Las Vegas Urban Area/Southern Nevada

Tactical Interoperable Communications Plan (TIC Plan)

FEBRUARY 2010

Tactical Interoperable Communications Plan
Signature Page
Approved by:

_____ _____
Name/Title/Agency Date

Record of Change

Version No.	Description	Change Date	Approved By
v 1.0	Initial plan	2005	Clark County Board of County Commissioners (CC BCC)
v 2.0	Update of information	2007	CC BCC
v 3.0	Expansion of information, new format	2010	CC BCC

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

Executive Overview

This document establishes a Tactical Interoperable Communications Plan (TIC Plan) for the Las Vegas Urban Area/Southern Nevada Operating Area. The TIC Plan 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 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.

Creation and maintenance of a TIC Plan is a requirement of the U. S. Department of Homeland Security's (DHS) Preparedness Directorate originally published in the 2005 Urban Area Security Initiative (UASI) grant program.

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This Tactical Interoperable Communications Plan (TIC Plan) has been created under the auspices of the Las Vegas (LV) Urban Area Working Group (UAWG) for the Las Vegas Urban Area and Southern Nevada Operating Area, including Nevada counties and counties in other states that immediately surround the Las Vegas Urban Area (defined as the Clark County border).

In order to create and maintain this TIC Plan, the UAWG has appointed the Urban Area Communication Steering Committee (UACSC), and charged it with the responsibility.

Coordination of this TIC Plan with other TIC Plans within Nevada and surrounding areas has been made through a state wide effort. At the State level within Nevada, the Nevada Communications Steering Committee (NCSC) has been established to coordinate and make recommendations relative to communication issues state wide and between the TIC Plan operational areas. Both the UACSC and the NCSC meet regularly to discuss and resolve issues. Figure 1 shows the Las Vegas Urban Area/Southern Nevada Operating Area to include bordering counties of California (CA), Utah (UT), and Arizona (AZ).

Figure 1 Las Vegas Urban Area (Clark County) / Southern Nevada (surrounding) Operating Area

This TIC Plan is intended to apply to the urban area and immediately surrounding areas as shown above. Specifically, this is an operational plan intended to be used by public safety personnel during day-to-day and emergency response situations. Public safety personnel are located in jurisdictions geographically identified above and in agencies and disciplines identified in Table 1 and Section 1.1.4 below.

San Bernardino – Currently, all fire departments in Clark County have access to a common San Bernardino County radio channel. The Clark County Fire Alarm Office

(FAO) has direct communications via radio console with the San Bernardino dispatch center.

Nye County –Emergency Operations Center (EOC) operated by Nye County Emergency Services and the Nye County Sheriff Dispatch Centers have interconnectivity with Clark County VHF/UHF channels.

Lincoln County – Lincoln County Sheriff's Office dispatch office has interconnectivity with Clark County VHF channels.

State of Utah – Bureau of Land Management (BLM) has Clark County VHF interconnectivity channels.

State of Arizona (AZ) – The Arizona Department of Public Safety has Clark County VHF interconnectivity channels.

Nevada Department of Wildlife (NDOW) – Has Clark County VHF interconnectivity channels.

U.S. Department of Energy – The radio system encompasses both Clark County and Nye County, also has interconnectivity options with Nye County Sheriff.

Littlefield AZ Fire Department – The dispatch has interconnectivity with Clark County VHF channels.

1.1 Participating Jurisdictions/Agencies/Disciplines

This TIC Plan has been created for the Las Vegas Area Working Group (UAWG). 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 emergency incident or planned event.

The jurisdictions, agencies, and disciplines represented in the TIC Plan are listed in Table 1. Additional contact information for each agency is listed in Appendix A.

Table 1 Public Safety Disciplines Represented in the TIC Plan

Discipline	Agency	Jurisdiction
Fire Services		
	Advanced FD	LV Speedway
	Boulder City FD	City
	Bullhead City FD	Arizona
	Bureau of Land Management (BLM)	Federal
	City of LV Fire and Rescue	City
	Clark County Fire Department (FD) (including Rural Volunteer)	Unincorporated Clark County
	Creech AFB FD	Military
	Ft. Mohave FD	Arizona
	Henderson FD	City
	Inyo FD	California
	Lincoln County FD	Lincoln County

Discipline	Agency	Jurisdiction
	Littlefield Fire and Rescue	Arizona
	Mesquite FD	City
	National Park Service	Federal
	Nellis AFB FD	Military
	Nevada Department of Wildlife Fire	State
	Nevada Division of Forestry	State
	Nevada Test Site Fire and Rescue	Federal
	North LV FD	City
	Pahrump FD	Nye County
	San Bernardino FD	California
	St. George FD	Utah
	U.S. Forest Service	Federal
Law Enforcement		
	Air Marshals	Federal
	All-Hazards Regional Multiagency Operations and Response (ARMOR)	Regional
	AZ Department of Public Safety	Arizona
	Bailiffs	
	BLM Rangers	Federal
	Boulder City PD	City
	Bureau of Alcohol, Tobacco and Firearms (ATF)	Federal
	California Highway Patrol	California
	Capitol Police – Las Vegas	State
	City of LV Marshals	City
	Clark County Park Police	Clark County
	Clark County School District Police	Clark County
	College of Southern Nevada PD	
	Creech AFB Military Police	Military
	Drug Enforcement Agency (DEA)	Federal
	Federal Bureau of Investigation (FBI)	Federal
	Henderson PD	City
	Hoover Dam PD	
	Immigration and Customs Enforcement (ICE)	Federal
	Inyo County Sheriffs Office	Inyo County
	Las Vegas Metropolitan Police Department (LVMPD) Dispatch/Communications Radio Systems Bureau	Clark County
	Las Vegas Metropolitan Police Department (LVMPD) Radio Systems Bureau	Clark County

Discipline	Agency	Jurisdiction
	Lincoln County Sheriff's Office	Lincoln County
	LV Moapa Tribal PD	
	LV Paiute Tribal PD	
	Mesquite PD	
	Mohave County Sheriff's Office	Mohave County
	National Park Service Rangers	Federal
	Nellis Air Force Base (AFB) Military Police	Military
	Nevada Department of Wildlife	State
	Nevada Division of Investigations	State
	Nevada Gaming Control Board	State
	Nevada Highway Patrol	
	Nevada Parks Division	State
	Nevada Test Site LE	
	North LV Police	City
	Nye County Sheriff's Office	Nye County
	San Bernardino County Sheriff's Office	San Bernardino County
	U. S. Secret Service	Federal
	U.S. Forest Service Rangers	Federal
	U.S. Marshal Service	Federal
	U.S. Postal Service Inspectors	Federal
	U.S. Transportation Security Administration (TSA)	Federal
	Union Pacific Railroad PD	
	University of Las Vegas (UNLV) Department of Public Safety	University of Las Vegas (UNLV) Property and Immediate Surrounding Areas
	Utah State Police	Utah
	Veterans Affairs (VA) Medical Center Police	
	Washington County Sheriff's Office	Washington County
Emergency Management		
	Boulder City Office of Emergency Management	Regional
	Clark County Office of Emergency Management	Regional
	Henderson Office of Emergency Management	Regional
	Mesquite Office of Emergency Management	Regional
	Nevada Division of Emergency Management	State
	North Las Vegas Office of Emergency Management	Regional

Discipline	Agency	Jurisdiction
Government Administrative Services		
	Family Services	
Emergency Medical Services		
Public Health		
	Agency for Toxic Substances and Disease Registry	Federal
	Centers for Disease Control (CDC) – Division of Regional Operations – Region 9	Federal
	Nevada Division of Mental Health and Developmental Services	State
	Nevada State Health Division	State
	Rocky Mountain Poison & Drug Center	Regional
	Southern Nevada Health District	
Health Care		
HAZMAT		
	ARMOR	Regional
	Nevada Division of Environmental Protection	State
	Nevada National Guard	State
	Nevada Task Force One - FEMA	Federal
	U.S. Air Force	Military
	U.S. Department of Energy	
	U.S. Department of Environmental Protection	Federal
Private Industry		
	H2O Environmental	
	NV Energy	
Volunteer Organizations		
	American Red Cross	

Discipline	Agency	Jurisdiction
	American Society for the Prevention of Cruelty to Animals (ASPCA)	
	Clark County ARES/RACES	
	Clark County Radio Emergency Associated Communications Teams (REACT)	
	Community Emergency Response Team (CERT)	
	Medical Reserve Corps of Southern Nevada	
	Southern Nye County ARES/RACES	
	The Salvation Army	
	Volunteer Homeland Reserve Unit (VHRU) – Southern Nevada	Regional
Public Safety Communications		
Metropolitan Police Dispatch	Barbara Doran	Office 702-828-7172 Pager 702-730-2688
North Las Vegas Police Dispatch	Jennifer Spivey	Office 702-633-1548
City of Henderson Police and Fire Dispatch	Barbara Brabenec	Office 702-267-4902
Boulder City Police and Fire Dispatch	Ruby Perkins	Office 702-293-9258
Clark County School District Police Dispatch	Armondo Quintanilla	Office 702-799-5411
Mesquite Police and Fire Dispatch	CJ Larsen	Office 702-346-6911
Las Vegas Fire Alarm Office	Louis Amell	Office 702-229-0237 Cell 702-303-2994
City of Las Vegas Marshalls Dispatch	Lt Michael Brown	Office 702-229-1820
City of Bullhead Police and Fire Dispatch	Sgt Barry Wincentsen	Office 928-763-3357
Nevada Highway Patrol Dispatch	Nicholas Lombardo	Office 702-486-4100, ext. 6
Paiute Tribal Police Dispatch	Everson Nakai	Office 702-471-0844

Discipline	Agency	Jurisdiction
LVICC (Las Vegas Interagency Communications Center): Bureau of Land Management, US Forest Service, National Park Service, Nevada Division of Forestry	Frank Waterman	Office 702-515-5305 Cell 702-575-2960
American Medical Response & MedicWest Ambulance Dispatch Centers	Jason Meilleur	Office 702-250-0089
Public Works		

1.1.1 Nongovernmental Agencies Represented in the TIC Plan

- American Red Cross
- ARES/RACES
- Las Vegas Security Chiefs Association
- Nevada Hospital Association (NHA)
- NV Energy (Nevada Shared Radio System (NSRS) partner, utility)
- Private Medical Transport (Ground/Air)
- Salvation Army

- Union Pacific Railroad (Transportation)

1.1.2 Tribal Entities Represented in the TIC Plan

- Las Vegas Band of Paiutes
- Moapa Band of Paiutes
- Timbisha Shoshone

1.1.3 Other TIC Plan(s) in the State

The POC information for each of the following TIC Plans can be found in Appendix A.

- Northwest Nevada Region TIC Plan
- Northeast Nevada Region TIC Plan

1.1.4 Public Safety Disciplines

- ARMOR – Multi-hazard response
- Bomb Squad
- Emergency Management
- Emergency Medical Services
- Federal, State, County, Tribal, and Local Agencies
- Fire Service
- Government Administration
- HAZMAT
- Health Care
- Law Enforcement
- Military
- Non Governmental Organizations
- Nuclear Emergency Response
- Public Health
- Public Safety Communications
- Public Works
- Search and Rescue

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:

POC Name:	Jim O'Brien, PhD
Agency Name:	Las Vegas Urban Area Working Group (UAWG)
Title:	Urban Area Administrator

Address:	500 South Grand Central Parkway, 6th Floor P.O. Box 551713 Las Vegas, Nevada 89155-1713
Office Phone:	702-455-5710
E-Mail:	JPO@co.clark.nv.us

Alternate:

POC Name:	Shannon Rooney
Agency Name:	Clark County Office of Emergency Management & HS
Title:	Chief, Operations and Planning
Address:	500 South Grand Central Parkway, 6th Floor P.O. Box 551713 Las Vegas, Nevada 89155-1713
Office Phone:	702-455-5710
E-Mail:	srooney@co.clark.nv.us

2 Governance

2.1 Overview

The TIC Plan was developed under the authority of the Clark County Local Emergency Planning Committee (LEPC) acting in its capacity as the Las Vegas UAWG. In 2005 the Las Vegas Urban Area Working Group created the Urban Area Communication Steering Committee (UACSC) as a standing advisory committee to the UAWG.

Members appointed to the UAWG include representatives of the following agencies, disciplines, and jurisdictions:

- Communications
- Critical Infrastructure/Utilities
- Emergency Management
- Emergency Medical Services
- Federal Civil Agencies
- Fire/Rescue
- Information Technology (IT)
- Intelligence and Information Sharing
- Law Enforcement
- Media
- Military
- Nongovernmental Organizations (NGOs)
- Private Sector
- Public Health
- Public Transportation
- Public Works
- Tribal Entities

The UACSC has been delegated the responsibility by the UAWG to develop and maintain the Las Vegas Urban Area/Southern Nevada TIC Plan. The UACSC shall advise the UAWG on all matters related to governance and coordination for the development and implementation of this TIC Plan. POCs for the UACSC are listed in Appendix A.

The Las Vegas Urban Area/Southern Nevada TIC Plan addresses interoperable communications equipment and planning for the Las Vegas Urban Area and Southern Nevada, including Nevada counties and counties in other states that immediately surround the Las Vegas Urban Area (defined as the Clark County border). Though each agency, discipline, and jurisdiction participating in this plan is unique regarding their own interoperable communication needs and capabilities, 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.

The UACSC also works with the state-level Nevada Communications Steering Committee (NCSC) to coordinate, advise and recommend on public safety communication issues directly effecting the Las Vegas Urban Area and Southern Nevada Operating Area, and generally provides input relative to policy, training, exercises, compliance, establishment of special committees, and operational issues within the state as a whole.

2.2 Governing Body Organizational Structure

The Las Vegas UAWG is the governing body. The UAWG is comprised of voting agency representatives in addition to the standing Urban Area Communication Steering Committee (UACSC). The UACSC has been delegated specific responsibility for development and maintenance of the Las Vegas Urban Area/Southern Nevada TIC Plan.

