforcement has the neighboring counties' frequencies programmed into the radios. Law enforcement uses interoperability daily on an individual basis, but only occasionally for an incident wide interoperability

C.5   EMS Radio Network

Responsible Agency

This radio system is owned by and managed by Regional Emergency Medical Services Authority (REMSA) in Reno, NV. The EMS Radio Network is a statewide UHF Network, however REMSA maintains the sites in Washoe County. This overview specifically applies to the sites Maintained by REMSA.

In addition this overview includes rural EMS agencies, which are in the process of migrating to the Nevada Shared Radio System. This migration will be completed by the end of 2010. The planned Rural EMS talkgroups will be in the 800 MHz frequency band and are included in Table C-6.

Name: Alan Dobrowolski
Title: Administrative Director
Phone: 775-858-5700 x2127
24/7 Phone:
Email: adobrowolski@remsa-cf.com

Name: Michael Flatt
Title: Communications IT
Address: 450 Edison Way, Reno NV
Phone: 775-858-5700
24/7 Phone:
Email: mflatt@remsa-cf.com

Number of Radios

No. of Mobile Radios on this System:	
No. of Portable Radios on this System:	

System Type

Radio System Make:	
Trunked / Conventional/Both:	
Radio System Model:	
Radio System Frequency Band:	
P25 Compliancy:	
Number of Channels:	
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	

Analog / Digital / Both:	
Wideband / Narrowband / Both:	
Voted:	
Simulcast:	

Service area

Washoe County and portions of Northern and Central NV

Participating Agencies

Regional fire and EMS agencies. In addition the system has a patching capability and REMSA is able to patch any of the area medical center base stations including (St. Mary's Regional Medical Center, Renown Regional Medical Center, Renown South Meadows Medical Center, Northern Nevada Medical Center, Reno VA)

Shared Channels

Table C - 6 EMS Radio Network Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by REMSA Dispatch
Med-1	Hospital Comm. Dispatch	Emergency Medical Services	463.0000	CSQ	468.0000	131.8	Wide	A	X
Med-2	Hospital Comm. Dispatch	Emergency Medical Services	463.0250	CSQ	468.0250	131.8	Wide	A	X
Med-3	Hospital Comm. Dispatch	Emergency Medical Services	463.0500	CSQ	468.0500	131.8	Wide	A	X
Med-4	Hospital Comm. Dispatch	Emergency Medical Services	463.0750	CSQ	468.0750	131.8	Wide	A	X
Med-5	Hospital Comm. Dispatch	Emergency Medical Services	463.1000	CSQ	468.1000	131.8	Wide	A	X
Med-6	Hospital Comm. Dispatch	Emergency Medical Services	463.1250	CSQ	468.1250	131.8	Wide	A	X
Med-7	Hospital Comm. Dispatch	Emergency Medical Services	463.1500	CSQ	468.1500	131.8	Wide	A	X
Med-8	Hospital Comm. Dispatch	Emergency Medical Services	463.1750	CSQ	468.1750	131.8	Wide	A	X
Med-9	Hospital Comm. Dispatch	Emergency Medical Services	462.9500	CSQ	467.9500	131.8	Wide	A	X
Med-10	Hospital Comm. Dispatch	Emergency Medical Services	462.9750	CSQ	467.9750	131.8	Wide	A	X

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio.   Repeater and base stations must be programmed with the Rx and Tx reversed.

Planned EMS Talkgroups on the NSRS.

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported
EMSHOFT	144	Hospital	Fleet AFS
CRSNTHOE	145	Hospital	Carson Tahoe
BNRCHRCH	146	Hospital	Fallon
CRSNVALY	147	Hospital	Carson Valley
NNRH	148	Hospital	Elko
HUMBLTGN	149	Hospital	Winnemucca
BTLMTNGN	150	Hospital	Battle Mountain
GRVRDILS	151	Hospital	Caliente
S LYON	152	Hospital	Yerington
MY GRANT	153	Hospital	Hawthorne
DSRTVIEW	154	Hospital	Parhump
NYEREGNL	155	Hospital	Tonopah
PERSHNGN	156	Hospital	Lovelock
RENWN MN	157	Hospital	Reno
WILBRIRI	158	Hospital	Ely
BARTON	159	Hospital	South Lake Tahoe
EMSMOBFT	160	Hospital	Fleet AFS
EMSREG1	161	Regional	Agencies in Region
EMSREG2	162	Regional	Agencies in Region
EMSREG3	163	Regional	Agencies in Region
EMSTAC1	164	Tactical	Agencies in Region
EMSTAC2	165	Tactical	Agencies in Region
NV MED	173	Statewide	Statewide EMS agencies
REMSAC1	174	Washoe County Interface	Agencies in Washoe County
REMSAC2	175	Washoe County Interface	Agencies in Washoe County

Other Shared Channel/Talkgroup Notes:

The statewide talk group, NV MED, is designed to be used in a state-wide incident, especially for the hospitals to communicate and provide their available bed counts, etc. Although none of these talk groups are monitored by dispatch, the Nevada State Health Division employees will monitor this talk group when possible.

The regional talk groups, EMSREG1, EMSREG2, EMSREG3, are designed for use in regional incidents, or for an ambulance to communicate with hospitals and/or transport units outside their own region, whose talk groups are not in their radio. The 2 tactical talk groups, EMSTAC1, EMSTAC2, are to be used as additional talk groups in an incident, or for any other communication purpose.

The 2 REMSA talk groups are specifically for the interface between the 800 MHz radios and REMSA's 450 MHz UHF system in Washoe County. The transport units can raise REMSA dispatch on REMSAC1 or REMSAC2, and REMSA dispatch will patch that talk group with the appropriate UHF Med channel to communicate with the hospitals.

C.6   Churchill VHF Public Safety

Responsible Agency

This radio system is owned by and managed by the Churchill County.

Name: Sergeant Traci Ricks
Title: Churchill County Sheriff's Office
Address: 73 N. Maine St, Fallon, NV 89406
Phone: 775 423-3116
24/7 Phone:
Email: TRICKS@CCCOMM.NET

Number of Radios

No. of Mobile Radios on this System:	17
No. of Portable Radios on this System:	50

System Type

Radio System Make:	
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No
Number of Channels:	1 shared by law and fire. Fallon PD has separate channels.
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Both
Wideband / Narrowband / Both:	Both
Voted:	Yes
Simulcast:	No

Service area

Churchill County

Participating Agencies

Churchill County Sheriff's Office

Churchill Fire Department

Shared Channels

Table C - 7 Churchill VHF Public Safety Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Churchill Dispatch
Churchill SO Rattlesnake	Law	Sheriff	155.1900	100.0	155.9100	162.2	Wide	A	Yes
Churchill SO Fairview	Law	Sheriff	155.1900	100.0	155.9100	100.0	Wide	A	Yes
Churchill SO Desert Peak	Law	Sheriff	155.1900	100.0	155.1900	127.3	Wide	A	Yes
Nevada Search and Rescue		Search and Rescue	155.1600	CSQ	155.1600		Wide	A	Yes
Churchill FD Rattlesnake	Fire	Fire	155.0550	91.5	150.7900	131.8	Wide	A	Yes
Churchill FD Desert Peak	Fire	Fire	155.0550	91.5	150.7900	131.8	Wide	A	Yes
Churchill FD Simplex	Fire	Fire	155.0550	91.5	155.0550	91.5	Narrow	A	Yes
Churchill Road	Road	Roads	156.1950	CSQ	156.1950		Wide	A	Yes
Fallon PD A1 Blue	Law	Police Encrypted	159.1575	770	156.0375	770	Narrow	D	Fallon PD
Fallon PD A2 Green	Law	Police	159.1575	770	156.0375	770	Narrow	D	Fallon PD
Fallon PD A3 White	Law	Police	155.4900	97.4	154.6500	97.4	Wide	A	Fallon PD
NAS Fallon	Federal Law	Military	139.5500	CSQ	142.9000		Wide	A	
Churchill County Incident Command	Interop	All agencies	156.0750	CSQ	156.0750		Wide	A	

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio.   Repeater and base stations must be programmed with the Rx and Tx reversed.

Other Shared Channel Notes:

The Sheriff's Office radios are also programmed with the following: Nevada Mutual Aid (2 channels), Lyon County channels, Pershing County channels, Lander County channels, Mineral County, Washoe County, Road Department, SAR, BLM Fire, Lyon Fire, Mineral Fire, Fire White 1 – 3, Carson SO, Douglas SO, Nye SO, Nevada Parks, NARCO (a narcotics task force), and Truckee Meadows FD.

The Fallon Police Department radios (Mobile & Hand radios) are also programmed with the following: Nevada Mutual Aid (2 channels), Churchill County, Lyon County channels, Pershing County channels, Lander County channels, Mineral County, SAR, Humbolt S.O., Carson SO, Douglas SO, Nye SO, Nevada Parks, North Central Narcotics Taskforce, Elko S.O. and Storey S.O.

C.7   Mineral VHF Public Safety

Responsible Agency

This radio system is owned by and managed by the Mineral County.