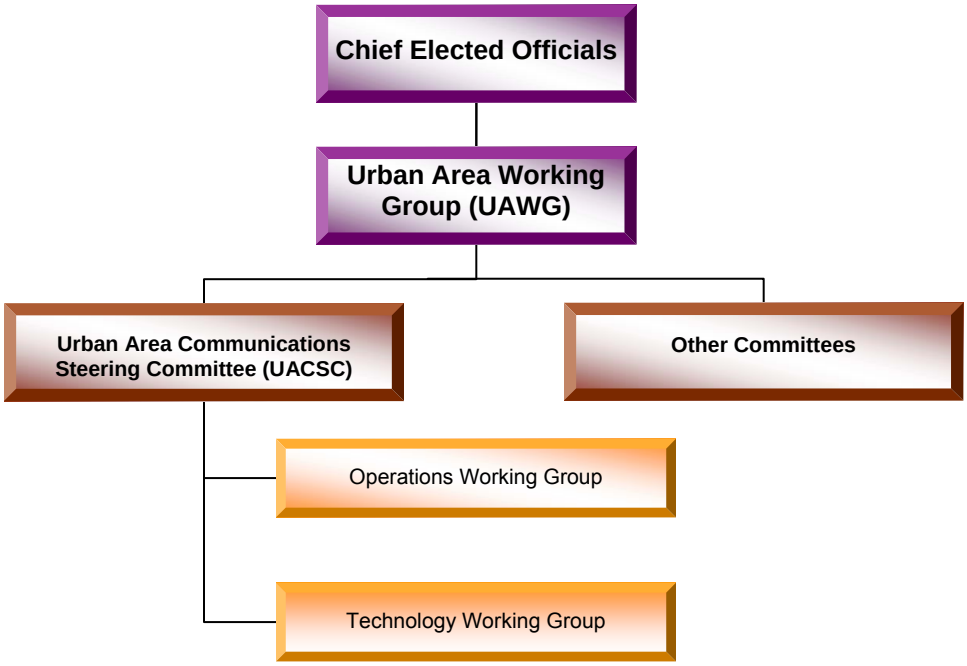


Figure 2 Las Vegas Urban Area/Southern Nevada Governance Organization Chart

2.3 Membership

Members may be appointed by the UACSC Chair or the Urban Area Administrator acting in capacity as the Urban Area Working Group Chair.

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

2.4 Responsibilities of the Urban Area Communications Steering Committee

The UACSC is responsible for:

- Maintaining and updating this TIC Plan at regular intervals or as critical updated information is identified.
- Disseminating the updated TIC Plan to all participating agencies and providing appropriate on-going access to the TIC Plan.
- Establishing and managing interoperable communications working groups as circumstances dictate.
- Developing and recommending operational implementation procedures, including review of communications related SOPs created by participating agencies to preclude conflicts or non-compliance with current standards or regulations.
- Establishing training recommendations in support of this TIC Plan.
- Continual re-evaluation of regional requirements as technology evolves and circumstances dictate.
- Notifying agencies of regular interoperable equipment/solutions testing and assisting agencies with test evaluation and the dissemination of results.
- Initiating and maintaining Memoranda of Understanding (MOUs) and Agreements for interoperable communications.
- Promoting interoperable communications capabilities through appropriate channels.
- Maintain liaison with the NCSC

2.5 Meeting Schedule

The Communications Steering Committee will meet regularly. Unless otherwise scheduled, the Communications Steering Committee will have quarterly meetings.

2.6 TIC Plan Maintenance and Update

The UACSC has the responsibility to review this document annually. Requests for modifications or additions to this document should be submitted to the TIC Plan POC for distribution to the UACSC. Updates to this document can be recommended at any time by any of the participating agencies.

Appendix A provides detailed point of contact information for plan maintenance, updates, revisions, coordination and specific contact information for each participating agency. The participating agencies are listed in Section 1.

2.7 Agency Responsibilities and Rights

Agencies will retain the following rights and responsibilities:

- Agencies are responsible for complying with MOUs and Agreements developed through the UACSC and UAWG 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.
- Incident Commanders retain the right to decide how to utilize interoperable communications.

2.8 Prioritization and Shared Use of Regional Interoperability Assets

The Incident Commander, or designee, in conjunction/cooperation with their counterparts in other involved agencies, will have the authority to request 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.

When the same resources are requested for two or more incidents, resource assignments should be based on the priority levels in accordance with the National Incident Management System (NIMS).

In the event of multiple simultaneous incidents within the same priority, the resources should be allocated according to NIMS.

In response to events or incidents which cross over jurisdictional boundaries, there could potentially be competing demands and priorities for interoperable communications assets.

Agencies should activate needed interoperable assets to respond effectively and to minimize any negative impact on surrounding agencies or jurisdictions. Specifically, interoperable communications should be attempted with the following order of operations in mind:

1. Utilize 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 response agencies do not share systems or channels, utilize a gateway solution to establish interoperable communications.
6. Where interoperable communications cannot otherwise be established between response 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 Incident Commander or Unified Command (if formed) shall have allocation authority and shall allocate resources 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 0.

3 Interoperability Equipment, Policies, and Procedures

This section describes all interoperable communications equipment and their associated policies and procedures in the Las Vegas Urban Area/Southern Nevada Operating Area.

3.1 Shared Systems

"Shared system" refers to a single radio system used to provide service to several public safety or public service agencies. The table below lists all radio systems shared by more than one public safety or service agency operating in the Las Vegas Urban Area/Southern Nevada. Details on each system are provided in Appendix B.

Note: 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 2 Las Vegas Urban Area/Southern Nevada Shared System(s)

Radio System Name	Make / Model	Type	Frequency Band	Owning Agency	Service Area
"Metro VHF"	M/A-COM (Harris)	VHF Voted	150-170 MHz	Las Vegas Metropolitan Police Department	Clark County
"Metro 700" (Feb 2010)	M/A-COM (Harris)	Open Sky	700 MHz	Las Vegas Metropolitan Police Department	Clark County
"NSRS" (Nevada Shared Radio System)	M/A-COM (Harris)	EDACS	800 MHz	NDOT, Nevada Power & UNLV	Statewide
"SNACC"	MOTOROLA	SmartZone	800 MHz	Southern Nevada Area Communications Council	Clark & Nye Counties
"DOE" Federal Trunked System	MOTOROLA	SmartZone	410-420 MHz	Department of Energy (DOE)	Clark & Nye Counties
"Nye County"	Hybrid, Multi-Vendor	VHF	150-170 MHz	Nye County	Nye County

Shared System Technology Overview

The UAWG and NCSC identified five (5) shared communication systems that provide service to the Las Vegas Urban Area/Southern Nevada. General interoperable

communications rules of use, policies, and procedures that apply across these systems are detailed below.

Shared System Policies and Procedures

Note: Agencies should follow procedures and policies already established for their shared systems. Refer to the policies and procedures for each individual system.

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

- When an individual responder needs to establish interoperable communications 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:
    - The lead agency dispatcher notifies the Communications Coordinator (COMC)/Communications Unit Leader (COML)/designee that interoperability channels/talkgroups 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 determines when the interoperability channels are no longer required and notifies the appropriate dispatch center.

- **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 (Common Terminology)** – 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., "North Las Vegas PD 2D3", "Clark County Fire Engine 18")

Shared System Problem ID and Resolution

Agencies should identify and resolve problems in accordance with policies already established for their shared systems.

During an incident:

- During activation, users on the scene report all system technical problems to the Incident Communications Technician (COMT), or the Communications Unit

Leader (COML) assigned to the incident/event who will follow established agency procedures to refer the problem to the appropriate system administrator.

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

- Report any problems with the shared system to the appropriate system administrator who will be responsible for ensuring effective resolution.

3.1.1 Intra-System Shared Interoperability Channel(s)

Definition of an Intra-System Shared Channel

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.

Intra-System Shared Channel Technology Overview

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.

Designated Intra-System Interoperability Channel(s)

Table 3 Intra-System Shared Channel(s) – To Be Determined in Future Years

System	Channel Name	Primary Use	Agencies Supported	Frequency/Band
TBD				

Intra-System Shared Channel Policies and Procedures

The policies and procedures in this section apply to the local, regional, State, and Federal channels shared across multiple systems.

Intra-System Shared Channel Rules of Use

Intra-system shared channels are common frequencies/talkgroups established and programmed into radios to provide interoperable communications among agencies using the same shared radio system. The following rules of use apply to these channels:

- **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 (Common Terminology)** – 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 or an inappropriate response. 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., "North Las Vegas PD 2D3", "Clark County Fire Engine 18")

Intra-System Shared Channel Problem ID and Resolution

During an incident:

- During activation, report shared channels 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 channels:

- Report any problems with the intra-system shared channel to the appropriate POC for the owning agency listed in Appendix B. The POC will be responsible for ensuring effective resolution to problems that exist with the intra-system shared channel.
- Report any unresolved problems with that system directly to the Las Vegas Urban Area/Southern Nevada [Communications Coordinator/COML/designee]. The Las Vegas Urban Area/Southern Nevada [Communications Coordinator/COML/designee] ensures effective resolution to the reported intra-system shared channel problems.

3.2 Inter-System Shared Channel(s) Policies and Procedures

Definition of a Region-wide 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.

Region-wide Inter-System Shared Channel Technology Overview

Specific inter-system 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.

Region-wide Inter-System Interoperability Channel(s)

Table 4 Inter-System Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Frequency/Band

Region-wide Inter-System Shared Channel Policies and Procedures

The policies and procedures in this section apply to the local, regional, state, and federal channels shared across multiple systems.

Region-wide Inter-System Shared Channel Rules of Use

Inter-system shared channels are reserved for situations that require interoperable communications to coordinate multiple public safety entities and/or activities across two or more separate radio systems. The following rules of use apply to these channels:

- **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 (Common Terminology)** – 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., [Local Example Here])

Region-wide Inter-System Shared Channel Problem ID and Resolution

During an incident:

- During activation, report shared channels 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 channels:

- Report any problems with the inter-system shared channel to the appropriate POC for the owning agency listed in Appendix C. The POC will be responsible for ensuring effective resolution to problems that exist with the inter-system shared channel.
- Report any unresolved problems with that system directly to the Las Vegas Urban Area/Southern Nevada [Communications Coordinator/COML/designee]. The Las Vegas Urban Area/Southern Nevada [Communications Coordinator/COML/designee] ensures effective resolution to the reported inter-system shared channel problems.

*(**Note:** Policies and procedures specific to a single shared channel are listed subsequent to that specific shared channel below)*

3.2.1 Law Enforcement Inter-System Shared Channel

Law Enforcement Inter-System Shared Channel Technology Overview

[Add text]

Designated Law Enforcement Inter-System Interoperability Channel(s)

Table 5 Inter-System Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Frequency/Band

Law Enforcement Inter-System Shared Channel Policies and Procedures

Conditions for Use

1. The plans shown in Tables 8 and 9 show frequencies available for assignment to all federal agencies to satisfy law enforcement and public safety incident response interoperability requirements. These frequencies will be referred to hereinafter as “Federal Interoperability Channels”.
2. The Federal Interoperability Channels are available for use among federal agencies and between federal agencies and non-federal entities with which federal agencies have a requirement to operate. The channels are available to federal agencies on a shared basis and will not be authorized for the exclusive use of any one federal agency.
3. The channels are available to non-federal entities to enable joint federal/non-federal operations for law enforcement and incident response, subject to the condition that harmful interfaces will not be caused to federal stations. These channels are restricted to interoperability communications and are not authorized for routine or administrative uses.
4. Extended operations and congestion may lead to frequency conflicts. Coordination with NTIA is required to resolve these conflicts.
5. Only narrowband emissions are to be used on the Federal Interoperability Channels.
6. Federal agencies should have an assignment in the Government Master File (GMF) or be included in the Joint Application (*JNT) circuit remarks.
7. Exceptions to the above restrictions will be considered by the Interdepartment Radio Advisory Committee (IRAC)/Frequency Assignment Subcommittee (FAS) on a case-by-case basis.

Table 6 LE VHF and UHF Shared Frequencies (Mobile)

LE VHF PLAN			LE UHF PLAN		
Identifier	Mobile Transmit (MHZ)	Mobile Receive (MHz)	Identifier	Mobile Transmit (MHZ)	Mobile Receive (MHz)
LEA	167.0875 (Simplex)	167.0875	LEB	414.0375 (Simplex)	414.0375
LE1	162.0875	167.0875	LE10	418.9875	409.9875
LE2	162.2625	167.2500	LE11	419.1875	410.1875
LE3	162.8375	167.7500	LE12	419.6125	410.6125
LE4	163.2875	168.1125	LE13	414.0625 (Simplex)	414.0625
LE5	163.4250	168.4625	LE14	414.3125 (Simplex)	414.3125
LE6	167.2500 (Simplex)	167.2500	LE15	414.3375 (Simplex)	414.3375
LE7	167.7500 (Simplex)	167.7500	LE16	409.9875 (Simplex)	409.9875
LE8	168.1125 (Simplex)	168.1125	LE17	410.1875 (Simplex)	410.1875
LE9	168.4625 (Simplex)	168.4625	LE18	410.6125 (Simplex)	410.6125

Law Enforcement Inter-System Shared Channel Rules of Use

Law Enforcement Plans

1. Frequencies 167.0875 MHz and 414.0375 MHz are designed as National Calling Channels for initial contact and will be identified in the radio as indicated in the following table.
2. Initial contact communications will be established using analog FM emission (11KF3E).
3. The interoperable channels will be identified on portable and mobile radios as follows with Continuous Tone-Controlled Squelch Systems (CTCSS) frequency 167.9 Hz and/or Network Access Code (NAC) $68F.

Incident Response Plans

1. Frequencies 169.5375 MHz, paired with 164.7125 MHz, and 410.2374 MHz, paired with 419.2375 MHZ, are designed as the calling channels for initial contact and will be identified in the radio as indicated in the following table.
2. Initial contact will be established using analog FM emission (11KF3E).
3. To ensure access by stations from outside the normal area of operations, CTCSS will not be used on the calling channels.
4. The interoperability channels will be identified in mobile and portable radios as follows:

Table 7 IR VHF and UHF Shared Frequencies (Mobile)

IR VHF PLAN				IR UHF PLAN			
Identifier	Mobile Transmit (MHZ)	Mobile Receive (MHz)	CTCSS	Identifier	Mobile Transmit (MHZ)	Mobile Receive (MHz)	CTCSS
NC 1 Calling	164.7125	169.5375	None	NC 2 Calling	419.2375	410.2375	None
IR1	165.2500	170.0125	As required	IR10	419.4375	410.4375	As required
IR2	165.9625	170.4125	As required	IR11	419.6375	410.6375	As required
IR3	166.5750	170.6875	As required	IR12	419.8375	410.8375	As required
IR4	167.3250	173.0375	As required	IR13	413.1875 (Simplex)	413.1875	As required
IR5	169.5375 (Simplex)	169.5375	As required	IR14	413.2125 (Simplex)	413.2125	As required
IR6	170.0125 (Simplex)	170.0125	As required	IR15	410.2375 (Simplex)	410.2375	As required
IR7	170.4125 (Simplex)	170.4125	As required	IR16	410.4375 (Simplex)	410.4375	As required
IR8	170.6875 (Simplex)	170.6875	As required	IR17	410.6375 (Simplex)	410.6375	As required
IR9	173.0375 (Simplex)	173.0375	As required	IR18	410.8375 (Simplex)	410.8375	As required

3.2.2 8CALL90/8TAC91-94 Shared Channel(s)

Table 8 8CALL90/8TAC91-94 Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Frequency/Band
8CALL90	Interoperability	Any	VHF/800
8TAC91-94	Interoperability	Any	VHF/800

8CALL90/8TAC91-94 Shared Channel Technology Overview

The purpose of this procedure is to establish a clear method for use of the newly established 8CALL90/8TAC91-94 interoperability radio channels. These interoperable radio frequencies replace mutual aid channels and provide greater area-wide coverage. These radio frequencies are to be used in the event of a multi-jurisdictional operation requiring the use of a common radio channel. These dedicated radio frequencies are specifically for the use in coordinating incident command activities during disasters or multi-jurisdictional events. 8CALL90/8TAC91-94 equipment is detailed in Appendix C.

Definitions for Use of 8CALL90/8TAC91-94 Frequencies

Interoperability: Communications Interoperability is the ability of public safety agencies to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, when needed, and as authorized.

Incident: An event or occurrence requiring the participation and coordination of more than one first responder agency (e.g. police, fire, medical services). The event or occurrence may be an emergency, natural or man-made disaster, or a non-emergency planned event (e.g. New Years Eve) requiring the services of more than one agency.

8CALL90: A dedicated radio frequency monitored by all local Public Safety Answering Points (PSAPs) in which requests for multi-agency assistance may be placed.

The calling channel shall be used to contact other users in the region for the purpose of requesting incident related information and assistance, and for setting up tactical communications for specific events. In most cases, the calling party will be asked to move from the calling channel to one of the 8TAC91-94 channels for continuing incident operations or other interoperability communication needs.

8TAC91-94: Dedicated radio channels that are assigned according to the geographic location of the event or occurrence.

The 8TAC91-94 channels are to be used for coordination activity between different agencies in a mutual aid situation. Incidents requiring multi-agency participation will be coordinated over these channels by the agency controlling the incident. In some situations, 8TAC91-94 channels may be used by a single agency.

PSAP: A Public Safety Answering Point also known as a 9-1-1 Center, Dispatch Center, or Fire Alarm Office (FAO), where public safety radio and telephone communication services are provided 24 hours, 7 days per week. A PSAP is required to monitor the 8CALL90 channel at all times. Monitoring of the 8CALL90 channel may be delegated

based on a scheduled rotation so long as the PSAP has the capability of monitoring 8CALL90 24 hours, 7 days a week.

Common Language and Terminology: At all times, common English language will be spoken when using 8CALL90/8TAC91-94 channels. 10 code, 400 code, and other similar designations or acronyms must be avoided at all times. Radio communication must be clear and understandable. Long radio transmissions should be avoided when possible.

8CALL90/l8TAC91-94 Shared Channel Policies and Procedures

First Responder or Incident Commander:

- Determines nature of incident and whether more than one resource will be needed (e.g. police, fire, medical, HAZMAT, bomb squad, emergency management).
- Notifies the monitoring dispatch center on assigned agency channel of the incident and requests assistance from other agencies as required.
- Utilizes NIMS protocol and communicates relevant information in plain English avoiding any agency specific codes or jargon.
- Advises, at appropriate time, who is Incident Commander and relays pertinent information to be transmitted to other responding resources.
- Advises when incident has terminated and vacates channel.
- Dispatch will monitor the 8TAC91-94 channel and communicate with resources on that channel. Dispatch will relay all information on their respective agency radio.

Monitoring PSAP (Dispatch Center):

- Receives and acknowledges request from first responder.
- Determines the proper 8TAC91-94 channel to be utilized.
- Advises first responder which 8TAC91-94 channel(s) to use.
- Notifies other resources and advises them of proper 8TAC91-94 channel.
- Assists with mobilization of resources (e.g. other public safety agencies, first responders, support personnel).
- Returns to normal monitoring duties at termination of incident.

8CALL90/8TAC91-94 Shared Channel Problem ID and Resolution

3.2.3 VCALL10 and VTAC11-14 Shared Channel(s)

Table 9 VCALL10 and VTAC11-14 Shared Channel(s)

Channel Name	Primary Use	Agencies Supported	Frequency/Band

VCALL10 and VTAC11-14 Shared Channel Technology Overview

VCALL10 and VTAC11-14 Shared Channel Problem ID and Resolution

3.3 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.

Console Patches will be established in accordance with existing dispatch center policies and procedures. Regional standard operating procedures will be developed and incorporated into this TIC Plan.

Gateways will be deployed and/or activated using existing interoperable communications resource policies and procedures. Regional standard operating procedures will be developed and incorporated into this TIC Plan.

Gateways are listed in the following table. More detailed information on each gateway is provided in Appendix D.

Table 10 Las Vegas Urban Area/Southern Nevada Gateway Systems

Gateway Name	Owning Agency	Day-to-Day or Incident / Event	Make / Model	Fixed / Mobile	No. of Simultaneous Nets	No. of Ports
City of Henderson (Police & Fire)			ACU-1000	Mobile		
City of Las Vegas (Fire)			ACU-1000	Mobile	6	12
City of Las Vegas (Fire)			ACU-1000	Fixed	6	12
Clark County Fire			ICRI	Mobile	2	4
Clark County IT Operations Center ACU-1000,	Clark County IT TELCOM Division	Incident/Event	ACU-1000	Fixed	12	12
Clark County IT Operations Center ACU-1000,	Clark County IT TELCOM Division	Incident/Event	ACU-1000	Mobile	12	12
CST	92nd Unit Nevada Army National Guard	Incident/Event	Incident Command Radio Interface (ICRI)	Mobile	2	4
CST	92nd Unit Nevada Army National Guard	Incident/Event	ACU-1000	Mobile	6	12

Gateway Name	Owning Agency	Day-to-Day or Incident / Event	Make / Model	Fixed / Mobile	No. of Simultaneous Nets	No. of Ports
Federal Radiological Emergency Response Plan (FRMAC)	DOE	Radiological Event	ACU-1000	Mobile	7	12
North Las Vegas	North Las Vegas PD	Incident/Event	Infinimode	Mobile	8	24
UNLV PD	UNLV PD	Incident/Event	JPS ACU-1000	Fixed	6	12

3.3.1 Gateway Policies and Procedures

Region-wide Gateway Rules of Use

Use of a temporary gateway or console patch requires dispatch center permission for all channels involved.

The following rules of use shall govern interoperable communications between agencies via gateways:

- **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 (Common Terminology)** – 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. “North Las Vegas PD 2D3”, “Clark County Fire Engine 18”).
- **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 system owner and/or the Incident Commander, or their designee, will ensure that each activated interoperability channel is monitored while in use if the capability exists.

Gateway Request Procedures

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 provide the following information to the owning gateway agency POC on request:

- Requesting agency

- On-scene agencies requiring interoperability
- Incident/event type (e.g., wild land 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 Deployment Procedures

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 below.

Gateway Activation Procedures

Once the owning agency grants authorization to use their fixed gateway, the region-wide 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.
- Monitor the patched channels if the capability exists.

Gateway Deactivation Procedures

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

- Contact the primary agency dispatch center (for fixed gateways) or the mobile gateway operator (for mobile gateways) to plan patch/gateway deactivation.
- Announce over all patched channels/talkgroups that connections will be deactivated prior to the connection being disabled.
- Terminate the patch.

Gateway Problem ID and Resolution

During an incident:

- Report gateway problems to the owning agency dispatch center/COML (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 owning agency dispatch center/COML listed in Appendix D. The POC will be responsible for ensuring effective resolution to problems that exist with the gateway.

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.
- Home system coverage may limit communications. Gateway users must be within the footprint of 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:

- At least annually, representatives from multiple agencies should test each gateway's ability to establish interoperable connections.
- 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.

3.4 Cache Radios

Cache radios, also known as "swapped radios," refers 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 an individual participating agency. These radios allow all responders to use common, compatible equipment during an incident. Specific caches within the Las Vegas Urban Area/Southern Nevada Operating Area are listed in the following table. There are several radio caches in the Las Vegas Urban Area. Detailed information on cache radios can be found in Appendix E.

Table 11 Las Vegas Urban Area/Southern Nevada Radio Cache(s)

Radio Cache Name	Make / Model	Owning / Managing Agency	Frequency Band	Quantity
Clark County Fire	Motorola MTS-2000	Clark County Fire	800 MHz	70
Clark County Fire Mobile Communications Unit	Motorola	Clark County FD		
Clark County OEM	Motorola HT-1000	Clark County Telecommunications IT	VHF High	45
DOE	Motorola XTS-3000	DOE	406-420 MHz	15
METRO PD	M/A-COM	LVMPD	700/800 MHz	127
North Las Vegas FD	Motorola XTS-5000	North LV FD	800 MHz	18
North Las Vegas PD	Motorola XTS-2500	North LV PD	800 MHz	30
North Las Vegas PD	Motorola XTS-5000	North LV PD	800 MHz	18
North Las Vegas PD	Motorola XTL-5000	North LV PD	800 MHz	2
UNLV Department of Police Services	Ericsson LPE 200	UNLV Department of Police Services	800 MHz	12

3.4.1 Cache Radio Policies and Procedures

Las Vegas Urban Area/Southern Nevada radio caches should employ the following policies and procedures:

- Radios should be fully charged and maintained, ready for deployment at all times.
- The deployment cache should include extra charged batteries/replacement batteries, and chargers for extended deployments.
- Personnel should be available to transport the radios to the incident scene.
- Upon request, technician(s) should be provided for on-scene support during the deployment, if available.
- If no owning-agency personnel accompany the cache, the cache shall be signed out by requesting/receiving personnel, noting individual name and contact

information, receiving agency, and cache status and quantities present on receipt. A pre-printed form is advised.

- The cache documentation should include owning agency, frequency band, frequency/channel programming, system protocol, and inventory list with quantity and individual radio IDs.
- Radios not included and identified in the cache inventory list should be labeled by the owning agency with ID and appropriate information prior to deployment.
- Check-out and tracking procedures shall be used during the incident to ensure the radios are properly returned to the cache following the incident.
- (Future) RFID tag will be attached to each cache radio.

700 MHz Cache Radios

All Las Vegas Urban Area/Southern Nevada 700 MHz radio caches are required to have the following channels/talkgroups programmed:

Table 12 Required Channels for Las Vegas Urban Area/Southern Nevada 700 MHz Cache Radio(s)

Channel Name	Primary Use
To Be Determined	

If possible, the following channels/talkgroups should also be programmed into Las Vegas Urban Area/Southern Nevada 700 MHz cached radios:

Table 13 Optional Channels for Las Vegas Urban Area/Southern Nevada 700 MHz Cache Radio(s)

Channel Name	Primary Use
To Be Determined	

800 MHz Cache Radios

All Las Vegas Urban Area/Southern Nevada 800 MHz radio caches are required to have the following channels/talkgroups programmed:

Table 14 Required Channel for Las Vegas Urban Area/Southern Nevada 800 MHz Cache Radio(s)

Channel Name	Primary Use
To Be Determined	

If possible, the following channels/talkgroups should also be programmed into Las Vegas Urban Area/Southern Nevada 800 MHz cached radios:

Table 15 Optional Channels for Las Vegas Urban Area/Southern Nevada 800 MHz Cache Radio(s)

Channel Name	Primary Use
To Be Determined	

UHF Cache Radios

All Las Vegas Urban Area/Southern Nevada UHF radio caches are required to have the following channels programmed:

Table 16 Required Channels for Las Vegas Urban Area/Southern Nevada Federal Cache Radio(s) 406-420

Channel Name	Primary Use
TBD	

If possible, the following channels should also be programmed into Las Vegas Urban Area/Southern Nevada UHF cached radios:

Table 17 Optional Channels for Las Vegas Urban Area/Southern Nevada Federal Cache Radio(s) 406-420

Channel Name	Primary Use
TBD	

Table 18 Optional Channels for Las Vegas Urban Area/Southern Nevada UHF Cache Radio(s)

Channel Name	Primary Use
TBD	

VHF Cache Radios

All Las Vegas Urban Area/Southern Nevada VHF radio caches are required to have the following channels programmed:

Table 19 Required Channels for Las Vegas Urban Area/Southern Nevada VHF Cache Radio(s)

Channel Name	Primary Use
TBD	

If possible, the following channels should also be programmed into Las Vegas Urban Area/Southern Nevada VHF cached radios:

Table 20 Optional Channels for Las Vegas Urban Area/Southern Nevada VHF Cache Radio(s)

Channel Name	Primary Use
TBD	

Radio Cache Rules of Use

The following are general rules of use and apply to all Las Vegas Urban Area/Southern Nevada radio caches:

- **National Incident Management System** – Use the Incident Command System (ICS) compliant with the National Incident Management System (NIMS) when using any regional interoperability resource.
- **Plain Language (Common Terminology)** – All interoperable communications during multi-agency, multi-discipline incidents will be in plain language. Do not use 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., "North Las Vegas PD 2D3", "Clark County Fire Engine 18")
- **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 as dictated by existing formal agreements.

Radio Cache Request

The Communications Unit Leader will determine when a situation exists that requires use of a regional interoperability resource and notify the appropriate dispatch center.

The following information is provided by the requesting agency to the appropriate Office of Emergency Management at the time of an activation request:

- User's agency
- On-scene agencies requiring interoperability
- Reason for request/type of event, i.e. flood, etc.
- Equipment required
- Expected duration of event
- Location required/access information
- Incident point of contact
- User/requestor and/or servicing dispatch contact phone number
- 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.

Radio Cache Equipment Activation

Upon receiving a request for the deployment of a radio cache, the owning agency POC 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 if 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.

Radio Cache 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.
- At the end of the incident, the support personnel or designee will be responsible for inventorying all radios and accessories returned to the cache.

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.
- The agency supplying the cache shall bring to the attention of the using agency information on missing or damaged radio equipment.
- Report unresolved radio cache problems directly to the Las Vegas Urban Area/Southern Nevada Communications Coordinator/COML/designee. The Las Vegas Urban Area/Southern Nevada Communications Coordinator/COML/designee ensures effective resolution to reported radio cache problems.

3.5 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 establish an Incident Communications Center (ICC). Examples of the types of communications devices an MCU can house are: dispatch positions designed to be staffed by Radio Operators 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 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 F.