Name: Undersheriff Michael Dillard
Title: Mineral County Sheriff's Office
Address: P.O. box 2290, Hawthorne, NV 89415-2290
Phone: 775
24/7 Phone:
Email: mdillard@mineralcountynv.org

Number of Radios

No. of Mobile Radios on this System:	40
No. of Portable Radios on this System:	75

System Type

Radio System Make:	
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No
Number of Channels:	3
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Narrowband
Voted:	No
Simulcast:	No

Service area

Mineral County

Participating Agencies

Mineral County Sheriff's Office

Mineral Fire Department

Shared Channels

Table C - 8 Mineral VHF Public Safety Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Mineral Dispatch
MCSO-Local	Law	Sheriff	155.1150	CSQ	155.1150	82.5	Wide	A	Yes
MCSO –Vortec	Law	Sheriff	155.1150	CSQ	155.1150	82.5	Wide	A	Yes
MCSO-Cory Pk	Law	Sheriff	155.1150	CSQ	155.9550	156.7	Wide	A	Yes
MCSO-Kinkaid	Law	Sheriff	155.1150	CSQ	155.9550	107.2	Wide	A	Yes
MCSO-Pilot Pk	Law	Sheriff	155.1150	CSQ	155.9950	114.8	Wide	A	Yes
Hawthorne Fire	Fire	Fire	154.4150	CSQ	154.4150		Wide	A	Yes
Hawthorne Fire Repeater	Fire	Fire	154.4150	CSQ	153.7700	203.5	Wide	A	Yes
Search and rescue	S&R	Search and Rescue	156.2100	CSQ	156.2100		Wide	A	Yes

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio.   Repeater and base stations must be programmed with the Rx and Tx reversed.

Other Shared Channel Notes:

Search and Rescue has a simplex frequency. They have applied for a license for a repeater on Cory.   Most of their activity is in the southwest part of the county. They primarily use the Sheriff's frequency.

The Sheriff's Office radios are programmed with the frequencies for most of the surrounding counties: Lyon, Nye, Churchill, Esmeralda, and Douglas in Nevada and Mono in California. They are also programmed with NDOW's frequencies, and the civil air patrol.

C.8   NDF VHF Public Safety

Responsible Agency

This radio system is owned or managed by: Nevada Division of Forestry

Name:	Dave Sanger
Title:	Communications System Manager
Phone:	
24/7 Phone:	775-753-0304
Address:	885 Eastlake Blvd., Carson City, NV 89704
Email:	dlsanger@forestry.nv.gov

Number of Radios

No. of Mobile Radios on this System:	250
No. of Portable Radios on this	300

System:	

System Type

Radio System Make:	Motorola
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No
Number of Channels:	1
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Repeated
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Wideband
Voted:	No
Simulcast:	No

Service area

Northeast Region

Participating Agencies

NDF.

Shared Channels

Table C - 9 NDF VHF Shared Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Interagency Dispatch
NDF Main	Wildland Fire		158.8950	Off	158.8950	Off	Wide	A	X
NDF Red	Wildland Fire		159.3450	Off	159.3450	Off	Wide	A	X
Northern									
McClellan Peak	Wildland Fire		158.895		159.4500	107.2	Wide	A	
Peavine Peak	Wildland Fire		158.895		159.4500	118.8	Wide	A	
Snow Valley	Wildland Fire		158.895		159.4500	127.3	Wide	A	
Pine Nut	Wildland Fire		158.895		159.4500	136.5	Wide	A	
Eagle Peak	Wildland Fire		158.895		159.4500	146.2	Wide	A	
Virginia Peak	Wildland Fire		158.895		159.4500	94.8	Wide	A	

Western									
Penn Hill	Wildland Fire		158.895		159.4500	107.2	Wide	A	X
Knoll Mtn	Wildland Fire		158.895		159.4500	118.8	Wide	A	X
Elko Mtn	Wildland Fire		158.895		159.4500	127.3	Wide	A	X
Marys Mt	Wildland Fire		158.895		159.4500	118.8	Wide	A	X
Gamble Ranch	Wildland Fire		158.895		159.4500	136.5	Wide	A	X
Mt. Tenabo	Wildland Fire		158.895		159.4500	136.5	Wide	A	X
Spruce Mtn	Wildland Fire		158.895		159.4500	146.2	Wide	A	X
Rocky Point	Wildland Fire		158.895		159.4500	94.8	Wide	A	X
Deer Mtn	Wildland Fire		158.895		159.4500	88.5	Wide	A	X
Kimberly	Wildland Fire		158.895		159.4500	100.0	Wide	A	X
Cave Mtn	Wildland Fire		158.895		159.4500	88.5	Wide	A	X
McGill	Wildland Fire		158.895		159.4500	136.5	Wide	A	X
Currant Mtn	Wildland Fire		158.895		159.4500	94.8	Wide	A	X
Kings Mtn	Wildland Fire		158.895		159.4500	136.5	Wide	A	X
Prospect Pk	Wildland Fire		158.895		159.4500	107.2	Wide	A	X
Winnemucca Mtn	Wildland Fire		158.895		159.4500	88.5	Wide	A	X
Maggies Peak	Wildland Fire		158.895		159.4500	Off	Wide	A	X
Star Peak	Wildland Fire		158.895		159.4500	Off	Wide	A	X

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

NOTES:

The subscriber equipment is programmed with NDF frequencies, USFS, BLM, aviation (air to ground) and frequencies of county and city cooperators. The radios are also programmed with the Fire White 1 - 4 and Red 1 - 4 tactical channels.

NDOW and State Parks radios are programmed with NDF frequencies. Cooperators also program their radios with NDF frequencies.

They have one command trailer they share with State Parks. It is equipped with 2 NDF mobiles, 2 State Parks mobiles, whip antennas, router for networking and Ethernet available, generator, air conditioning, galley, restroom facilities, and a conference room. Dispatch should be contact to deploy.

C.9   NDOW VHF Public Safety

Responsible Agency

This radio system is owned or managed by: Nevada Department of Wildlife

Name: Eric Eggen
Title: Communications System Manager
Alternate: Corrine Ookinda, Public Safety Dispatch Supervisor

Phone:
24/7 Phone: (775) 688-1500
Address: 1100 Valley Road, Reno, Nevada 89512
Email: dlsanger@forestry.nv.gov

Number of Radios

No. of Mobile Radios on this System:	200
No. of Portable Radios on this System:	50

System Type

Radio System Make:	
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No
Number of Channels:	2
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Repeated
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Wideband
Voted:	No
Simulcast:	No

Service area

Statewide

Participating Agencies

NDOW.

Shared Channels

Table C - 10 NDOW VHF Shared Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Reno Dispatch
Western									

Virginia Peak Rptr	Public Safety	NDOW	151.1600	123.0	151.4750	67.0	Wide	A	X
Fox Mtn	Public Safety	NDOW	151.1600	94.8	151.4750	67.0	Wide	A	X
Snow Valley	Public Safety	NDOW	151.1600	117.8	151.4750	67.0	Wide	A	X
Cory Peak	Public Safety	NDOW	151.1600	85.4	151.4750	67.0	Wide	A	X
Winnemucca Mtn rpt	Public Safety	NDOW	151.1600	123.0	151.4750	110.9	Wide	A	X
Maggie Peak	Public Safety	NDOW	151.4900	88.5	151.1600	173.8	Wide	A	X
Eastern									
Elko Mtn Rpt	Public Safety	NDOW	151.1600	123.0	151.4750	74.4	Wide	A	X
Spruce Mtn	Public Safety	NDOW	151.1600	97.4	151.4750	74.4	Wide	A	X
Knoll Mtn	Public Safety	NDOW	151.1600	85.4	151.4750	74.4	Wide	A	X
Jacks Peak	Public Safety	NDOW	151.1600	100.0	151.4750	74.4	Wide	A	X
Mt Moses	Public Safety	NDOW	151.1600	203.5	151.4750	74.4	Wide	A	X
Mt Lewis	Public Safety	NDOW	151.1600	203.5	151.4750	74.4	Wide	A	X
Austin Pk	Public Safety	NDOW	151.1600	103.5	151.4750	74.4	Wide	A	X
Deer Mtn	Public Safety	NDOW	151.1600	203.5	151.4750	74.4	Wide	A	X
Cave Mtn Rpt	Public Safety	NDOW	151.1600	123.0	151.4750	67.0	Wide	A	X
Prospect Peak	Public Safety	NDOW	151.1600	91.5	151.4750	67.0	Wide	A	X
Currant	Public Safety	NDOW	151.1600	94.8	151.4750	67.0	Wide	A	X
Southern									
Angels Pk Rpt	Public Safety	NDOW	151.1600	123.0	151.4750	79.7	Wide	A	X
Highland Peak	Public Safety	NDOW	151.1600	88.5	151.4750	79.7	Wide	A	X
Mt Perkins	Public Safety	NDOW	151.1600	94.8	151.4750	79.7	Wide	A	X
DRI Mtn	Public Safety	NDOW	151.1600	107.2	151.4750	79.7	Wide	A	X
Mt Wilson	Public Safety	NDOW	151.1600	85.4	151.4750	79.7	Wide	A	X
Montezuma Pk Rpt	Public Safety	NDOW	151.1600	123.0	151.4750	79.7	Wide	A	X

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

NOTES:

NDOW is also licensed for two mobile simplex frequencies used statewide.