Table 21 Las Vegas Urban Area/Southern Nevada Mobile Communications Unit(s)

Unit ID / Designator	FEMA Type	Owning Agency	Deployment Area
FRMAC		DOE	Nationwide
North LV MCC	1	North LV	Regional
Henderson MCU		Henderson PD and FD	Regional
Clark County IT MCU	4	Clark County IT	Regional
Southern Nevada Health District MCU	3	Southern Nevada Health District	Regional
Clark County Coroner's Office	4	Clark County Coroner's Office	Regional
Remote Communications Support Vehicle	4 pending to type 2	Nevada Department of Public Safety (DPS)	Statewide
Clark County Fire MCU	2	Clark County Fire	Regional
LV Fire and Rescue MCU	2	City of LV	Regional
Nevada Highway Patrol (NHP) MCU	3	NHP	Statewide
Southern Nevada Regional Transportation Commission MCU	4	Southern Nevada Regional Transportation Commission	Regional
Clark County School District Police MCU	3	Clark County School District	Regional
92nd CST MCU	3	National Guard	Statewide
Boulder City Fire MCU		Boulder City Fire	Regional
FBI		FBI	National
Nevada Task Force One Search and Rescue MCU	4	Clark County Fire/FEMA	Statewide
Clark County ARES/RACES MCU	4	LV Repeater Association	Regional
LVMPD ARMOR Unit		LVMPD	Regional

3.5.1 Mobile Communications Unit Policies and Procedures

Mobile Communications Unit Interoperable Communication Request

The Incident Commander, or his/her 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., wild land 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

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

3.6 Amateur Radios

An EOC Amateur Radio Team consists of volunteers from the Amateur Radio Emergency Service/Radio Amateur Radio Service (ARES/RACES). Upon activation of an EOC and an EOC request for deployment, Radio Operators report to the EOC or other location designated by the EOC, and staff radios for the duration of the Emergency. Radio Teams will bring with them all necessary equipment to provide, at a minimum, voice communications, both direct (simplex) and through local repeaters. Some Radio Teams can provide digital data, email via radio, fax, television, long-haul HF, vehicle tracking and other communications methods.

Radio Team response time may vary from team to team. There are several POCs for the Radio Teams listed below in priority order of contact that will enable the Radio Teams to be deployed in the fullest and fastest manner.

- Activation of ARES/RACES is the responsibility of the EOC.
- Deactivation of ARES/RACES is determined by the EOC.
- Radio Teams are composed of individuals familiar with all aspects of radio communications in their area of responsibility and provide multiple and redundant communication avenues in case of emergency deployment and are able to address all problems/issues associated with the 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 450 MHz. The frequencies allow for communications locally and across the country.

- 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 President's 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 Federal Communication Commission (FCC) Rules and Regulations, Part 97.407.
- Amateur Radio frequencies should be open and not subject to the non-disclosure rules of other radio services. Therefore, communications should be treated as "open mike" communications and sensitive information should not be sent via Amateur Radio.
- Amateur Radio Operators also operate the Shared Resources High Frequency Radio Program (SHARES) and are Government HF (1.8 - 30 MHz) frequencies that provide a single agency emergency message handling system for worldwide communications.

Table 22 Las Vegas Urban Area/Southern Nevada Amateur Radio Teams Points of Contact

Name/Location	Email	Phone	Organization	Call-sign
Bill Smith	W4hmv@cox.net	(702) 281-8894	ARES/RACES	W4HMV
Vern Garman	garmco@cox.net	(702)439-9788	ARES/RACES	KOEGA

** RACES – Radio Amateur Civil Emergency Service *** ARES – Amateur Radio Emergency Service

3.6.1 ARES/RACES

There are approximately 150 Amateur Radio Operators currently enrolled in the Clark County ARES/RACES organization. Each of these Operators hold licenses issued by the Federal Communications Commission (FCC) and is registered with the Clark County Office of Emergency Management.

In general, each of the Operators own radio equipment capable of operating on some or all of the frequencies allocated to the Amateur Radio Service by the FCC (see figure 1). In addition to voice communications on the allocated frequencies, other modes such as Morse code, digital messaging and amateur television are available.

A full complement of equipment is in place in the Emergency Communications Center (ECC) on the 7th floor of the Clark County Government Center Building. Additionally, Clark County ARES / RACES has an MCU available equipped with a similar set of equipment for deployment within the county.

Responsible Agency

Contact information:

Name: Bill Smith
Title: Emergency Coordinator
Phone: (702) 281-8894
Email: w4hmv@cox.net

Service Area

Regional

System Type and Capacity

Repeaters owned by Clark County Office of Emergency Management
**Note: All 4 of these repeaters are linked and they are also linked using Voice over Internet Protocol (VoIP) technology to repeaters in Tonopah, Elko and Carson City/Reno.

Output MHz	Input MHz	Tone Hz	Location	Comments
147.180	147.780	100	Angel	Mt Charleston
145.300	144.700	100	Beacon Hill	Near Logandale
147.180	147.780	127.3	Spirit Mtn	Near Laughlin
447.325	442.325	100	Red Mtn	Near Boulder City

Repeaters owned by other government agencies.

Output MHz	Input MHz	Tone Hz	Location	Comments
145.325	144.860	100	NLV	City owned

Repeater systems owned by local clubs and associations

Output MHz	Input MHz	Tone MHz	Location	Comments
145.110	144.510	100.0	Red Mtn	Can link to privately owned systems in CA, AZ and UT
145.390	144.790	100.0	Black Mtn	Sloan
146.880	146.280	100.0	High Potosi	Wide Area Repeater
146.940	146.340	100.0	LV Hilton	Linked to 448.500
147.060	147.660	100.0	Apex Mtn	
147.090	147.690	100.0	Black Mtn	
147.270	147.870	None	Sunrise Hosp	
145.220	144.620	100.0	Highland Pk	Lincoln County
145.270	144.670	131.8	Xmas Tree	
147.330	147.930	123.0	Bunkerville	
147.390	147.990	None	Glendale	
447.300	442.300	100.0	Mtn View Hospital	
447.475	442.475	110.9	Angel Peak	
448.075	443.075	127.3	Fitzgerald Hotel	
448.500	443.500	100.0	Tropicana Hotel	Linked to 146.94
448.625	443.625	114.8	Black Mtn	
449.200	444.200	114.8	Angel Peak	
449.875	444.875	127.3	Apex Mtn	
927.3725	902.375	151.4	Low Potosi	**
927.5625	902.5625	123.0		
927.2875	902.2875	151.4	Sunrise	
927.5875	902.5875	131.8	Apex	
927.5250	902.5250	127.3	High Potosi	
927.2500	902.2500	114.8	Angel	**
927.3375	902.3375	151.4	Angel	
927.4750	902.4750	D532	Near Suncoast	
927.6625	902.6625	D606		
927.1875	902.1875			
927.4625	902.4625	151.4	Beacon Hill	
927.3125	902.3125	D606	Opel	**
927.8875	902.8875	D606	Xmas Tree	**
927.8125	902.8125	151.4		
927.6750	902.6750	82.5	Apex	
927.1125	902.1125	D432	Sunrise	

GMRS Repeaters

Output MHz	Input MHz	Tone Hz	Location	Comments
462.5500	557.5500	192.8	Angel	ARES 1
462.7000	557.7000	173.8	Angel	ARES 2
462.6750	557.6750	141.3	Angel	REACT 1
462.6750	557.6750	162.2	Angel	REACT 2
462.6000	557.6000	131.8	Angel	Red Cross

Emergency Communication Center (ECC)

The ECC located on the 7th floor of the county building has the following capabilities:

VHF/UHF	Two Dual Band Transceivers
HF	One 2-30MHz 100 watt MHz transceiver, with general coverage receiver
Power Amp	One HF 1000 watt power amplifier
Antenna Tuner	One Automatic antenna tuner
900 MHz	One 900 MHz transceiver
GMRS	One GMRS transceiver
Packet	One packet radio terminal node controller and PC
Scanner	One VHF/UHF scanner (trunking capable)
Antennas	For each transceiver with all band vertical and dipole for HF
Amateur TV	ATV receiver and TV set
Computers	Win EOC and Internet

Mobile Communications Unit

Chevrolet Suburban with the following capabilities:

VHF/UHF	
UHF	One repeater
VHF/UHF	One dual band transceiver
HF	One 2-30Mhz 100 watt MHz Transceiver, with general coverage receiver
VHF	APRS digipeater
Generator	One 5kw generator
Inverter	One 4kw inverter
Batteries	Heavy duty 12volt auxiliary system
HF Antenna	HF mobile dipole
Other Antennas	VHF/UHF roof mounted antennas; one air-mast-mounted APRS antenna and one air-mast-mounted amateur radio TV antenna
Other	Broadband card and computer to enable Wi-Fi and IRLP and ECHOLINK capability; D-STAR (digital voice) capability expected by October 2009

Talkgroups

None listed

Participating Agencies

Available to all agencies upon request

Notes

- Repeater systems owned by organizations outside of Clark County are available for use upon request in emergencies. Several of these systems have links into California, Arizona, and Utah.
- At least one Packet (digital communications) Repeater is available in the county and surrounding areas.
- An ATR (Amateur Television Repeater) is available and it has links into southern California.
- Local stations can connect to other stations world-wide via the internet.

– CC ARES/RACES also supports the WinLink System. This system through a series of repeater and HF radio links allows the transmission of Outlook Express email without local internet connections being available.

Authorized frequency bands from FCC Rules Part 97 Sec. 97.301

VHF 6 m 50-54 MHz 2 m 144-146 MHz 1.25 m 219-225 MHz	**EHF** 6 mm 47.0-47.2 GHZ 4 mm 75.5-81.0 GHz 2.5 mm 122.25-123 GHz 2 mm 134-141 GHz 1 mm 241-250 GHz
UHF 70 cm 420-450 MHz 33 cm 902-928 MHz 23 cm 1240-1300 MHz 13 cm 2300-2310 MHz	**MF** 160 m 1800-2000 KHz
SHF 9 cm 3.4-3.475 GHz 5 cm 5.650-5.850 GHz 3 cm 10.00-10.50 GHz 1.2 cm 24.00-24.25 GHz	**HF** 80 m 3.50-4.00 MHz 40 m 7.0-7.3 MHz 30 m 10.10-10.15 MHz 20 m 14.00-14.35 MHz 17 m 18.068-18.168 MHz 15 m 21.00-21.45 MHz 12 m 24.89-24.99 MHz 10 m 28.0-29.7 MHz
Note: Within these frequency bands, mode and license class determine specific frequencies an operator may use.	

3.7 Satellite Phones

A satellite telephone (i.e., a SATPHONE) is a type of mobile phone that connects to orbiting satellites instead of terrestrial cell sites. These phones can provide additional communications avenues for command or management personnel during large-scale incidents.

Satellite phones do NOT provide interoperable communications but are instead a redundancy to operable phone networks when those networks go down.

Table 23 Las Vegas Urban Area/Southern Nevada Satellite Phone Caches

Type/Make/Model	Owning Agency	Quantity	Service	Other Information

3.7.1 Satellite Phone Policies and Procedures

Technology Overview

Include information on the technology overview.

Rules of Use

Do not deploy satellite phones as primary communication talk paths. Use these devices only when higher priority communication links have failed or become overloaded. By default, satellite phones are an alternate, not primary, means of communication.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

When a satellite phone becomes the means of communications, personnel shall call their dispatch center and give the dispatch center the following information:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Employee Notification

When a satellite phone no longer available as a means of communication, personnel shall notify their dispatch center and give the dispatch center the following information:

Name:
Agency/Department:
Position in the Department:

3.8 Mobile Repeaters or Transportable Communications Systems

Table 24 Las Vegas Urban Area/Southern Nevada Mobile Repeater or Transportable Communications Systems

Type/Make and Model	Owning Agency	Quantity	Service	Other Info
Motorola Quantar Repeaters VHF High Band	DOE	4	National	Shipped by air craft or by truck Includes a cache of 48 portable radios, along with antennas, collapsible tower
Daniel Repeaters VHF High Band	DOE	2	National	Pelican Case with a cache of 12 radios, COMMS Console with mobile 50w amplifier, and 2-35 ft collapsible towers
DOE Custom Made Sat VHF/UHF Microwave	DOE	1	Regional	Trailer,
ROVER UAV Receiver	DOE	1	Regional	Portable Unit
Swedish KU Band	DOE	2	National	SAT, Video, Data, IP Phones, Voice,
Back-to-Back MA/COM MASTR III Repeaters VHF/800	LVMPD	2	National	6x5 shelter rack system, OMNI stick antennas
NDOT Communications on Wheels (COW) (future)	NDOT	1	Statewide	Electrical crank-up tower, generator, shelter, EDACS OPEN SKY Trunking

3.8.1 Mobile Repeaters or Transportable Communications Systems Policies and Procedures

Motorola Quantar Repeaters VHF High Band

Technology Overview

Include information on the technology overview.

Rules of Use

Include rules of use.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

Include information on when this repeater is activated who is responsible:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Include information on when this repeater is deactivated who is responsible:

Name:
Agency/Department:
Position in the Department:

Daniel Repeaters VHF High Band

Technology Overview

Include information on the technology overview.

Rules of Use

Include rules of use.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

Include information on when this repeater is activated who is responsible:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Include information on when this repeater is deactivated who is responsible:

Name:
Agency/Department:
Position in the Department:

DOE Custom Made Sat VHF/UHF Microwave

Technology Overview

Include information on the technology overview.

Rules of Use

Include rules of use.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

Include information on when this repeater is activated who is responsible:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Include information on when this repeater is deactivated who is responsible:

Name:
Agency/Department:
Position in the Department:

ROVER UAV Receiver

Technology Overview

Include information on the technology overview.

Rules of Use

Include rules of use.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

Include information on when this repeater is activated who is responsible:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Include information on when this repeater is deactivated who is responsible:

Name:
Agency/Department:
Position in the Department:

Swedish KU Band

Technology Overview

Include information on the technology overview.

Rules of Use

Include rules of use.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

Include information on when this repeater is activated who is responsible:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Include information on when this repeater is deactivated who is responsible:

Name:
Agency/Department:
Position in the Department:

Back-to-Back MA/COM MASTR III Repeaters VHF/800

Technology Overview

Include information on the technology overview.

Rules of Use

Include rules of use.

Interoperable Communication Request

Include information on the communications request.

Problem ID and Resolution

Include information on problem and ID resolution.

Equipment Activation

Include information on when this repeater is activated who is responsible:

Name:
Agency/Department:
Position in the Department:
Location:

Equipment Deactivation

Include information on when this repeater is deactivated who is responsible:

Name:
Agency/Department:
Position in the Department:

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 (See Appendix A).

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

Job descriptions and qualified personnel for each Communications Unit position are detailed in Appendix A.

Dispatch Center or Emergency Operations Center (EOC)

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 or ESF-2 representative. 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.

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. Appendix A list additional RADO communications dispatchers.