All radios, both mobiles and portables, are programmed with VHF frequencies for the following agencies:

- Nevada Department of Forestry
- Nevada State Parks
- All Sheriffs' frequencies except Washoe County, Clark County and Metro Las Vegas
- Washoe Search and Rescue
- NPS
- BLM

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- U.S. Forest Service
- U.S. Fish and Wildlife
- Fish and Game agencies from California, Idaho, Utah, and Arizona. These agencies also have NDOW frequencies.

C.10   Nevada State Parks VHF Public Safety

Responsible Agency

This radio system is owned or managed by: Nevada Division of State Parks

Name:	Steven Silva
Title:	Senior Law Enforcement Specialist
Alternate:	Dave Morrow, State Parks Administrator
	Guy Dudley, State Parks Radio Technician
Phone:	
24/7 Phone:	(775) 684-2770
Address:	901 S. Stewart St, Suite 5005, Carson City, NV 89701-5248
Email:	sbsilva@parks.nv.gov

Number of Radios

No. of Mobile Radios on this System:	150
No. of Portable Radios on this System:	131

System Type

Radio System Make:	
Trunked / Conventional/Both:	Conventional
Radio System Model:	
Radio System Frequency Band:	VHF
P25 Compliancy:	No
Number of Channels:	3
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Simplex
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Wideband (Some Narrowband capable)
Voted:	No
Simulcast:	No

Service area

Statewide

Participating Agencies

Nevada Division of State Parks.

Shared Channels

Table C - 11 Nevada State Parks VHF Shared Channel Information

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M	Monitored by Dispatch
SP-1 Snow Valley Peak	NDSP Operation	Lake Tahoe / Wide Area	151.3400	None	159.3750	131.8	Wide	A	
SP-1 Squaw Peak	NDSP Operation	Ely / Wide Area	151.3400	None	159.3750	131.8	Wide	A	
SP-1 Highland Peak	NDSP Operation	Pioche / Wide Area	151.3400	None	159.3750	131.8	Wide	A	
SP-1 Apex	NDSP Operation	Las Vegas / Wide Area	151.3400	None	159.3750	131.8	Wide	A	
SP-2 Simplex Channel	NDSP Operation	Statewide	151.3400	None	151.3400	131.8	Wide	A	
SP-3 Simplex Channel	Tactical Operation	Statewide	151.2950	None	151.2950	131.8	Wide	A	
SP-4 Lahontan SRA	NDSP Operation	Lahontan Peak / Wide Area	151.3400	None	159.3750	114.8	Wide	A	
SP-4 Spring Mtn Ranch SP	NDSP Operation	SMR / In Park	151.3400	None	159.3750	114.8	Wide	A	
SP-4 Valley of Fire SP	NDSP Operation	VOF / In Park	151.3400	None	159.3750	114.8	Wide	A	
SP-4 Sand Harbor SP	NDSP Operation	Sand Harbor / In Park	151.3400	None	159.3750	114.8	Wide	A	
SP-5 Future Use	NDSP Operation	TBD	151.3400	None	159.3750	100.0	Wide	A	
SP-6 Mt Perkins, AZ	NDSP Operation	Laughlin / Wide Area	151.3400	None	159.3750	88.5	Wide	A	

The convention calls for frequency lists to show four digits after the decimal place. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

NOTES:

Nevada Division of State Parks is dispatched by Nevada DPS. Because they are dispatched by DPS, they have 41 800 MHz mobiles and 41 800 MHz portables.

State Park Police Officers have interoperability with the following agencies via channels programmed into their radios: NDF, NDOW, BLM, USFS, NPS, and Sheriff's Offices and local Fire Departments in counties where State Parks are located. Their radios are also programmed with the State and Federal Mutual Aid Channels, White Fire 1 & 2, and National SAR.

NDSP uses open receive on its base stations, mobile, and portable radios but transmits the tones to accommodate co-operators that have toned the NDSP channels in their radios.

Appendix D   Frequencies/Channels

Detailed information on shared frequencies/channels available for use within the region is listed in the following table to include shared frequency/channel name(s) and frequency/channel details for each shared frequency/channel.

Table D-1 shows the Nevada Tactical Crossband Repeater frequencies for both VHF and 800 MHz. The table is arranged by site and each of the six frequencies for each site are listed. The channels are all narrowband and use the standard National Interoperability PL tone of 156.7.

In the Agencies supported column the following abbreviations are used:

NW Nevada – Indicates the channel is available for all of Northwest Nevada for those agencies that have a signed MOU with NDOT to use the frequencies.

Signed MOU – Indicates the channel is available for use around the location of the site for those agencies that have a signed MOU with NDOT.

Statewide - Indicates the channel is available throughout the State of Nevada for those agencies that have a signed MOU with NDOT to use the frequencies.

Tactical Use – Indicates that a VHF calling channel from another region was reused as a tactical channel in another region. This was done so that the total number of VHF channels could be minimized.

Table D - 1 Nevada Tactical Crossband Repeaters

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
Nevada Tactical Crossband Repeater Interoperability Channels								
NCALL1	Bald Mountain	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC10	Bald Mountain	Interoperability	Signed MOU	153.8750	CSQ	155.4450	156.7	Narrow	A
NTAC18	Bald Mountain	Interoperability	Signed MOU	159.0525	CSQ	154.9650	156.7	Narrow	A
8CALL90	Bald Mountain	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Bald Mountain	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Bald Mountain	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL1	Eagle Ridge	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC12	Eagle Ridge	Interoperability	Signed MOU	153.9200	CSQ	155.5875	156.7	Narrow	A
NTAC21	Eagle Ridge	Interoperability	Signed MOU	159.1500	CSQ	155.1450	156.7	Narrow	A
8CALL90	Eagle Ridge	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Eagle Ridge	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Eagle Ridge	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL1	Fairview	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC17	Fairview	Interoperability	Signed MOU	159.0450	CSQ	155.1300	156.7	Narrow	A
NTAC3	Fairview	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
8CALL90	Fairview	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Fairview	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Fairview	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL1	Peavine Ridge	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC10	Peavine Ridge	Interoperability	Signed MOU	153.8750	CSQ	155.4450	156.7	Narrow	A
NTAC20	Peavine Ridge	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
8CALL90	Peavine Ridge	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Peavine Ridge	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Peavine Ridge	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL1	Pilot Peak	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC11	Pilot Peak	Interoperability	Signed MOU	153.9050	CSQ	155.3700	156.7	Narrow	A

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Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
NTAC15	Pilot Peak	Interoperability	Signed MOU	158.7600	CSQ	155.5800	156.7	Narrow	A
8CALL90	Pilot Peak	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Pilot Peak	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Pilot Peak	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL1	Pine Nut Mtn	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC4	Pine Nut Mtn	Interoperability	Signed MOU	151.3100	CSQ	154.9050	156.7	Narrow	A
NTAC22	Pine Nut Mtn	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Pine Nut Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Pine Nut Mtn	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Pine Nut Mtn	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL1	Toulon Peak	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC10	Toulon Peak	Interoperability	Signed MOU	153.8750	CSQ	155.4450	156.7	Narrow	A
NTAC20	Toulon Peak	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
8CALL90	Toulon Peak	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Toulon Peak	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Toulon Peak	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL1	TV Hill	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC9	TV Hill	Interoperability	Signed MOU	153.8450	CSQ	156.1350	156.7	Narrow	A
NTAC20	TV Hill	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
8CALL90	TV Hill	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	TV Hill	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	TV Hill	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Austin Mtn	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC2	Austin Mtn	Interoperability	Signed MOU	151.2650	CSQ	154.1000	156.7	Narrow	A
NTAC6	Austin Mtn	Interoperability	Signed MOU	151.4300	CSQ	154.9050	156.7	Narrow	A
8CALL90	Austin Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Austin Mtn	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Austin Mtn	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Cave Mtn	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
NTAC5	Cave Mtn	Interoperability	Signed MOU	151.3550	CSQ	155.8200	156.7	Narrow	A
NTAC21	Cave Mtn	Interoperability	Signed MOU	159.1500	CSQ	155.1450	156.7	Narrow	A
8CALL90	Cave Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Cave Mtn	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Cave Mtn	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Elko Mtn	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC5	Elko Mtn	Interoperability	Signed MOU	151.3550	CSQ	155.8200	156.7	Narrow	A
NTAC19	Elko Mtn	Interoperability	Signed MOU	159.0750	CSQ	154.3400	156.7	Narrow	A
8CALL90	Elko Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Elko Mtn	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Elko Mtn	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Mary's Mtn	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC16	Mary's Mtn	Interoperability	Signed MOU	159.0150	CSQ	155.7300	156.7	Narrow	A
NTAC22	Mary's Mtn	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Mary's Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Mary's Mtn	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Mary's Mtn	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Peavy Hill	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NCALL3	Peavy Hill	Interoperability	Signed MOU Tactical Use	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC21	Peavy Hill	Interoperability	Signed MOU	159.1500	CSQ	155.1450	156.7	Narrow	A
8CALL90	Peavy Hill	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Peavy Hill	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Peavy Hill	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Prospect Peak	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC5	Prospect Peak	Interoperability	Signed MOU	151.3550	CSQ	155.8200	156.7	Narrow	A
NTAC21	Prospect Peak	Interoperability	Signed MOU	159.1500	CSQ	155.1450	156.7	Narrow	A
8CALL90	Prospect Peak	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Prospect Peak	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
8TAC92	Prospect Peak	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Sober Peak	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC15	Sober Peak	Interoperability	Signed MOU	158.7600	CSQ	155.5800	156.7	Narrow	A
NTAC17	Sober Peak	Interoperability	Signed MOU	159.0450	CSQ	155.1300	156.7	Narrow	A
8CALL90	Sober Peak	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Sober Peak	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Sober Peak	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Squaw	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC13	Squaw	Interoperability	Signed MOU	158.7525	CSQ	155.0850	156.7	Narrow	A
NTAC19	Squaw	Interoperability	Signed MOU	159.0750	CSQ	154.3400	156.7	Narrow	A
8CALL90	Squaw	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Squaw	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Squaw	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Winnemucca Mtn	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC2	Winnemucca Mtn	Interoperability	Signed MOU	151.2650	CSQ	154.1000	156.7	Narrow	A
NTAC19	Winnemucca Mtn	Interoperability	Signed MOU	159.0750	CSQ	154.3400	156.7	Narrow	A
8CALL90	Winnemucca Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Winnemucca Mtn	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Winnemucca Mtn	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL3	Fitzpatrick	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC3	Fitzpatrick	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
NTAC23	Fitzpatrick	Interoperability	Signed MOU	159.2475	CSQ	154.3250	156.7	Narrow	A
8CALL90	Fitzpatrick	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Fitzpatrick	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Fitzpatrick	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL3	Highland Peak	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC5	Highland Peak	Interoperability	Signed MOU	151.3550	CSQ	155.8200	156.7	Narrow	A