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 Las Vegas Urban Area/Southern Nevada 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 25 CASM AM POC Information

Name	Phone	Email	Area of Responsibility
Robert Wideman	775-687-0300	Bob.wideman@gmail.com	Statewide

Appendix A Points of Contacts

A.1 Dispatch Centers Points of Contact

Name	24/7 Contact	Organizations / Agencies Served
Communications Supervisor	(702) 828-7110	– FBI – Metro – Park Police – North Las Vegas – Coroner – Animal Control City/County – NHP – School Police – City Marshals – FD – Arson Investigators – BLM – City Enforcement – Clark County IT
UNLV Police Services	(702) 895-2668 ext. 2	UNLV Police Services
Clark County Water Reclamation District	Marty Flynn (702) 379-5116 Elaine Houser (702) 354-9546	Clark County Water Reclamation District
Metropolitan Police Dispatch	Barbara Doran Office 702-828-7172 Pager 702-730-2688	
North Las Vegas Police Dispatch	Jennifer Spivey Office 702-633-1548	
City of Henderson Police and Fire Dispatch	Barbara Brabenec Office 702-267-4902	

Boulder City Police and Fire Dispatch	Ruby Perkins Office 702-293-9258	
Clark County School District Police Dispatch	Armondo Quintanilla Office 702-799-5411	
Mesquite Police and Fire Dispatch	CJ Larsen Office 702-346-6911	
Las Vegas Fire Alarm Office	Louis Amell Office 702-229-0237 Cell 702-303-2994	
City of Las Vegas Marshalls Dispatch	Lt Michael Brown Office 702-229-1820	
City of Bullhead Police and Fire Dispatch	Sgt Barry Wincentsen Office 928-763-3357	
Nevada Highway Patrol Dispatch	Nicholas Lombardo Office 702-486-4100, ext. 6	
Paiute Tribal Police Dispatch	Everson Nakai Office 702-471-0844	
LVICC (Las Vegas Interagency Communications Center): Bureau of Land Management, US Forest Service, National Park Service, Nevada Division of Forestry	Frank Waterman Office 702-515-5305 Cell 702-575-2960	
American Medical Response & MedicWest Ambulance Dispatch Centers	Jason Meilleur Office 702-250-0089	

University Medical Center	Ernie McKinley, ACIO Office: 702-671-6567	

A.2 Nongovernmental Agency Contact Information

Agency	Name	Position	Phone	Email
ARES/RACES	Bill Smith	Emergency Coordinator	(702) 281-8894	w4hmv@cox.net

A.3 TIC Plan Development and Update Participants

Agency	Name	Phone	Email	Subcommittee(s)
ARES/RACES	Vern Garman	(702) 641-5963	garmco@cox.net	
ARES/RACES	Bill Smith	281-8894	W4hmr@cox.net	
DOE/NEST	Hans Devouassoux	794-1911	devouahy@nv.doe.gov	
LVMPD	Nicole Hart	828-2831	N9475h@lvmpd.com	
DOE	Randy Minyaro	295-4766	minyarll@nv.doe.gov	
CLV OEM	Carolyn Levering	229-0313	clevering@lasvegasnevada.gov	
LVMPD	Jeffrey Yeagley	828-3216	j12923y@lvmpd.com	
LVMPD	Sherri Foster	828-7173	S3067F@lvmpd.com	
RTC	Rick Moore	676-1636	moorer@rtcsnv.com	
NSRS/NV Energy	Mark Pallans	402-6246	mpallans@nvenergy.com	
C.C. Nuclear Waste Division	Phil Klevorick	455-6933	klevorick@co.clark.nv.us	
C.C. Coronor	Dereck Dubasik	455-2648	Derek@co.clark.nv.us	
DHS/OEC	Richard Reed	202-579-8130	Richard.e.red@dhs.gov	
C.C. OEM HS	Shannon Rooney	702-455-5710	srooney@co.clark.nv.us	

NV DIV EM MGMT	Bud Marshall	702-828-2256	bmaarshall@dps.state.nv.us	
NV DIV EM MGMT	Sherrill Sundell	775-687-0386	ssundell@dps.state.nv.us	
NV DIV EM MGMT	Suzanne Brunette	115-687-0426	sbrunette@dps.state.nv.us	
CCP CC Park Police	Roy Michael	702-455-7532	michaera@co.clark.nv.us	
NV Energy	Kim Ferguson	702-402-6009	kfergusen@nvenergy.com	
LV Urban Area	Mark Blomstrom	775-742-8200	Mark.blomstrom@charter.net	
Nye County Emergency Service	Fred Jones	775-751-4279	fjones@co.nve.nv.us	
CC IT	Andrew Gagliardi	702-455-4746	aga@co.clark.nv.us	
University Medical Center	Robert Hill	702-671-6123	Bob.hill@umcsu.com	
University Medical Center	Michael Buchna	702-383-2733	Mike.buchn@umcsu.com	
UNLV	David Javier	895-5784	David.javier@unlv.edu	
UNLV	Sandi Barfield	895-5798	Sandra.barfield@unlv.edu	
LVFD	Ken Taylor	303-0798	ktaylor@lasvegasnevada.gov	
SNACC	David Goss	455-7390	ddg@co.clark.nv.us	
CLV	Lou Amell	229-0237	lamell@lasvegasnevada.gov	
NLVFD	Terri Davis	633-2068	davist@cityofnorthlasvegas.com	
NLVPD	Chris Vasquez	633-1713	vasquezc@cityofnorthlasvegas.com	
NLVPD	Mike Garnich	633-1713	garnichm@cityofnorthlasvegas.com	
HFD	Robert Richardson	267-2217	Rob.richardson@cityofhenderson.com	
CCFD	David Croston	250-8430	D2924c@co.clark.nv.us	
CTA Communications	Budge Currier	434-239-9200	wcurrier@aecom.com	
OHS	Mike Lopez	505-463-1538	mlopez@compa.com	
Henderson PD	Barbra Brabenec	702-267-4902	Barbra.brabenec@cityofhenderson.com	
CC IT	Lester Lewis	702-455-4023	llewis@co.clark.nv.us	

A.4 Agency 24/7 Contact Information for Public Safety Communications Centers

Agency	Phone 24/7
City of Boulder	
Boulder City Fire Department	(702) 293-9224
Boulder City Police Department	(702) 293-9224
City of Henderson	
Henderson Animal Control	(702) 267-4913
Henderson EOC	(702) 267-4913
Henderson Fire Department	(702) 267-4913
Henderson Police Department	(702) 267-4913
City of Las Vegas	
Las Vegas Animal Control	(702) 229-6480
Las Vegas Code Enforcement	(702) xxx-xxxx
Las Vegas Department of Transportation	(702) xxx-xxxx
Las Vegas Detention and Enforcement	(702) 229-6444
Las Vegas EOC	(702) xxx-xxxx
Las Vegas Facilities Maintenance	(702) 229-0291
Las Vegas Fire Rescue	(702) 229-0291
Las Vegas Fleet	(702) 229-0291
Las Vegas General Services	(702) xxx-xxxx
Las Vegas IT	(702) 229-6294
Las Vegas Municipal Court Marshals	(702) 229-2048
Las Vegas OEM	(702) 229-0313
Las Vegas Parks and Recreation	(702) 229-0291
Las Vegas Sanitation	(702) 229-0291
Las Vegas Streets	(702) 229-0291
Las Vegas TEFO	(702) 229-0291
City of Mesquite	

Agency	Phone 24/7
Mesquite Fire	(702) 346-6911
Mesquite OEM	(702) 346-6911
Mesquite Police	(702) 346-6911
City of North Las Vegas	
North Las Vegas Fire Department, Fire Alarm Office	(702) 229-0291
North Las Vegas OEM	(702) 633-1125
North Las Vegas Police Department	(702) 633-1390
North Las Vegas – All Other Departments	(702) 633-1390
Clark County	
Clark County Air Quality Control	(702) 455-5942
Clark County Animal Control	(702) 455-7710
Clark County ARES/RACES	(702) 281-8894
Clark County Automotive	(702) 455-7710
Clark County Code Enforcement	(702) 455-4191
Clark County Code Enforcement	(702) 455-3210
Clark County Coroners Office	(702) 455-4533
Clark County Courthouse Bailiffs	(702) 455-4750
Clark County DA	(702) 455-2194
Clark County Department of Family Youth Services (DFY) Bailiffs	(702) 455-2194
Clark County Dept. of Aviation	(702) 261-4010
Clark County Detention Center	(702) 671-5772
Clark County Fire Department	(702) 229-0401
Clark County Flood Control	(702) 455-3139
Clark County IT	(702) 455-3282
Clark County Telecomm	(702) 455-4746
Clark County Justice Bailiffs	(702) 671-3116
Clark County OEM	(702) 229-0401
Clark County Park Police	(702) 455-7532

Agency	Phone 24/7
Clark County Parks & Recreation	(702) 455-8200
Clark County Public Works Roads	(702) 455-7540
Clark County Public Works Traffic	(702) 455-7544
Clark County Risk Management	(702) 455-8587
Clark County Security	(702) 455-5911
Clark County Sheriff's Civil Bureau	(702) 671-5842
Clark County Spring Mountain Youth Camp	(702) 455-5555
Other Agencies and/or Jurisdictions	
American Medical Response (AMR)	(702) 384-3400
American Red Cross	(702) 791-3311
Clark County School District Facilities Division	(702) 799-5411
Clark County School District KLVX Communications Group	(702) 799-5411
Clark County School District Police Department	(702) 799-4357
Clark County School District Transportation Department	(702) 799-5411
Clark County Water Reclamation District	(702) 434-6600
Fire Alarm Office Supervisor - Las Vegas	(702) 229-0407
Las Vegas Convention and Visitors Authority	(702) 892-7400
Las Vegas Metropolitan Police Department	(702) 229-3111
Las Vegas Metropolitan Police Department. (LVMPD)	(702) 229-3111
Las Vegas Paiute Tribal Police Department	(702) 229-3111
Las Vegas Valley Water District	(702) 258-3150
MedicWest Ambulance	(702) 792-9111
Mercy Airlife Air Ambulance	(702) 383-1000
Nevada Power	(702) 367-5555
Regional Flood Control District	(702) 455-3139
Regional Transportation Commission	(702) 914-0742
Southern Nevada Area Communications Council (SNACC)	(702) 455-7390; (702) 249-1752
Southern Nevada Health District	(702) 759-1000

Agency	Phone 24/7
Southwest Gas	(702) 365-1111
Tribal Police Department	(702) xxx-xxxx
Union Pacific Railroad (UP)	(888) 877-7267
Regional Hospitals	
Boulder City Hospital	(702) 293-4111
Centennial Hills Hospital	(702) 360-9040
Desert Springs	(702) 733-8800
Mesa View	(702) 346-8040
Mountain View	(702) 255-5025
North Vista Hospital	(702) 649-7711
O'Callaghan Federal Hospital	(702) 653-2343
Southern Hills	(702) 880-2100
Spring Valley Hospital	(702) 853-3000
St. Rose Dominican de Lima	(702) 616-5000
St. Rose Dominican San Martin	(702) 492-8000
St. Rose Dominican Siena	(702) 616-5000
Summerlin Medical Center	(702) 233-7000
Sunrise Hospital	(702) 731-8000
University Medical Center	(702) 383-2000
Valley Hospital	(702) 388-4000
Nevada State Agencies	
Nevada Air National Guard	(775) 688-2830
Nevada Army National Guard	(775) 688-2830
Nevada Bureau of Investigation	(775) 688-2830
Nevada Capitol Police	(775) 688-2830
Nevada Department of Information Technology	(775) 688-2830
Nevada Department of Public Safety	(775) 688-2830
Nevada Department of Wildlife	(775) 688-2830

Agency	Phone 24/7
Nevada Division of Emergency Management	(775) 688-2830
Nevada Division of Forestry	(775) 688-2830
Nevada DOT (Las Vegas)	(702) 385-6594
Nevada Highway Patrol	(775) 688-2830
Nevada Parole and Probation	(775) 688-2830
Nevada Taxi Cab Authority	(775) 688-2830
U.S. Government Agencies	
Bureau of Land Management (BLM)	(702) 631-2350
Federal Bureau of Investigation	(702) 385-1281
Nellis AFB Fire Department	(702) 652-1110
Nellis AFB EOD	(702) 652-1110
U.S. Forest Service	(702) 293-8932
U.S. National Park Service	(202) 208-6843
U.S. Bureau of Reclamation	(202) 513-0501
U.S. Department of Energy	(702) 295-3521
U.S. Postal Inspectors	(626) 405-1200
U.S. Secret Service	(202) 406-5708
U.S. Marshals Office	(702) 388-6355
U.S. Immigration and Customs Enforcement	(202) 305-2734
Bureau of Indian Affairs	(202)208-7163
Bureau of Alcohol, Tobacco, Firearms, and Explosives	(702) 387-4600
U.S. Drug Enforcement Agency (DEA)	(202) 305-8500
U.S. Parole and Probation	(301) 492-5990
Federal Aviation Administration	(866) 835-5322
U.S. Transportation Security Administration	(866) 289-9673

A.5 UACSC Steering Committee Member Information

Agency	Name	Position	Phone	Email	Subcommittee(s)

Agency	Name	Position	Phone	Email	Subcommittee(s)
Clark County School District Technology & Information Systems Services 4212 Eucalyptus Ave. Las Vegas, NV 89121		Chief Technology Officer	(702) 799-3321 (702) 779-6143 Fax		
City of Las Vegas 400 Stewart Ave. Las Vegas, NV 89101	Joseph Marcella		(P)702-229-4788 (F)702-385-9369	jmarcella@ci.las-vegas.nv.us	
Las Vegas Valley Water District 1001 So Valley View Las Vegas, NV 89153	James Ellisor		(P)702-258-3251 (F)702-258-3271	James.ellisor@lvvwd.com	
Clark County 500 So. Grand Central Pkwy. Las Vegas, NV 89155-1761	Laura Fucci	CIO	(P) 455-5853 (F) 455-4932	LFucci@Co.Clark.NV.US	
Las Vegas Metropolitan Police Department 400 Stewart Avenue Las Vegas, NV 89101	Phil Roland		(P) (702) 229-5536		
City of Henderson 240 Water Street Henderson, NV 89015	Phil Roland		(P) (702) 267-4343 (F) (702) 267-4301		
Southern Nevada Health District PO Box 3902 Las Vegas, NV 89127	Sandra Hakins	Information Technologies Manager	(P) (702) 759-1228 (F) (702) 383-6341	Hakins@snhdmail.org	
City of North Las Vegas 2200 Civic Center North Las Vegas, NV 89030	Steve Chapin				
University Medical Center 1800 W. Charleston Blvd. Las Vegas, NV 89102	Douglas Northcutt		(P) (702) 383-3977 (F) (702) 383-2742	doug.northcutt@umcsn.com	