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
NTAC13	Highland Peak	Interoperability	Signed MOU	158.7525	CSQ	155.0850	156.7	Narrow	A
8CALL90	Highland Peak	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Highland Peak	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Highland Peak	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL3	Warm Springs	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC15	Warm Springs	Interoperability	Signed MOU	158.7600	CSQ	155.5800	156.7	Narrow	A
NTAC18	Warm Springs	Interoperability	Signed MOU	159.0525	CSQ	154.9650	156.7	Narrow	A
8CALL90	Warm Springs	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Warm Springs	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Warm Springs	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL4	Mt Brock	Interoperability	Southern Nevada	151.0850	CSQ	155.3850	156.7	Narrow	A
NTAC9	Mt Brock	Interoperability	Signed MOU	153.8450	CSQ	156.1350	156.7	Narrow	A
NTAC17	Mt Brock	Interoperability	Signed MOU	159.0450	CSQ	155.1300	156.7	Narrow	A
8CALL90	Mt. Brock	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Mt. Brock	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Mt. Brock	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Rx Tone	Wide Narrow	Mode A, D, M
Nevada Tactical Crossband Repeater Interoperability Channels (Planned)
NCALL1	Pine Grove Mtn	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC11	Pine Grove Mtn	Interoperability	Signed MOU	153.9050	CSQ	155.3700	156.7	Narrow	A
NTAC14	Pine Grove Mtn	Interoperability	Signed MOU	158.7525	CSQ	155.7300	156.7	Narrow	A
8CALL90	Pine Grove Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Pine Grove Mtn	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Pine Grove Mtn	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL1	Poito Valley	Interoperability	NW Nevada	151.0700	CSQ	156.1800	156.7	Narrow	A
NTAC15	Poito Valley	Interoperability	Signed MOU	158.7600	CSQ	155.5800	156.7	Narrow	A
NTAC22	Poito Valley	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Poito Valley	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Poito Valley	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Poito Valley	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	3 Mile Hill	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC20	3 Mile Hill	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
NTAC23	3 Mile Hill	Interoperability	Signed MOU	159.2475	CSQ	154.3250	156.7	Narrow	A
8CALL90	3 Mile Hill	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	3 Mile Hill	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	3 Mile Hill	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Argenta	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC3	Argenta	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
NTAC20	Argenta	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
8CALL90	Argenta	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Argenta	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Argenta	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Diamond Peak	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC15	Diamond Peak	Interoperability	Signed MOU	158.7600	CSQ	155.5800	156.7	Narrow	A

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Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Rx Tone	Wide Narrow	Mode A, D, M
NTAC20	Diamond Peak	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
8CALL90	Diamond Peak	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Diamond Peak	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Diamond Peak	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Ellen Dee	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC13	Ellen Dee	Interoperability	Signed MOU	158.7525	CSQ	155.0850	156.7	Narrow	A
NTAC20	Ellen Dee	Interoperability	Signed MOU	159.0825	CSQ	156.0450	156.7	Narrow	A
8CALL90	Ellen Dee	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Ellen Dee	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Ellen Dee	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Mt Moses	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC16	Mt Moses	Interoperability	Signed MOU	159.0150	CSQ	155.7300	156.7	Narrow	A
NTAC22	Mt Moses	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Mt. Moses	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Mt. Moses	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Mt. Moses	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Penn Hill	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC15	Penn Hill	Interoperability	Signed MOU	158.7600	CSQ	155.5800	156.7	Narrow	A
NTAC22	Penn Hill	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Penn Hill	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Penn Hill	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Penn Hill	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL2	Spruce Mtn	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC3	Spruce Mtn	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
NTAC22	Spruce Mtn	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Spruce Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Spruce Mtn	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Spruce Mtn	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL2	Trident Peak	Interoperability	NE Nevada	151.1000	CSQ	154.6950	156.7	Narrow	A

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Rx Tone	Wide Narrow	Mode A, D, M
NTAC16	Trident Peak	Interoperability	Signed MOU	159.0150	CSQ	155.7300	156.7	Narrow	A
NTAC22	Trident Peak	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Trident	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Trident	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Trident	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL3	Caliente	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NCALL2	Caliente	Interoperability	Signed MOU Tactical Use	151.1000	CSQ	154.6950	156.7	Narrow	A
NTAC23	Caliente	Interoperability	Signed MOU	159.2475	CSQ	154.3250	156.7	Narrow	A
8CALL90	Caliente	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Caliente	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Caliente	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL3	Currant Summit	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC3	Currant Summit	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
NTAC23	Currant Summit	Interoperability	Signed MOU	159.2475	CSQ	154.3250	156.7	Narrow	A
8CALL90	Currant Summit	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Currant Summit	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Currant Summit	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL3	Mesquite	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC5	Mesquite	Interoperability	Signed MOU	151.3550	CSQ	155.8200	156.7	Narrow	A
NTAC22	Mesquite	Interoperability	Signed MOU	159.1800	CSQ	154.8300	156.7	Narrow	A
8CALL90	Mesquite	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Mesquite	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Mesquite	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL3	Mt. Montgomery	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC3	Mt. Montgomery	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
NTAC23	Mt. Montgomery	Interoperability	Signed MOU	159.2475	CSQ	154.3250	156.7	Narrow	A
8CALL90	Mt. Montgomery	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A

Channel Name	Site Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Rx Tone	Wide Narrow	Mode A, D, M
8TAC93	Mt. Montgomery	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Mt. Montgomery	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL3	Overton	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC1	Overton	Interoperability	Signed MOU	151.2050	CSQ	154.1750	156.7	Narrow	A
NTAC7	Overton	Interoperability	Signed MOU	151.4300	CSQ	155.5800	156.7	Narrow	A
8CALL90	Overton	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC93	Overton	Interoperability	Signed MOU	852.5125	CSQ	807.5125	156.7	Narrow	A
8TAC94	Overton	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A
NCALL3	Pahranagat	Interoperability	Southern Nevada	159.4200	CSQ	154.0100	156.7	Narrow	A
NTAC3	Pahranagat	Interoperability	Signed MOU	151.3100	CSQ	155.3550	156.7	Narrow	A
NTAC21	Pahranagat	Interoperability	Signed MOU	159.1500	CSQ	155.1450	156.7	Narrow	A
8CALL90	Pahranagat	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Pahranagat	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC92	Pahranagat	Interoperability	Signed MOU	852.0125	CSQ	807.0125	156.7	Narrow	A
NCALL4	Sunrise Mtn	Interoperability	Southern Nevada	151.0850	CSQ	155.3850	156.7	Narrow	A
NTAC8	Sunrise Mtn	Interoperability	Signed MOU	153.7850	CSQ	156.1950	156.7	Narrow	A
NTAC17	Sunrise Mtn	Interoperability	Signed MOU	159.0450	CSQ	155.1300	156.7	Narrow	A
8CALL90	Sunrise Mtn	Interoperability	Statewide	851.0125	CSQ	806.0125	156.7	Narrow	A
8TAC91	Sunrise Mtn	Interoperability	Signed MOU	851.5125	CSQ	806.5125	156.7	Narrow	A
8TAC94	Sunrise Mtn	Interoperability	Signed MOU	853.0125	CSQ	808.0125	156.7	Narrow	A

Table D - 2 Northwest Nevada Region 800 MHz Inter-system Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M

Table D - 3 Northwest Nevada Region VHF Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
White 1	Fire		154.2800		154.2800		W	A
White 2	Fire		154.2650		154.2650		W	A
White 3	Fire		155.2950		155.2950		W	A
EOC 1			155.1450		155.1450		W	A
EOC 2			155.7150		155.7150		W	A
Federal Law Enforcement	Law		155.4750		155.4750		W	A
State Law Enforcement	Law		155.6550		155.6550		W	A
Sierra Front HTF (Peavine)	Fire Interop		169.8750	123.0	170.4750	123.0	N	A
Sierra Front HTF (Slide)	Fire Interop		169.8750	110.9	170.4750	110.9	N	A
Sierra Front HTF (Leviathan)	Fire Interop		169.8750	103.5	170.4750	103.5	N	A
Sierra Front BLM (Cory PK)	Fire Interop		169.9875	151.4	162.2375	151.4	N	A
Sierra Front BLM (Ft Sage)	Fire Interop		169.9875	173.8	162.2375	173.8	N	A
Sierra Front BLM (Virginia Peak)	Fire Interop		169.9875	114.8	162.2375	114.8	N	A
Sierra Front BLM (McClellan)	Fire Interop		169.9875	186.2	162.2375	186.2	N	A
Sierra Front BLM Local	Fire Interop		169.9875	146.2	169.9875	146.2	N	A
Tahoe NF Fire Net	Fire Interop		168.1750		170.6000		W	A
Tahoe NF Forest Net (Babbit Pk)	Fire Interop		168.7750	156.7	170.5750	156.7	N	A
Tahoe NF Forest Net (Mt Rose)	Fire Interop		168.7750	110.9	170.5750	110.9	N	A
Tahoe NF Forest Net (Squaw Pk)	Fire Interop		168.7750	167.9	170.5750	167.9	N	A
NDF (Eagle Pk)	Fire Interop		158.8950	146.2	159.4500	146.2	W	A
NDF (Peavine)	Fire Interop		158.8950	118.8	159.4500	118.8	W	A
NDF (Snow Valley)	Fire Interop		158.8950	127.3	159.4500	127.3	W	A

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
NDF (Pinenut)	Fire Interop		158.8950	136.5	159.4500	136.5	W	A
CalFire NEU (Scout Pk)	Fire Interop		154.1300	100.0	159.4950	100.0	W	A
CalFire NEU (Mt Pluto)	Fire Interop		154.1300	114.8	159.4950	114.8	W	A
CalFire NEU (Squaw Pk)	Fire Interop		154.1300	127.3	159.4950	127.3	W	A
CalFire NEU (Mt Rose)	Fire Interop		154.1300	103.5	159.4950	103.5	W	A
Sierra Front HTF (Mean)	Fire Interop		169.8750	156.7	170.4750	156.7	W	A
Sierra Front HTF (Lobdell)	Fire Interop		169.8750	146.2	170.4750	146.2	W	A
Sierra Front HTF (Masonic)	Fire Interop		169.8750	123.0	170.4750	123.0	W	A
Sierra Front HTF (Cory)	Fire Interop		169.8750	167.9	170.4750	167.9	W	A
Air to Ground Primary	Tactical		164.8750		164.8750		N	A
Air to Ground Secondary	Tactical		166.6875		166.6875		N	A
BLM SOA	Tactical		171.6750		171.6750		N	A
BLM Guard 2	Tactical		167.9500		167.9500		N	A
NDF RED	Tactical		159.3450		159.3450		W	A
NDF RED2	Tactical		158.8650		158.8650			
CALFIRE TAC1	Tactical		151.1450		151.1450		N	A
CALFIRE TAC2	Tactical		151.1600		151.1600		W	A
CALFIRE TAC3	Tactical		151.1750		151.1750		W	A
CALFIRE TAC4	Tactical		151.1900		151.1900		W	A
CALFIRE TAC5	Tactical		151.2500		151.2500		W	A
CALFIRE TAC6	Tactical		151.3250		151.3250		W	A
CALFIRE TAC7	Tactical		151.3400		151.3400		W	A
CALFIRE TAC8	Tactical		151.3700		151.3700		W	A
CALFIRE TAC9	Tactical		151.3850		151.3850		W	A
CALFIRE TAC10	Tactical		151.4000		151.4000		W	A
CALFIRE TAC11	Tactical		151.4450		151.4450		W	A

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
CALFIRE TAC12	Tactical		151.4600		151.4600		W	A
OES Fire T1	Tactical		153.8300		153.8300		W	A

Table D - 4 Northwest Nevada Region UHF Inter-system Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M

Appendix E   Gateways (Pending)

Detailed information on gateways available for use within the region is listed in subsequent pages of Appendix D. The table below lists the owning or managing agency, gateway name(s), make/model and whether the device is fixed or mobile.

Table E - 1 Northwest Nevada Region Gateway Systems

Gateway Name	Owning Agency	Day-to-Day or Incident / Event	Make / Model	Fixed / Mobile	No. of Simultaneous Nets	No. of Ports
WCRCS Conventional Interface	Washoe County Telecomm.	Day-to-Day and/or Major Incident	4 Wire Tone Control	Fixed and/or mobile	24	17
Incline Village	North Lake Tahoe FPD	Day-to-Day	Tyco Electronics Conventional Interface	Fixed	24	17
Fallon Police Department	Fallon Police Department	Major Incident	Communications Applied Tech	Mobile	5	7

Note: The assets in the above table are pending. The following sections have not been created and need modification.

E.1   WCRCS Conventional Interface

Equipment Location

This gateway is stored at 5195 Spectrum Blvd. Reno, NV 89512

Responsible Agency

This gateway is owned or managed by: Washoe County

Name: Aaron Kenneston
Title: Manager Regional Emergency Operations
Phone: (775) 337-5898
24/7 Phone:
Email: akenneston@washoecounty.us

Service Area

<mark>Washoe County Area</mark>

Participating Agencies

- City of Reno
- City of Sparks
- Nevada air National Guard
- Nevada Department of Transportation
- North Lake Tahoe Fire Protection District
- Pyramid Lake Paiute Tribe
- Regional Emergency Medical Services
- Reno Sparks Indian Colony
- Reno Tahoe Airport Authority
- Sierra Fire Protection District
- Truckee Meadows Community College
- Truckee Meadows Fire Protection District
- Truckee Meadows Water Authority
- Hospital Emergency Rooms
- University of Nevada, Reno
- Washoe County
- Washoe County School District
- Incline Village General Improvement District
- Storey County (limited)
- FBI (limited)
- Placer County (limited)

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E.2   Incline Village Gateway

Equipment Location

This gateway is stored at 75 Tanager Incline Village, NV 89451

Responsible Agency

This gateway is owned or managed by: North Lake Tahoe Fire Protection District

Name: Ryan Sommers
Title: Battalion Chief
Phone: (775) 831-0351
24/7 Phone: (775)832-4111
Email: akenneston@washoecounty.us

Service Area

Incline Village/Crystal Bay NV

Participating Agencies

- City of Reno
- City of Sparks
- Nevada air National Guard
- Nevada Department of Transportation
- North Lake Tahoe Fire Protection District
- Pyramid Lake Paiute Tribe
- Regional Emergency Medical Services
- Reno Sparks Indian Colony
- Reno Tahoe Airport Authority
- Sierra Fire Protection District
- Truckee Meadows Community College
- Truckee Meadows Fire Protection District
- Truckee Meadows Water Authority
- Hospital Emergency Rooms
- University of Nevada, Reno
- Washoe County
- Washoe County School District
- Incline Village General Improvement District
- Storey County (limited)
- FBI (limited)
- Placer County (limited)

Other Gateway Notes:

E.3   Fallon Police Department Gateway

Equipment Location

This gateway is stored at 98 X. Carson St, Fallon, Nevada

Responsible Agency

This gateway is owned or managed by: Fallon Police Department

Name: Frank Shyne
Title: Captain
Phone: (775) 423-2111
24/7 Phone: 775-423-2111
Email: FShyne@ci.fallon.nv.us

Service Area

Incline Village/Crystal Bay NV

Participating Agencies

- Fallon Fire Dept.
- Nevada Highway Patrol
- Churchill County S.O.
- Mineral County S.O.
- Pershing County S.O.
- Lovelock P.D.
- Lyon County S.O.

Other Gateway Notes:

The Fallon Police Department just completed a five year upgrade of our radio system. We now have a new primary repeater that we call the Blue channel. It is narrowband, digital and encrypted.   We still maintain the White channel which operates on analog equipment that has been upgraded.

   In addition to the two repeater systems we have two new Motorola base station radios. Both repeaters function in conjunction with five receivers at all points of the city on a voting system. The receivers increase the capability and range of handheld radios. We have 5 analog and 5 digital receivers that are connected to the main police department building via dedicated circuits.

Radio Models Supported: Kenwood 190-390, Com-net Ericsson Jaquar 700P-P7100-P7170, Telephone

Appendix F   Radio Caches

Information on radio caches available for use within the region is listed in subsequent pages of Appendix E. The table below lists the owning or managing agency, cache, frequency band and quantity of radios in each cache.