Agency	Name	Position	Phone	Email	Subcommittee(s)
Campus Computing Services 4505 Maryland Parkway Box 451032 Las Vegas, NV 89154-103	Alan D. Personius	Director	(P) (702) 895-0787 (F) (702) 895-3850	alan.personius@ccmail.nevada.edu	

A.6 UAWG/LEPC Member Information

Agency	Name	Position	Phone	Email	Subcommittee(s)
CCWRD	Elaine Houser	Safety/\Security Administrator	(702) 668-8031	ehouser@cleanwaterteam.com	
CCWRD	Marty Flynn	Asst to the General Manager	(702) 668-8066	mflynn@cleanwaterteam.com	

A.7 Other State TIC Plan POC Information

Northeast Region TIC Plan

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:	Robert Wideman
Title:	State-wide Interoperability Coordinator
Office Phone:	(775) 687-0300
E-Mail:	rwideman@dps.state.nv.us

Alternate:

Agency Name:	Nevada Communications Steering Committee
POC Name:	Dale Lotspeich
Title:	Chairman of NCSC; Interoperable Communications Coordinator
Cell Phone:	(775) 777-2501
E-Mail:	elkosheriff@elkocountynv.net

Northwest Region TIC Plan

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:	Robert Wideman
Title:	State-wide Interoperability Coordinator
Office Phone:	(775) 687-0300
E-Mail:	rwideman@dps.state.nv.us

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

A.8 Regional Emergency Resource Personnel

	Name	Agency	Address	Phone	Email
COMT	On Duty Supervisor	LVMPD	4591 W Russell Rd, LV, NV, 89118	(702) 828-7110	n/a
	Marty Flynn	CCWRD	5857 E Flamingo	(702) 668-8066	mflynn@cleanwaterteam.com
COML	Jeffery L. Yeagley	LVMPD	4591 W Russell Rd, LV, NV, 89118	(702) 828-3219	J12923y@lvmpd.com
	Elaine Houser	CCWRD	5857 E Flamingo	(702) 668-8031	ehouser@cleanwaterteam.com
	Mike Garnich	NLVPD	North Las Vegas	(702) 633-1713	GarnichM@cityofnorthlasvegas.com
	Chris Vasquez	NLVPD	North Las Vegas	(702) 633-1713	VasquezC@cityofnorthlasvegas.com
INCM	Assigned Staff	CCWRD	5857 E Flamingo		
RADO	On Duty Supervisor	LVMPD	4591 W Russell Rd, LV, NV, 89118	n/a	n/a
	**See Appendix A Section A.10				
Cache THSP	Randy Rounds	LVMPD	4591 W Russell Rd, LV, NV, 89118	(702) 828-3872	r3451r@lvmpd.com
	Mike Zarack	LVMPD	4591 W Russell Rd, LV, NV, 89118	(702) 828-3872	m10164z@lvmpd.com
	Brian Davis	LVMPD	4591 W Russell Rd, LV, NV, 89118	(702) 828-3872	b10138d@lvmpd.com
	Mike Garnich	NLVPD	North Las Vegas	(702) 633-1713	GarnichM@cityofnorthlasvegas.com
	Chris Vasquez	NLVPD	North Las Vegas	(702) 633-1713	VasquezC@cityofnorthlasvegas.com
Gateway THSP					

	Name	Agency	Address	Phone	Email
Other THSP	Assigned Staff	CCWRD	5857 E Flamingo		

A.9 RADO Communications Dispatchers/Regional Emergency Resource Personnel

Available RADO Communication Dispatchers					
Agency	**Name**	**Agency**	**Name**	**Agency**	**Name**
	Hotham, Michael		Oliver, Crystal		Diaz, Lizeth
	Lee, Mary		Bates, Pina		Harrell, Lindsey
	Zupancic, Susan		Dominguez, Tina		Maenza, Lisa
	Mcgill, Tammy		Miller, Lynelle		Eggstaff, Amanda
	Mattimoe, Deborah		Caddess, Donna		Mckim, James
	Nelson, Rochelle		Snowden, Tara		Rafferty, Kacy
	Bitryk, Leslie		Sammut, Kristina		Bannister , La Toya
	Kimberlin, Jill		Price, Donna		Cuellar, Simon
	Schulter, Susan		Ghilardi-Solomon (Christine)		Patrick, Melissa
	Mouton, Ora		Padgen, Eileen		Stauffer, Cinnamon
	Olige, Lisa		Singletary, D. Irene		Poyner, David
	Shipp, Eva		Campos, Giulianna		Trafton, Jason
	Luca, Stephanie		Mcfarland, Denise		Vanderburg, Jodi
	Cullum, Thomas		Proctor, Laura		Fedei, Amber
	Whetstone, Deborah		Rivera, Rosio		Heinz, Heidi
	O'neill, Christine		Bryan, Katrina		Mcnalley, Laurie
	Sobosle, Tina		Bentley, Erika		Murphy, Kate
	Hodges, Staci		Donovan, Christina		Parker, Bryce
	Smith, Lonnie		Korica, Linda		Teague, Cathleen
	Mir, Kathy		Perriman, Stephani		Albert, Kendall
	Carrillo, Shelley		Galiano, Christelle		Buffery, Jolleen
	Dahl, Stacia		Russell, Michelle		Grammas, Tiffany
	Govea, Kimberly		Twomey-Walsh, Michelle		Motis, Carol
	Nelson, Lora		Vanderpool, Dean		Jackson, Casey
	Kowal, Dawn		Garcia, Jennifer		Laws, Heather
	Pantuso, Cecelia		Carrillo, Monica		Dean, Tiffany
	Bradley, Valencia		Johnson, Erika		Gordon, Blair (Brown)
	Lish, Sharon		Latorre, Maria		Olivas, Jennie
	Hennesy, Denise		Weirauch, Kimberly		Dominguez, Glenn
	Hentzell, Kristie		Etnire, Brittani		Wittwer, Ashley (Grossman)
	Loretto, Leslie		Bell, Wendy		
	Churchville, Tenesia		Spruell, Leah		

Appendix B 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 Las Vegas Urban Area/Southern Nevada Shared System(s)

Radio System Name	Make / Model	Type	Frequency Band	Owning Agency	Service Area
LVMPD	M/A-COM	VHF Voted	150-170 MHz	LVMPD	Clark County
Metropolitan Police Department (Feb 2010)	M/A-COM (Harris)	Open Sky	700 MHz	LVMPD	Clark County
NSRS	M/A-COM (Harris)	EDACS	800 MHz	NDOT, Nevada Power & UNLV	Statewide
SNACC	MOTOROLA	SmartZone	800 MHz	SNACC	Clark & Nye Counties
Federal Trunked System	MOTOROLA	SmartZone	410-420 MHz	DOE	Clark & Nye Counties
Nye County	Hybrid, Multi-Vendor	VHF	150-170 MHz	Nye County	Nye County

B.1 Las Vegas Metropolitan Police Department Radio System (METRO) VHF Voted

Responsible Agency

This radio system is owned or managed by: Metropolitan Police Department (LVMPD)

Name: Jeff Yeagley
Title: Manager
Phone: (702) 828-3219
24/7 Phone: (702) 378-3219
Email: jl2923y@lvmpd.com

Number of Radios

No. of Mobile Radios on this System:	Approximately 2200
No. of Portable Radios on this System:	Approximately 3400

System Type

Radio System Make:	M/A-COM, Kenwood, Motorola
Trunked / Conventional/Both:	Conventional
Radio System Model:	Master III Repeaters, Kenwood and Motorola terminal eq.
Radio System Frequency Band:	VHF
P25 Compliancy:	
Number of Channels:	
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Narrowband
Voted:	Yes
Simulcast:	Yes

Service area

Clark Countyl

Participating Agencies

- All of Clark County

- METRO Police Department
- Clark County Coroner's Office
- Clark County Civil Bureau
- Clark County District Attorney's Office
- Clark County Detention Center

Shared Channels

Table B - 2 [Name] Shared Channel Information

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Primary Use	Agencies Supported
8CALL90	Analog	Narrow			Incident Communications	Clark County
8TAC91-94	Analog	Narrow			Incident Communications	Clark County

Shared Talk Groups

Table B - 3 [Name] Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

This shared system covers Clark County, Nevada

B.2 Las Vegas Metropolitan Police Department (LVMPD) "Desert Sky" (Open Sky-type) Radio System

Responsible Agency

This radio system is owned or managed by: Las Vegas Metropolitan Police Department (LVMPD)

Name: Jeff Yeagley
Title: Manager
Phone: (702) 828-3219
24/7 Phone: (702) 378-3219
Email: jl2923y@lvmpd.com

Number of Radios

No. of Mobile Radios on this System:	Approximately 2200
No. of Portable Radios on this System:	Approximately 3400

System Type

Radio System Make:	M/A-COM, Kenwood, Motorola (Harris)
Trunked / Conventional/Both:	Conventional
Radio System Model:	Master III Repeaters, Kenwood and Motorola terminal eq.
Radio System Frequency Band:	VHF
P25 Compliancy:	
Number of Channels:	
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	Both
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	Narrowband
Voted:	Yes
Simulcast:	Yes

Service area

Clark County

Participating Agencies

- All of Clark County

- METRO Police Department
- Clark County Coroner's Office
- Clark County Civil Bureau
- Clark County District Attorney's Office
- Clark County Detention Center

Shared Channels

Table B - 4 [Name] Shared Channel Information

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Primary Use	Agencies Supported
8CALL90	Analog	Narrow			Incident Communications	Clark County
8TAC91-94	Analog	Narrow			Incident Communications	Clark County

Shared Talk Groups

Table B - 5 [Name] Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

This shared system covers Clark County, Nevada

B.3 Nevada Shared Radio System (NSRS)

Responsible Agency

This radio system is owned or managed by: Nevada Department of Transportation, Nevada Power, and University of Nevada Las Vegas

Name: Mark Pallans
Title: NSRS Communications Administrator
Phone: (702) 657-4205
24/7 Phone:
Email:

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 EDACS
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

Statewide

Participating Agencies

- Nevada Government
- Highway Patrol

- Capitol Police
- National Guard
- NDOT
- DOIT
- UNLV PD

Non Governmental Organizations

- Nevada Power

Shared Channels

Table B - 6 [Name] Shared Channel Information

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Primary Use	Agencies Supported

Shared Talk Groups

Table B - 7 [Name] Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

This shared system covers the State of Nevada

B.4 SNACC

Responsible Agency

This radio system is owned or managed by: Southern Nevada Area Communications Council, a Joint Powers Authority

Name: David Goss
Title: Communications Administrator
Phone: 702-455-7390
24/7 Phone:
Email: ddg@co.clark.nv.us

Number of Radios

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

System Type

Radio System Make:	Motorola SmartZone V4.1
Trunked / Conventional/Both:	Trunked Analog/Astro
Radio System Model:	
Radio System Frequency Band:	
P25 Compliancy:	
Number of Channels:	74
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	
Analog / Digital / Both:	Analog
Wideband / Narrowband / Both:	
Voted:	
Simulcast:	

Service area

Regional

Participating Agencies Using SNACC

- Boulder City Fire Department (August 2006)
- City of Henderson Animal Control

- City of Henderson Fire Department
- City of Henderson Police Department
- Clark County Animal Control
- Clark County Code Enforcement
- Clark County Dept. of Aviation
- Clark County Fire
- Clark County Henderson Justice Court Marshals
- Clark County IT Department
- Clark County Park Police
- Clark County School District Police Department
- Clark County Water Reclamation District
- Las Vegas Animal Control
- Las Vegas Detention and Enforcement
- Las Vegas EMS (AMR and MedicWest)
- Regional Hospitals
- Las Vegas Fire Rescue
- Las Vegas General Services
- Las Vegas Municipal Court Marshals
- Las Vegas Paiute Tribal Police Department
- Las Vegas Parking Enforcement
- Las Vegas Valley Water District
- Las Vegas Water Pollution Control Facility
- Mercy Airlife Air Ambulance
- North Las Vegas Animal Control
- North Las Vegas Building Maintenance
- North Las Vegas Code Enforcement
- North Las Vegas Detention
- North Las Vegas EOC
- North Las Vegas Fire Department
- North Las Vegas Fleet Operations
- North Las Vegas Municipal Court Marshals
- North Las Vegas OEM
- North Las Vegas Police Department
- North Las Vegas Streets
- North Las Vegas Traffic Operations
- North Las Vegas Utilities
- Southern Nevada Area Communications Council

Shared Channels

Table B - 8 [Name] Shared Channel Information

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Primary Use	Agencies Supported

Shared Talk Groups

Table B - 9 [Name] Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

This shared system covers Clark County, Nevada. Federal Bureau of Investigation, Nellis AFB Fire, and Nellis AFB EOD are on the SNACC system for interoperability purposes only.

B.5 Federal Trunked System

Responsible Agency

This radio system is owned or managed by: DOE

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

Number of Radios

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

System Type

Radio System Make:	MOTOROLA
Trunked / Conventional/Both:	
Radio System Model:	SmartZone
Radio System Frequency Band:	410-420 MHz
P25 Compliancy:	
Number of Channels:	
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	
Analog / Digital / Both:	
Wideband / Narrowband / Both:	
Voted:	
Simulcast:	

Service area

Clark & Nye Counties

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Shared Channels

Table B - 10 [Name] Shared Channel Information

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Primary Use	Agencies Supported
METRO Information Channel						

Shared Talk Groups

Table B - 11 [Name] Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

[Add notes]

B.6 Nye County

Responsible Agency

This radio system is owned or managed by: Nye County

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

Number of Radios

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

System Type

Radio System Make:	Hybrid, Multi-Vendor
Trunked / Conventional/Both:	
Radio System Model:	
Radio System Frequency Band:	VHF 150-170 MHz
P25 Compliancy:	
Number of Channels:	
Encryption Protocol:	
Year Installed:	
Repeated/Simplex/Both:	
Analog / Digital / Both:	
Wideband / Narrowband / Both:	
Voted:	
Simulcast:	

Service area

Nye County

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Shared Channels

Table B - 12 [Name] Shared Channel Information

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Primary Use	Agencies Supported
METRO Information Channel						

Shared Talk Groups

Table B - 13 [Name] Shared Talkgroup Information

Talkgroup Name	Talkgroup ID	Primary Use	Agencies Supported

Other Shared Channel/Talkgroup Notes:

[Add notes]

Appendix C Mutual Aid Channels/Inter-system Shared Channels

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

Table C - 1 Las Vegas Urban Area/Southern Nevada 700 MHz Inter-system Shared Channel(s)

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Talkgroup ID	Primary Use	Agencies Supported
8CALL90/ 8TAC91-94							
Clark County Mutual Aid							
METRO Information Channel							
SNACC IOP1-IOP16							

Table C - 2 Las Vegas Urban Area/Southern Nevada 800 MHz Inter-system Shared Channel(s)

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Talkgroup ID	Primary Use	Agencies Supported

Table C - 3 Las Vegas Urban Area/Southern Nevada UHF Inter-system Shared Channel(s)

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Talkgroup ID	Primary Use	Agencies Supported

Table C - 4 Las Vegas Urban Area/Southern Nevada VHF Inter-system Shared Channel(s)

Channel Name	Analog / Digital	Wide / Narrow	Tx and Tone	Rx and Tone	Talkgroup ID	Primary Use	Agencies Supported

C.1 8CALL90/8TAC91-94 Mutual Aid Channels

C.1.1 8CALL90/8TAC91-94

The 8CALL90/8TAC91-94 Shared Channels system ties the 8CALL90/8TAC91-94 frequencies to corresponding VHF channels through repeaters.