Table F - 1 Northwest Nevada Region Radio Cache(s)

Radio Cache Name	Make / Model	Owning / Managing Agency	Frequency Band	Quantity
Washoe County Radio Cache	Tyco Electronics 7200 with vehicular charger, lithium chargeable battery, clamshell and lithium AA batteries	Washoe County Emergency Operations Center	800 MHz / 700 MHz Trunked Conventional P25 Open Sky	43
Fallon Police Department	Motorola XTS 2500, w/ spare battery, speaker, mic and charger	Fallon Police Department	VHF Analog	4
Sparks Fire Department	Motorola MTS2000	Sparks Fire Department	800 MHz Conventional Analog	19
Sparks Fire Department	Motorola JT1000	Sparks Fire Department	VHF Conventional Analog	13

Table F - 2 Northwest Nevada Region VHF Radio Cache

Channel Name	Primary Use

If possible, the following channels should also be programmed into Northwest Nevada Region VHF cached radios:

Table F - 3   Additional Northwest Nevada Region VHF Radio Cache

Channel Name	Primary Use

F.1   Washoe County Radio Cache

Equipment Location

This radio cache is stored at 5195 Spectrum Blvd. Reno, NV 89512

Responsible Agency

This radio cache is owned or managed by: Washoe County

Name: Aaron Kenneston
Title: Manager Regional Emergency Operations
Phone: (775) 337-5898
24/7 Phone:
Email: akenneston@washoecounty.us

Service Area

Primarily Washoe County, but can be deployed anywhere in Nevada depending on incident.

System Type and Capacity

Cache Description:

Make / Model:	M/A-COM 7200
Frequency Band:	800 Mhz
No. of Radios in Cache:	43
No. of Available Channels:	
No. of Spare Batteries:	

Channels Programmed on Cache

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

Other Cache Notes:

F.2   Fallon Police Department Radio Cache

Equipment Location

This radio cache is located at the Fallon Emergency Operatoins Center, 98 S. Carson Street, Fallon, Nevada

Responsible Agency

This radio cache is owned or managed by: Fallon Police Department

Name: Frank Shyne
Title: Captain
Phone: (775) 423-2111
24/7 Phone: 775-423-2111
Email: FShyne@ci.fallon.nv.us

Service Area

Northern Nevada

System Type and Capacity

Cache Description:

Make / Model:	Motorola XTS 2500
Frequency Band:	150 - 160 Mhz
No. of Radios in Cache:	4
No. of Available Channels:	15
No. of Spare Batteries:	8

Channels Programmed on Cache

Channel Name	Display	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
Repeater P25 Coded	A1 Blue			159.1575	770	156.0375	770	N	P25
Repeater P25 Clear	A2 Green			159.1575	770	156.0375	770	N	P25
Repeater Analog	A3 White			155.4900	97.4	154.6500	77	W	Analog
Local Rptr T/A	A4 Emg & Fire T/A			155.0550	91.5	155.0550	91.5	W	Analog
Rattlesnake Repeater	A5 CHSO Rtsn			155.1900	100.0	155.9100	162.2	W	Analog
Fairview Repeater	A6 CHSO Fair			155.1900	100.0	155.9100	100	W	Analog
Desert Pk Repeater	A7 CHSO Dpk			155.1900	100.0	155.9100	127.3	W	Analog
NV Mutual Aid 1	A8 M/A 1			155.4750	CSQ	155.4750	CSQ	W	Analog
Law Enforcement M/A	A9 LEMA			155.6550	CSQ	155.6550	CSQ	W	Analog
Eagle Rptr SO-2	A10 LCSO-Eagle			159.2100	146.2	156.1050	136.5	W	Analog

Channel Name	Display	Primary Use	Agencies Supported	Rx Freq	Rx Tone	Tx Freq	Tx Tone	Wide Narrow	Mode A, D, M
Como Rptr SO-2	A11 LCSO-Como			159.2100	146.2	156.1050	127.3	W	Analog
Pershing Co SO "	A12 LCSO-Local			154.9650	CSQ	154.9650	167.9	W	Analog
Mineral Co SO	A13 MCSO-Local			155.1150	CSQ	155.1150	CSQ	W	Analog
P25 Coded Rptr T/A	A14 Blue Local			159.1575	770.0	159.1575	770	N	P25
Anaton Rptr TlA	A15 Wht Local			155.4900	97.4	155.4900	97.4	W	Analog
Analog Rptr T/A	A16 CHSO Local			155.1900	100.0	155.1900	100	W	Analog
Duck Hill Repeater	B4 Carson SO Pri			155.9700	CSQ	155.2500	127.3	W	Analog
	B5 LCSO Tac			154.7250	146.2	154.7250	146.2	W	Analog
SO 2 Rptr T/A	B6 CHSO-2 Loc			151.2650	071	151.2650	071	N	Analog
	B7 State Parks			151.3400	CSQ	151.3400	CSQ	W	Analog
	B8 SAR			155.1600	CSQ	151.1600	CSQ	W	Analog
Rptr T/A	B9 DCSO Local			154.8900	CSQ	154.8900	100.0	W	Analog
Primary Rptr T/A	B10 Crsn SO Loc			155.9700	CSQ	155.9700	127.3	W	Analog
Rptr T/A	B11 SCSO Local			155.6100	85.4	155.6100	85.4	W	Analog
Rptr T/A	B12 Hmblt SO Loc			155.6250	131.8	155.6250	131.8	W	Analog
Rptr T/A	B13 LanderSO Loc			155.8950	CSQ	155.8950	82.5	W	Analog
Rptr T/A	B14 Elko SO Local			155.0550	131	155.0550	131	W	Analog
Railroad ch-78	B15 Railroad Local			161.2800	CSQ	161.2800	CSQ	W	Analog
Rattlesnake Repeater	B16 EMR FireRtsn			155.0550	91.5	150.7900	131.8	N	Analog

Talk Groups Programmed on Cache

Other Cache Notes:

F.3   Sparks Fire Department 800 MHz Radio Cache

Equipment Location

This radio cache is stored at 1605 Victorian Ave Sparks NV 89431

Responsible Agency

This radio cache is owned and managed by:

Name: Jack A. (Jake) Conely
Title: Fire Captain, Sparks Fire Department
Office Phone: (775) 353-2255
E-Mail: jconely@cityofsparks.us
Address: 1605 Victorian Ave Sparks NV 89431
24/7 Phone: (775) 858-2525

Service Area

Sparks Area

System Type and Capacity

Cache Description:

Make / Model:	Motorola MTS 2000
Frequency Band:	800 MHz
No. of Radios in Cache:	19
No. of Available Channels:	
No. of Spare Batteries:	

Channels Programmed on Cache

[Add text]

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

NOTE: All of the above channels/talkgroups are available on both WCRCS and NSRS systems for authorized users that have requested access to these channels through each system administrator.

F.4   Sparks Fire Department VHF Radio Cache

Equipment Location

This radio cache is stored at 1605 Victorian Ave Sparks NV 89431.

Responsible Agency

This radio cache is owned and managed by:

Name: Jack A. (Jake) Conely
Title: Fire Captain, Sparks Fire Department
Office Phone: (775) 353-2255
E-Mail: jconely@cityofsparks.us
Address: 1605 Victorian Ave Sparks NV 89431
24/7 Phone: (775) 858-2525

Service Area

Sparks Area.

System Type and Capacity

Cache Description:

Make / Model:	Motorola JT 1000
Frequency Band:	VHF
No. of Radios in Cache:	13
No. of Available Channels:	
No. of Spare Batteries:	

Channels Programmed on Cache

[Add text]

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

NOTE: All of the above channels/talkgroups are available on both WCRCS and NSRS systems for authorized users that have requested access to these channels through each system administrator.

Appendix G   Mobile Communications Units

Detailed information on mobile communications units (MCU) (also known as Mobile Communications Center (MSS) or Mobile EOC) available within the region is listed in subsequent pages of Appendix F.

Table G - 1 Northwest Nevada Region Mobile Communications Unit(s)

Unit ID / Designator	Type	Owning Agency	Deployment Area
Comm 1	FEMA Type 1	Carson City Fire Department	City of Carson Only
SAR	FEMA Type 3	Lyon County SO	Lyon County
MCU-1	Non-typed Converted Ambulance	Lyon County SO	Lyon County
MC61	Unknown	North Lyon County Fire Protection District	Lyon County
Unit #14 Converted Ambulance	Non-typed Converted Ambulance	Fallon Police Department	Churchill County
Reno Command Van	FEMA Type 1	Reno Fire Department	Washoe County – outside area with authorization
Sparks Police MCC	FEMA Type 3	Sparks Police Department	Washoe County – outside area with authorization
Unit 900	FEMA Type 1	DC 911 Emergency Services	Northern NV & Alpine Co. CA
Storey County	Non FEMA Type	Storey County Sheriff's Office	Storey County
Nevada Highway Patrol			
Reno Police Department			
Washoe County			
Nevada Division of Environmental Protection (NDEP)			
BLM			
Sierra Front Wildfire Cooperators	Non-type Trailer		
University of Nevada, Reno (UNR)			
Washoe County School District			
Nevada DEM			

G.1   COMM 1

Equipment Location

This equipment is located at the Carson City Fire Department

Responsible Agency

This equipment is owned or managed by Carson City Fire Department

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

City of Carson City

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

Other Mobile Communications Unit Equipment Notes:

[Add notes]

G.2   SAR

Equipment Location

This equipment is located at 18 Highway 95A North, Yerington, NV 89447

Responsible Agency

This equipment is owned or managed by

Name: Jeffery A. Page
Title: Lyon County Office of Emergency Management
Address: 18 Highway 95A North, Yerington, NV 89447
Phone: 775-463-6551 Ext. 10
24/7 Phone: 775-302-7088
Email: **jpage@lyon-county.org**

Alternate:

Agency Name: Lyon County Sheriff's Office
POC Name: Capt. Kathy Heston
Title: Captain – Administrative Services Bureau
Address: 30 Nevin Way, Yerington, NV 89447
Office Phone: (775) 463-6600
24/7 Phone: (775) 463-6620
E-Mail: kheston@lyon-county.org

Deployment Area

Lyon County

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	

General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	
Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.3   MCU-1

Equipment Location

This equipment is stored at Lyon County Office of Emergency Management.

Responsible Agency

This equipment is owned or managed by

Name: Jeffery A. Page
Title: Lyon County Office of Emergency Management
Phone: 775-463-6551 Ext. 10
24/7 Phone: 775-302-7088
Email: **jpage@lyon-county.org**

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.4   MC61

Equipment Location

This equipment is stored at the North Lyon county Fire Protection District Office.

Responsible Agency

This equipment is owned or managed by North Lyon County Fire Protection District, Office
Street: 195 East Main Street
Fernley, NV 89408-7644
Phone: (775) 575-3310

Deployment Area

Lyon County

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.5   Unit #14 Converted Ambulance

Equipment Location

This equipment is stored at Fallon Police Department

Responsible Agency

This equipment is owned or managed by

Name: Frank Shyne
Title: Captain
Phone: 775 423-2111
24/7 Phone:
Email: FShyne@ci.fallon.nv.us

Deployment Area

City of Fallon

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

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Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.6   Reno Command Van

Equipment Location

This equipment is stored at Reno Fire Department

Responsible Agency

This equipment is owned or managed by the Reno Fire Department

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.7   Sparks Police MCC

Equipment Location

This equipment is stored at Sparks Police Department

Responsible Agency

This equipment is owned or managed by the Sparks Police Department

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

Washoe County

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.8   Unit 900

Equipment Location

This equipment is stored at 1615 8th Street, Minden (Douglas County), NV 89423

Responsible Agency

This equipment is owned or managed by Douglas County 911 Emergency Services

Name: Ron Sagen
Title: 911 Manager
Phone: 775-782-9977
24/7 Phone: 775-782-9911
Email: rsagen@co.douglas.nv.us

Deployment Area

This Mobile Communications Unit is available for deployment throughout Northern Nevada and select portions of Alpine County CA, depending on weather conditions.

System Type and Capacity

Unit ID / Designator:	Unit 900
Owning Agency	Douglas County 911 Emergency Services
Type/Make/Model:	2004 Freightliner / Model MCC24LLS360-03-03
Quantity:	1
Primary Deployment Method (Other)	Driving to location
MCU Storage Address	1615 8th St. Minden, NV 89423
Latitude	38.9550797553
Longitude	-119.767546895
Year Activated	2004
FEMA Type	Type 1
Activation Method	Requested through 911
General Comments	
Time to Setup	15-30 minutes depending on location
Chassis Size	40'
Capability to Extend a Regional LMR System	Yes
Dispatch Capability	Yes
Number of Dispatch Consoles	2
SATCOM Capability	Yes

SATCOM Type	Global-star
Number of Phone/Data Lines	4
Microwave Connectivity Capability	No
PBX Capability	No
Cellular PBX	Yes
Capability FAX Capability	No
Computer Server Capability	No
LAN Capability	Yes
Number of Workstations	4 (2 radio positions)
Conference	Yes
Internet Access	Yes – Clearwire
Network Access Speed in KBPS	1.3 MB
Video Teleconference Capability	No
On Scene Video Monitoring Capability	Yes
Self-contained Power Supply Capacity (Watts)	Kohler 15-KW 120/240 Vac generator
TV Reception Capability	No – digital converter required
Expandable Mast	Yes

G.9 Store County

Equipment Location

This equipment is stored at Storey County Sheriff's Office in Virginia City, NV.

Responsible Agency

This equipment is owned or managed by the Storey County Sheriff's Office

Name: Cherie Nevin
Title: Assistant Director of Communications / Emergency Mangement
Phone:
24/7 Phone:
Email: cnevin@stroeycounty.org

Deployment Area

Storey County

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.10   Nevada Highway Patrol

Equipment Location

This equipment is located at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.11   Reno Police Department

Equipment Location

This equipment is located at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.12   Washoe County

Equipment Location

This equipment is located at

Responsible Agency

This unit is owned by and managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.13   Nevada Division of Environmental Protection (NDEP)

Equipment Location

This equipment is stored at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.14   BLM

Equipment Location

This equipment is stored at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.15   Sierra Front Wildfire Cooperators

Equipment Location

This equipment is stored at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.16   University of Nevada, Reno

Equipment Location

This equipment is stored at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.17   Washoe County School District

Equipment Location

This equipment is stored at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

G.18   Nevada DEM

Equipment Location

This equipment is stored at

Responsible Agency

This equipment is owned or managed by

Name:
Title:
Phone:
24/7 Phone:
Email:

Deployment Area

System Type and Capacity

Unit ID / Designator:	
Owning Agency	
Type/Make/Model:	
Quantity:	
Primary Deployment Method (Other)	
MCU Storage Address	
Latitude	
Longitude	
Year Activated	
FEMA Type	
Activation Method	
General Comments	
Time to Setup	
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	
Number of Dispatch Consoles	
SATCOM Capability	
SATCOM Type	

Number of Phone/Data Lines	
Microwave Connectivity Capability	
PBX Capability	
Cellular PBX	
Capability FAX Capability	
Computer Server Capability	
LAN Capability	
Number of Workstations	
Conference	
Internet Access	
Network Access Speed in KBPS	
Video Teleconference Capability	
On Scene Video Monitoring Capability	
Self-contained Power Supply Capacity (Watts)	
TV Reception Capability	
Expandable Mast	

Appendix H Policy Documents, Governing Documents, MOUs, and Agreements

Note: Reference any policy document(s), governing document(s), MOU(s) and agreement(s) by a link to a website if available.

H.1 Sierra Front Wildfire Cooperator's Agreement

Located at the Minden Inter-Agency Dispatch Center.

H.2 Washoe County Regional Communications System Inter-Local Agreement

Located at Washoe County Telecommunications, Reno, NV.

H.3 Nevada Emergency Management Assistance Compact

Maintained by the Nevada Division of Emergency Management, Carson City, NV.

H.4 Lake Tahoe Regional Fire Chiefs Association Mutual Aid Agreement

Located at the South Lake Tahoe Fire Department, South Lake Tahoe, CA.

H.5 Nevada Master Mutual Aid Agreement

Located at the Nevada Division of Forestry, Carson City, NV.

H.6 Lyon County Mutual Aid Agreements

Type	Agency with agreement	Description
Mutual Aid	LCOEM	NEMAC
Mutual Aid	All FPD's	Nevada State Mutual Aid Inter-county Mutual/Auto Aid BLM & USFS Mutual Aid
Mutual Aid	MVFPD	Walker River Fire MA
Mutual Aid	CLCFPD	Carson City Fire MA Storey County Fire MA Tahoe Chiefs MA
Mutual Aid	SVFPD	EFFPD MA Mono County MA
Mutual Aid	LCSO	Mono County Storey County Washoe County FIS and Coroner

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H.7   Storey County Mutual Aid Agreements

Type	Agency with agreement	Description
Auto Aid	Central Lyon County Fire	Fire/Ems coverage
Auto Aid	Reno Fire Department	Fire/Ems Coverage
Auto Aid	Sparks Fire	Fire/Ems coverage
Auto Aid	REMSA	Ems Coverage
Auto Aid	Division of Forestry	Fire Coverage
Auto Aid	Sierra Fire District	Fire Coverage
Auto Aid	BLM	Fire Coverage
Mutual Aid Mutual Aid Mutual Aid Mutual Aid	Lake Tahoe Regional Chiefs NV Fire Chiefs Interstate Compact Agreement Nevada Emac (Emergency MGT)	Fire/Ems Coverage Fire/Ems Coverage Fire/Ems Coverage Fire Coverage

Appendix I   Update Procedures and Reference Materials

Update Procedures:

This Regional TICP was written for the Northwest Region of Nevada under the direction of the NCSC. Throughout the development process it became apparent that an initial review would be required before the TICP could be fully implemented. This document contains the interoperability resources for the Region. In addition, a first pass at the rules of use and procedures for using the interoperability resources for the Region has been documented. In the case where only verbal agreements were in place, written procedures have been recorded in this document. In the case where new technologies were being installed (the Nevada Tactical Crossband Repeaters, Quad County Interconnect and the planned Gateways for example), procedures and rules of use were documents in the TICP and are intended to provide a starting point for developing rules of use procedures during the first revision. The following plan is provided as a guideline for the initial review of the TICP.