Responsible Agency

Contact information:

Name: Jeff Yeagley
Title: Manager
Phone: (702) 828-3216
Email: j12923y@lvmpd.com

Service Area

Regional geographically dependent. Fixed site locations include coverage for the following areas: TAC91 Potosi/Virgin Peak; TAC92 Arden; TAC93 Angel/Xmas; TAC94 Sunrise. 8CALL90 all the above.

System Type and Capacity

Make/Model:

M/A-COM MSTR III

Frequencies

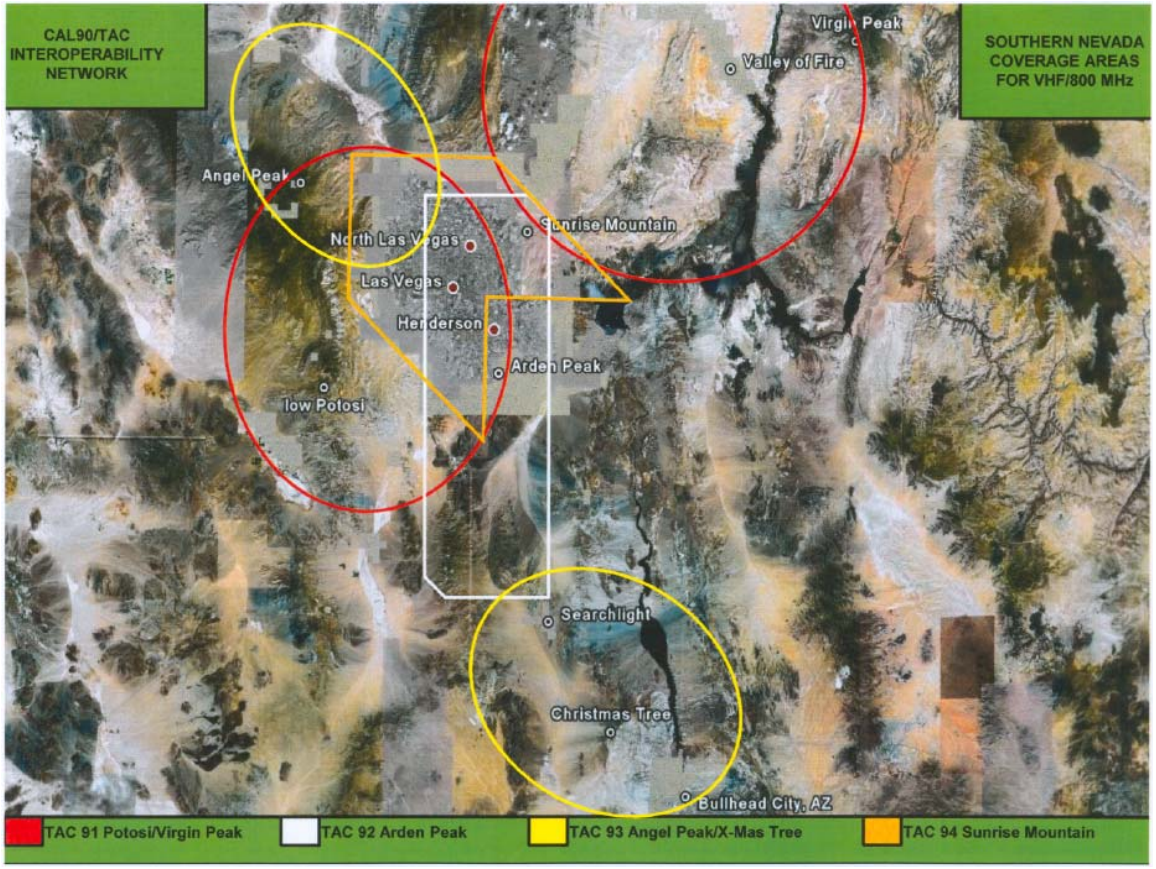
VHF Repeaters				800 MHz Repeaters		
Name	***Tx***	***Rx***	***CTCSS***	***Tx***	***Rx***	***CTCSS***
8CALL90	155.145	155.715	203.5 / M	851.0125	806.0125	156.7 / 5A
8TAC91	154.265	155.16	156.7 / 5A	851.5125	806.5125	156.7 / 5A
8TAC92	154.28	155.475	156.7 / 5A	852.0125	807.0125	156.7 / 5A
8TAC93	154.295	155.655	156.7 / 5A	852.5125	807.5125	156.7 / 5A
8TAC94	156.075	155.16	156.7 / 5A	853.0125	808.0125	156.7 / 5A

Participating Agencies

All agencies operating in the region may use these channels in support of interoperable communications (see Appendix A).

Notes

A portable programmable repeater is available to support operations on one set of the 8CALL90/8TAC91-94 channels.

8CALL90/8TAC91-94 

Area Coverage Map

C.2 Clark County Mutual Aid

The Clark County Mutual Aid Shared Channels System provides 3 VHF channels for mutual aid.

Responsible Agency

Contact information:

Name: Andy Gagliardo
Title: Clark County Telecommunications IT
Phone: (702) 455-4746
Email: aga@co.clark.nv.us

Service Area

Regional, Fixed site locations include coverage for the following areas:

System Type and Capacity

Make/Model:

Motorola MTR-2000

Frequencies (Mobile)

Tx	*Rx*	*CTCSS*
155.085	153.995	Tx: 134 Rx: 311
155.085	153.995	Tx: 306 Rx: 311
155.085	153.995	Tx: 4114 Rx: 311

Participating Agencies

- Clark County IT {Ops -Center}
- MedicWest Ambulance
- Las Vegas Convention Center- Security Dispatch
- Southern Inyo Fire Protection District/ Ems Dispatch Center
- Clark County Coroners Office
- Clark County Parks & Community Service {Arden Shop.
- Metro Police/Communications Shop

- Clark County OEM {Gov- Center/ EOC Room # 1}
- Death Valley National Park Service Dispatch
- Clark County Public Works Roads Dispatch
- Motorsports Medical Service
- Clark County OEM Office
- FBI Office/Communications Division
- Southern Nevada Health District {EMS Office}
- Southern Nevada Health District {EOC}
- Southern Nevada Health District {Mobile Command Post}
- Clark County Parks & Community Service {Sunset}
- BLM Las Vegas Dispatch Center
- Clark County /OEM Dispatch Center {IT- Ops Building}
- American Medical Response
- Clark County School District {Indian Springs Schools}
- Nye County Sheriffs Office/Dispatch
- Valley Hospital Med -Center
- UMC Hospital EOC
- Clark County Fire {Rural Units}
- Las Vegas Fire Dispatch {FAO}
- Nevada Division of Forest Service
- Nevada State Parks Service
- Clark County Park Police/ Animal Control Dispatch Center {Sunset Park}
- Southern Nevada Volunteer First Aid& Rescue Assn
- Clark County DFYS {Spring Mtn Boys Camp}
- Las Vegas Water District{New EOC}
- SNACC
- McCarran Airport
- Clark County Automotive Dispatch
- Nevada Highway Patrol/ Dispatch & Communication Division Las Vegas
- Airlife 7 Helo
- City of North Las Vegas Police Department Mobile Command Center

Notes

Standalone repeaters

C.2.1 METRO Information Channel

The METRO Information Channel Shared Channels system provides a single 800 MHz channel connected to a single VHF control station.

Responsible Agency

Contact information:

Name: David Goss
Title: Communications Administrator
Phone: (702) 455-7390
Email: ddg@co.clark.nv.us

Service Area

Las Vegas Valley

System Type and Capacity

Make/Model:

Motorola Quantar, 100 watt, 800 MHz
Motorola Quantar, 25 watt, 146 - 170 MHz

Frequencies

VHF Control Station			800 MHz Repeater		
Tx	***Rx***	***DPL***	***Tx***	***Rx***	***DPL***
159.15	154.77	77	866.3750	821.3750	065

When rebanding is complete the 800 MHz frequencies will be shifted downward by 15 MHz.

Participating Agencies

Available to all agencies upon request
Use requires approval from SNACC and METRO

Notes

None

C.2.2 SNACC IOP1-IOP 16

The SNACC IOP1-IOP16 Shared Talkgroups system provides 16 interoperable talkgroups on the SNACC system.

Responsible Agency

Contact information:

Name: Dave Goss
Title: Communications Administrator
Phone: (702) 455-7390
Email: ddg@co.clark.nv.us

Service Area

Regional

System Type and Capacity

Make/Model:

Motorola SmartZone 4.1 analog, wide area

Talkgroups

There are 16 interoperable talkgroups on the SNACC system identified as IOP1 through IOP16

Participating Agencies

All SNACC agencies

Notes

None

Appendix D Gateways/Console Patches

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 D - 1 Las Vegas Urban Area/Southern Nevada Gateway System(s)

Gateway Name	Owning Agency	Day-to-Day or Incident / Event	Make / Model	Fixed / Mobile	No. of Simultaneous Nets	No. of Ports
UNLV PD	UNLV PD	Incident/Event	JPS ACU-1000	Fixed	6	12
Clark County IT Operations Center ACU-1000,	Clark County IT TELCOM Division	Incident/Event	ACU-1000	Fixed	12	12
Clark County IT Operations Center ACU-1000,	Clark County IT TELCOM Division	Incident/Event	ACU-1000	Mobile	12	12
North Las Vegas	North Las Vegas PD	Incident/Event	Infinimode	Mobile	8	24
FRMAC	DOE	Radiological Event	ACU-1000	Mobile	7	12
City of Las Vegas (Fire)			ACU-1000	Mobile	6	12
City of Las Vegas (Fire)			ACU-1000	Fixed	6	12
Clark County Fire			ICRI	Mobile	2	4
City of Henderson (Police & Fire)			ACU-1000	Mobile		
CST	92nd Unit Nevada Army National Guard	Incident/Event	ICRI	Mobile	2	4
CST	92nd Unit Nevada Army National Guard	Incident/Event	ACU-1000	Mobile	6	12

D.1 UNLV PD, Fixed

Equipment Location

This gateway is stored at: UNLV Polices Services Dispatch Building on Harmon Avenue Las Vegas, NV 89154Responsible Agency

This gateway is owned or managed by: UNLV Police Services

Name: Sandra Barfield
Title: Dispatch Manager
Address: 4505 S. Maryland Parkway Las Vegas, NV 89154
Phone: (702) 895-35798
24/7 Phone: (702) 210-3471 cell (702) 895-3668 ext. 2 (dispatch)
Email: sandra.barfield@unlv.edu

Service Area

Regional

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported: TBA

D.2 Clark County IT Operations Center ACU-1000, Fixed

Equipment Location

This gateway is stored at: 1670 Pinto Lane, Las Vegas, Nevada 89106

Responsible Agency

This gateway is owned or managed by: Clark County IT Department

Name: Andrew M. Gagliardo
Title: Telecommunications Technician
Address:
Phone: (702) 455-4746
24/7 Phone:
Email: aga@co.clark.nv.us

Service Area

Las Vegas Valley

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios supported: Motorola 1250 for VHF/UHF and XTL-5000 for 800 MHz trunked

D.3 Clark County IT Operations Center ACU-1000, Mobile

Equipment Location

This gateway is stored at: 1670 Pinto Lane, Las Vegas, Nevada 89106

Responsible Agency

This gateway is owned or managed by: Clark County IT Department

Name: Andrew M. Gagliardo
Title: Telecommunications Technician
Address:
Phone: (702) 455-4746
24/7 Phone:
Email: aga@co.clark.nv.us

Service Area

Las Vegas Valley

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios supported: Motorola 1250 for VHF/UHF and XTL-5000 for 800 MHz trunked

D.4 North Las Vegas Police Department, Infinimode, Mobile

Equipment Location

This gateway is stored at: 1301 East Lake Mead Boulevard, North Las Vegas, NV 89030

Responsible Agency

This gateway is owned or managed by: North Las Vegas Police Department

Name: Mike Garnich
Title: Manager – Radio System Division
Address:
Phone: (702) 633-1713
24/7 Phone:
Email: garnichm@cityofnorthlasvegas.com

Service Area

Regional

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported: VHF High Band P25 , 700/800 MHz Motorola 4.1 Smartzone, 800 MHz EDACS, UHF 406-420 MHz, UHF 450-470 MHz, Air, Ham Radio 2M/70CM, Portable Radio Cables for: Motorola XTS5000, Kenwood TK2140, M/A-COM 7100P, M/A-COM LPE200, Bendix King, Nextel Phones

D.5 FRMAC (Mobile)

Equipment Location

This gateway is stored at: [address], [City/County], [State], [zip code]

Responsible Agency

This gateway is owned or managed by: DOE

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

Service Area

Regional

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported:

D.6 City of Las Vegas Fire Rescue Mobile Command Post

Equipment Location

This gateway is stored at: [address], Las Vegas Fire Rescue Annex Shop [City/County], [State], [zip code]

Responsible Agency

This gateway is owned or managed by: City of Las Vegas Fire Rescue

Name: Lou Amell
Title: Communications Supervisor
Address:
Phone: (702) 229-0237
24/7 Phone:
Email: lamell@lasvegasnevada.gov

Service Area

Regional

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported: Bendix King for UHF/VHF and MTS-2000 for 800 MHz

D.7 City of Las Vegas Fire Rescue, Fixed

Equipment Location

This gateway is stored at: [address], Fire Station 2 [City/County], [State], [zip code]

Responsible Agency

This gateway is owned or managed by: City of Las Vegas Fire Rescue

Name: Lou Amell
Title: Communications Supervisor
Address:
Phone: (702) 229-0237
24/7 Phone:
Email: lamell@lasvegasnevada.gov

Service Area

Las Vegas Valley

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported: MTS-2000 for 800 MHz, Bendix King for VHF/UHF

D.8 Clark County Fire Mobile Communications Unit

Equipment Location

This gateway is stored at: [address], Fire Station 13 (McCarran Airport) [City/County], [State], [zip code]