At first glance the TICP seems intimidating and the thought of reviewing over 100 pages is a daunting task. The following review plan is provided to reduce the time required to complete the review process. It is important to make sure that emergency responders who are actually using radio communications on a day to day basis are involved in the process.

Step 1: Establish a TICP ad-hoc committee.

Step 2: Notify Key leaders of the TICP review process

Step 3: Meet with users and technical support personnel from each agency

Step 4: Incorporate changes into the TICP

Step 5: Users and technical support personnel report back to key leaders

Step 6: TICP Review Team reports to NCSC

Step 7: Formally accept changes

Step 1: Establish the TICP Review Team

The key to a successful review process is the establishment of a review team. The team should be formed using members of the operating and technical advisory committees. 1-2 members from these committees can be used to form the 3-4 member review team. It will be important to keep the review team members small, so that busy schedules can be aligned.

Step 2: Notify key leaders of the TICP review process

After the review team has been assembled the review process can begin. The first step in the process is to notify key leaders that the TICP will be reviewed. Key leaders include City Police Chiefs, the Sheriff, Police and Fire Chiefs throughout the Region and leaders

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from other organizations listed in the TICP. The purpose of this notification is two-fold. First, the leaders can be informed about the goals of the TICP. Second, they can be informed on how much time will be required from their agency and what type of information will need to be reviewed. This will insure that the agency will support the review process. After key personnel have been informed, the TICP review team can begin the review process by sending invitations to each agency. Step 3 can be used as a guideline for who to invite and how many meetings should be held.

Step 3: Meet with users and technical support personnel from each agency

This step will require active participation from each agency represented in the TICP. Prior to this meeting, invitations should be sent to radio users and technical personnel from each agency. An electronic version of the TICP should be sent with the invitation along with detailed review instructions. These instructions might include the following:

You have been selected to participate in the Regional Tactical Interoperable Communications Plan (TICP) review process for Northwest Nevada. The Regional TICP contains a list of all the interoperable communication resources for the Region. Please review your specific section and be prepared to provide feedback to the review committee on _____. We anticipate that the meeting will take 2 hours. In preparation for the meeting, search through the attached Regional TICP and find all references to your agency. When you find a reference to your agency, verify the details provided to ensure they are accurate. You do not need to read the entire TICP, just the sections that refer to your agency.

The user and technical support personnel meetings should be organized by agency in most cases. For smaller agencies, they can be organized according to discipline. Keep in mind that group dynamics indicate that groups larger than 12-15 people can be difficult to manage based on the amount of detail that will have to be reviewed.

During the review meetings the review team will go line by line through the sections of the TICP that pertain to the agencies that are present. Focus on the details in the rules of use and procedures for each interoperability asset and verify all frequencies that are listed in the TICP. It will also be necessary to keep track of suggestions made that apply to all agencies represented in the TICP.

Step 4: Incorporate changes into TICP

After consensus is reached by the TICP review team and the reviewing agencies, the changes need to be incorporated into the TICP. A system to track TICP version numbers has been established so that all changes are incorporated in the TICP. Make sure to update the version number table in the front of this document as updates are made.

Step 5: Users and technical support personnel report back to key leaders

The purpose of the TICP review is to arrive at a mutually agreed summary of interoperability resources for the agencies represented in the TICP. Many of these resources are owned by individual agencies and they each have their own procedures and rules of use. However, in order to achieve interoperability, some details must be agreed upon across all agencies. One example might be which channels are required in a radio

cache to insure interoperability. After the review process is complete, the users and technical staff who attended the meeting must report back to their agency so that continued support of the review process continues. The users and the technical support personnel can provide feedback and help establish support for the process.

Step 6: TICP Review Team reports to NCSC

The TICP Review Team will report back to the NCSC and provide an overview of the changes made to the TICP as a result of the TICP review. This report will also include many recommendations from the users and technical support personnel and will also likely include some decision items that will need to be considered for countywide adoption. The Review Team will present these changes and will make recommendations to NCSC.

Step 7: Formally accept changes

The final step in the process will be completed by NCSC. All accepted changes will be incorporated into the TICP and the NCSC representatives will sign the TICP.

Reference Sources

- SAFECOM. http://www.safecomprogram.gov

    The *National Emergency Communications Plan* (NECP) is a strategic plan that sets goals and identifies key national priorities to enhance governance, planning, technology, training and exercises, and disaster communications capabilities. The NECP provides recommendations, including milestones, to help emergency response providers and relevant government officials make measurable improvements in emergency communications over the next three years.

- National Public Safety Telecommunications Council (NPSTC). http://www.npstc.org

    The *National Interoperability Field Operations Guide* (NIFOG) is a collection of technical reference material for radio technicians responsible for radios that will be used in disaster response applications. The NIFOG includes information from the National Interoperability Frequency Guide (NIFG), the instructions for use of the NIFG, and other reference material; formatted as a pocket-sized guide for radio technicians to carry with them. A copy of the NIFOG can be found on the SAFECOM website: www.safecomprogram.gov

- Federal Emergency Management Agency (FEMA). http://www.fema.gov

    The Department of Homeland Security *Target Capability List* (TCL describes the capabilities related to the four homeland security mission areas: Prevent, Protect, Respond, and Recover. It defines and provides the basis for assessing preparedness. It also establishes national guidance for preparing the Nation for major all-hazards events, such as those defined by the National Planning Scenarios.

- Nevada. http://homelandsecurity.nv.gov

The Nevada *Statewide Communications Interoperability Plan* (SCIP) is a strategic plan designed to provide a framework for the state to identify strategic initiatives intended to enhance emergency communications interoperability throughout the State. Nevada has an approved SCIP that addresses designated critical elements for statewide interoperability and a process to frequently update the SCIP as progress is made and new initiatives emerge.

- RTICPs. Las Vegas Urban Area and Southern Nevada Regional TICP

    Northwest Nevada Regional TICP

    Northeast Nevada Regional TICP

The Las Vegas Urban Area RTICP is available by contacting the Clark County Office of Emergency Management.

- National Interoperability Information Exchange (NIIX) website at http://www.niix.org.

The NIIX website has actually examples of SOPs, TICPs, MOUs and other documents that various agencies around the country have developed. This is a great source of information to use as examples. You will have to create a login and password in order to access the site.

- Incident Command System (ICS) planning.

ICS Forms can also be found at the following website: http://training.fema.gov/EMIWeb/IS/ICSResource/ICSResCntr_Forms.htm

Note: A copy of completed ICS Forms should also be distributed to the COML.

Appendix J   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.
AM	Administrative Manager
ARES	Amateur Radio Emergency Services
Audio Bridge	Connects four-wire audio from disparate radio systems to provide interoperability.
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CASM	Communication Assets Survey and Mapping
CAM	Communication Assets Mapping
CAS	Communication Assets Survey
CERT	Community Emergency Response Team
COMC	Communications Coordinator
COML	Communications Unit Leader
COMT	Incident Communications Technician
Console Patching	Ability to connect channels via dispatch consoles
DEM	Department of Emergency Management
DHS	Department of Homeland Security
DOD	Department of Defense
DPS	Department of Public Safety
EMS	Emergency Medical Services
EOC	Emergency Operations Center
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
FCC	Federal Communication Commission
GBC	Great Basin College
IC	Incident Command
ICC	Incident Communications Center
ICALL	Calling Channel for ITAC
ICP	Incident Command Post
ICRI	Incident Commander's Radio Interface (mobile gateway)
ICS	Incident Command System
ICTAP	Interoperable Communications Technology Assistance Program
ITCN	Inter-Tribal Council of Nevada
IMC	Integrated Multi-Site Controller
INCM	Incident Communications Center Manager
Inter-agency	Located or occurring between two or more agencies
Interoperable	Ability of a system to use the parts or equipment of another system
IT	Information Technology
ITAC	Conventional mutual aid channel 800 Mhz
JFO	Joint Field Office
JPA	Joint Powers Authority
MCC	Mobile Communication Center
MCU	Mobile Communications Unit
MHz	Abbreviation for megahertz. 5 MHz = 5,000,000 Hz or 5,000 kHz.

MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
Mutual Aid	Personnel, equipment, or services provided to another jurisdiction
NCHS	Nevada Commission on Homeland Security
NDF	Nevada Department of Forestry
NDOT	Nevada Department of Transportation
NIMS	National Incident Management System
NBA	Nevada Broadcaster's Association
NHA	Nevada Hospital Association
NHP	Nevada Highway Patrol
NPSPAC	National Public Safety Planning Advisory Committee
NHSE	Nevada System of Higher Education
NSRS	Nevada Shared Radio System
NSSE	National Special Security Event
OEM	Office of Emergency Management
POC	Point of Contact
RACES	Radio Amateur Civil Emergency Service
RADO	Radio Operator
RF	Radio Frequency
RTICP	Regional Tactical Interoperability Plan
SHARES	Shared Resources High Frequency Radio Program
SOP	Standard Operating Procedure
STR	Strategic Technology Reserve
Talkgroup	Term usually 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.
THSP	Technical Specialist
RTIC Plan	Tactical Interoperable Communications Plan
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).
USFS	United States Forest Service
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.

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