Responsible Agency

This gateway is owned or managed by: Clark County Fire

Name: Kevin Chapman
Title: Deputy Chief
Address:
Phone: (702) 455-7700
24/7 Phone:
Email: KLC@co.clark.nv.us

Service Area

Regional

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported: TBD

D.9 City of Henderson Police and Fire Mobile Command Post

Equipment Location

This gateway is stored at: Fire Station 97, 1550 Amador, Henderson, NV 89012

Responsible Agency

This gateway is owned or managed by: City of Henderson

Name: Thaddeus Yurek #746
Title: Lt.
Address:
Phone: (702) 267-4570
24/7 Phone:
Email: Thaddeus.yurek@cityofhenderson.com

Service Area

Regional

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

Radios Supported: XTS-2500/5000, Kenwood 7250

D.10 CST (Mobile) ICRI

Equipment Location

This gateway is stored at: 92nd Unit Nevada Army National Guard
[address], [City/County], [State], [zip code]

Responsible Agency

This gateway is owned or managed by: 92nd Unit Nevada Army National Guard

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

Service Area

[Add service area information]

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

[Add notes]

D.11 CST (Mobile) ACU-1000

Equipment Location

This gateway is stored at: 92nd Unit Nevada Army National Guard
[address], [City/County], [State], [zip code]

Responsible Agency

This gateway is owned or managed by: 92nd Unit Nevada Army National Guard

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

Service Area

[Add service area information]

Participating Agencies

- [Add participating agencies]
- [Add participating agencies]

Other Gateway Notes:

[Add notes]

Appendix E 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 E - 1 Las Vegas Urban Area/Southern Nevada Radio Cache(s)

Radio Cache Name	Make / Model	Owning / Managing Agency	Frequency Band	Quantity
Clark County OEM	Motorola HT-1000	Clark County Telecommunications IT	VHF High	45
Clark County Fire	Motorola MTS-2000	Clark County Fire	800 MHz	70
North Las Vegas PD	Motorola XTS-2500	North LV PD	800 MHz	30
North Las Vegas PD	Motorola XTS-5000	North LV PD	800 MHz	18
North Las Vegas PD	Motorola XTL-5000	North LV PD	800 MHz	2
North Las Vegas FD	Motorola XTS-5000	North LV FD	800 MHz	18
Clark County Fire Mobile Communications Unit	Motorola	Clark County FD		43
METRO PD	M/A-COM	LVMPD	700/800 MHz	127
UNLV Department of Police Services	Ericsson LPE 200	UNLV Department of Police Services	800 MHz	12
DOE	Motorola XTS-3000	DOE	406-420 MHz	15

E.1 Clark County OEM

Equipment Location

This radio cache is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This radio cache is owned or managed by: [Agency/Jurisdiction]

Name: Andy Gagliardo
Title: Clark County Telecommunications IT
Phone: (702) 455-4746
24/7 Phone:
Email: aga@co.clark.nv.us

Service Area

Regional

System Type and Capacity

Cache Description:

Make / Model:	
Frequency Band:	
No. of Radios in Cache:	
No. of Available Channels:	
No. of Spare Batteries:	

Other Cache Description:

Cache ID	Qty	Description
1	7	Bank chargers for HT1000 Radios
1	2	Power strips
1	1	50 ft power cord, 3 outlets
2	8	3 ft stakes w/cord (guying masts)
2	2	Base stakes (telescoping mast)
2	3	3 ft tripods
2	4	50 ft LMR 400 w connectors
2	2	VHF Omni antenna
2	1	Sledge hammer
3	43	HT1000 portable radios
4	43	Chest packs
4	43	Remote speaker/mikes
4	26	Spare HT1000 batteries
5	44	Single battery charger
5	1	100 ft power cord
5	1	50 ft power cord, 3 outlets

Cache ID	Qty	Description
6	1	VHF repeater
6	2	Batteries
6	2	Solar panels
6	1	Power regulator
6	Misc	Power cords
6	1	100 ft power cord
7	10	Sandbags
Loose	2	20 ft pushup mast
Loose	2	VHF 5 element yagi antenna

Channels Programmed on Cache

[Add text]

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

E.2 Clark County Fire

Equipment Location

This radio cache is stored at 4425 W. Tropicana Ave., Las Vegas, NV 89109

Responsible Agency

This radio cache is owned or managed by: Clark County

Name: Kevin Chapman
Title: Deputy Chief
Phone: (702) 455-7700
24/7 Phone:
Email: KLC@co.clark.nv.us

Service Area

Regional

System Type and Capacity

Cache Description:

Make / Model:	
Frequency Band:	
No. of Radios in Cache:	
No. of Available Channels:	
No. of Spare Batteries:	

Other Cache Description:

Cache ID	Qty	Description
	65	Motorola MTS-2000 Model 1 Portable 406-420 MHz
	30	Motorola Radio Chest Packs
	13	Motorola Multi-Chargers
	2	Portable Motorola UHF Repeaters GR-100 with Duplexer 406-420 MHz

Channels Programmed on Cache

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

Other Cache Notes:

E.3 North Las Vegas PD

Equipment Location

This radio cache is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This radio cache is owned or managed by: City of North Las Vegas

Name: Mike Garnich
Title: Manager, Radio Systems Division
Phone:
24/7 Phone: (702) 633-1713
Email: garnichm@cityofnorthlasvegas.com

Service Area

[Add service area information]

Cache Description:

Make / Model:	**Motorola XTS-2500, XTS-5000, XTL-5000**
Frequency Band:	800MHz
No. of Radios in Cache:	
No. of Available Channels:	
No. of Spare Batteries:	

Other Cache Description:

Cache ID	Qty	Description
Emergency Response/Disaster Recovery Kit	5	6 radios Motorola XTS-2500, 12 batteries, 1 bank charger, 6 speaker/mikes, 746 - 869 MHz
Emergency Response/Disaster Recovery Kit	3	6 radios Motorola XTS-5000, 12 batteries, 1 bank charger, 6 speaker/mikes, 746 - 869 MHz
Battery Charger Kit	1	24 XTS-5000 batteries, 1 bank charger, 1 single charger
Emergency Response/Disaster Recovery Mini-base Station Kit	2	Self contained base station, Motorola XTS-5000, 746 - 869 MHz
Electrical Supplies Kit	1	Power cords, flashlight, power strips, etc.
Fax/Phone Kit	1	Phone, Printer/Fax/Scanner, P/F/S cable, power cord, Spare ink cartridges, Paper, Phone/Ether-Net cables
Office Supply Kits	1	Batteries, packing tape, markers, binders, pens
Spare Kits	2	2 XTL-5000, 2 XTS-5000 Model 2, 1 XTS-5000 Model 1

Cache ID	Qty	Description
Bench Stock Kits	1	Wires, connectors, installation components, fuses, etc. to install in variety of locations and equipment

Channels Programmed on Cache

NORTH LAS VEGAS SNACC RADIO SYSTEM FLEET MAP

P O L I C E

NORTH LAS VEGAS SNACC RADIO SYSTEM FLEET MAP

CHANNEL NUMBER	ZONE 1	ZONE 2	ZONE 4	ZONE 5	ZONE 6	ZONE 7	ZONE 8	ZONE 9	ZONE X	ZONE P
	POLICE 1	POLICE 2	CITY	ANIMAL CONTROL	MUTUAL AID	INTEROP	LAW	OTHER	FD/PD	PRE-REBAND
	POLICE 1	POLICE 2	CITY							
1	INFO1	INFO1	ROAD	INFO1	NLV-S	IOP 1	SWV CMD	MCAP	INFO1	NLV-S
2	SAC	TRNG1	TRFOP	NLVAC	NLVMCC	IOP 2	NWV CMD	HNDAIR	NLVMCC	BLANK
3	NEAC	TRNG2	FLEET	RGNAC	AIR-S	IOP 3	NEV CMD	BLANK	FLEET	AIR-S
4	C 2 C	ACAD1	UTLOP	CC-AC	HPD-S	IOP 4	SEV CMD	LVVWD	C 2 C	HPD-S
5	INFO2	N-ACAD2	UTLSV	BLANK	BLANK	IOP 5	H-MAIN	AMR	BLANK	BLANK
6	NWAC	N-ACAD3	CUST	LV-AC	METRO1	IOP 6	H-INFO	MWEST	BLANK	METRO1
7	NCAC	N-CADET	BLDG	BLANK	CAL90	IOP 7	H-EAST1	VISTA	BLANK	ICALLS
8	TAC1	COURT	CODE	BLANK	CAL90D	IOP 8	H-WEST1	BLANK	TAC1	ITAC1S
9	TAC2	NLV-MAR	OHNS	BLANK	TAC91	IOP 9	H-NRTH1	BLANK	OHNS	ITAC2S
10	BKUP-B	BKUP-D	BKUP-A	BLANK	TAC91D	IOP10	HSWAT1	BLANK	BKUP-B	ITAC3S
11	JAIL1	JAIL1	JAIL1	BLANK	TAC92	IOP11	HSWAT2	BLANK	JAIL 1	ITAC4S
12	SPCOP	JAIL2	CNLV1	BLANK	TAC92D	IOP12	LVMPD	BLANK	CNLV1	ICALL
13	RECDS	J TAC	CNLV2	BLANK	TAC93	IOP13	BCPTRL1	BLANK	CNLV2	ITAC1
14	R S D	R S D	R S D	BLANK	TAC93D	IOP14	PAIUTE	BLANK	RSD	ITAC2
15	EOC	EOC	EOC	BLANK	TAC94	IOP15	CCPRK	BLANK	EOC	ITAC3
16	PD911	PD911	PD911	BLANK	TAC94D	IOP16	LV-MAR	BLANK	PD911	ITAC4

PATROL- VER 15.0

CHANGING ZONES
PRESS THE KEY WITH THE SINGLE DOT ON IT UNDER THE WORD ZONE. USING THE LEFT OR RIGHT ARROWS SELECT THE DESIRED ZONE. PRESS AND RELEASE THE HOME KEY.

HOME
PRESS AND HOLD FOR 3 SEC. THE KEY ON THE FRONT OF THE RADIO WITH THE HOUSE SYMBOL ON IT.

UN-LOCK RADIO
MOMENTARILY PRESS AND RELEASE THE BUTTON ABOVE THE PTT.

F I R E

CHANNEL NUMBER	ZONE Z1	ZONE Z2	ZONE Z3	ZONE Z4	ZONE Z5	ZONE Z6	ZONE Z7	ZONE Z8	ZONE Z9	ZONE MZ	ZONE H1	ZONE H2	ZONE X FD/PD
1	BATT 1	LV SP OPS	BATT 2	SPEC OPS	BATT 5	BATT 12	BATT 9	IOP 1	LAUGH FD	AMR	BLDR CTY	SR DELIMA	INFO1
2	BATT 4	LV TRAIN	BATT 3	TRAINING	BATT 15	BATT 6	LLV/RRPAS	IOP 2	SAN BERDO	M WEST	CEN HILLS	S MARTIN	NLVMCC
3	BATT 10	LV PREV	BATT 6	FIRE PREV	BATT 4	BATT 9	HFD TAC 3	IOP 3	BAKER	MCI CNTRL	DSRT SPR	SR SIENNA	FLEET
4	HI-RISE	LV ARSON	HI-RISE	ARSON	HI-RISE	LLV/RRPAS	HFD TAC 4	IOP 4	I CALL	ALL HOSP	MEADOWS	SUMMRLIN	C 2 C
5	LV TAC 5	LV MECH	ARFF	MECH	NV TAC 5	HFD TAC 3	HFD TAC 5	IOP 5	I TAC 1	EMS TAC 5	MESA VIEW	SUN ER	BLANK
6	LV TAC 6	MCCARRAN	CC TAC 6	MCCARRAN	NV TAC 6	BC TAC 6	HFD TAC 6	IOP 6	I TAC 2	EMS TAC 6	MTN VIEW	SUN PEDS	BLANK
7	LV TAC 7	METRO	CC TAC 7	METRO	NV TAC 7	BC TAC 7	HFD TAC 7	IOP 7	I TAC 3	EMS TAC 7	NELLIS	SUN TRMA	BLANK
8	LV TAC 8	BLANK	CC TAC 8	BLANK	NV TAC 8	BC TAC 8	HFD TAC 8	IOP 8	I TAC 4	EMS TAC 8	N VISTA	UMC ER	TAC1
9	LV TAC 9	TAC 209	CC TAC 9	TAC 409	NV TAC 9	BC TAC 9	HFD MED 9	IOP 9	8CAL90	EMS TAC 9	S HILLS	UMC PEDS	OHNS
10	LV TAC 10	TAC 210	CC TAC 10	TAC 410	NV TAC 10	BC TAC 10	HND AIR	IOP10	8TAC91	EMS TAC 10	SPRG VALL	UMC TRMA	BKUP-B
11	LV TAC 11	TAC 211	CC TAC 11	TAC 411	NV TAC 11	BC FIRE	HFD/HPD	IOP11	8TAC92	EMS TAC 11	NEW HOSP1	VALLEY	JAIL 1
12	LV TAC 12	TAC 212	CC TAC 12	TAC 412	NV TAC 12	BC SPCL	TRAIN 12	IOP12	8TAC93	EMS TAC 12	NEW HOSP2	NEW HOSP3	CNLV1
13	AMR	TAC 213	AMR	TAC 413	AMR	AMR	AMR	IOP13	8TAC94	EMS TAC 13	BLANK	BLANK	CNLV2
14	M WEST	MEDICAL	M WEST	MEDICAL	M WEST	M WEST	M WEST	IOP14	BLANK	EMS TAC 14	BLANK	BLANK	RSD
15	SIMPLEX	SIMPLEX	SIMPLEX	SIMPLEX	SIMPLEX	SIMPLEX	SIMPLEX	IOP15	BLANK	EMS TAC 15	BLANK	BLANK	EOC
16	FF DOWN	FF DOWN	FF DOWN	FF DOWN	FF DOWN	FF DOWN	FF DOWN	IOP16	SIMPLEX	BLANK	BLANK	BLANK	PD911

SPECIAL EVENT

CHANNEL NUMBER	ZONE 1	ZONE 2	ZONE 4	ZONE 6	ZONE 7
	POLICE 1	POLICE 2	CITY	MUTUAL AID	INTEROP
	POLICE 1	POLICE 2	CITY		
1	INFO1	INFO1	ROAD	NLV-S	IOP 1
2	BLANK	TRNG1	TRFOP	NLVMCC	IOP 2
3	BLANK	TRNG2	FLEET	BLANK	IOP 3
4	BLANK	ACAD1	UTLOP	BLANK	IOP 4
5	BLANK	N-ACAD2	UTLSV	BLANK	IOP 5
6	BLANK	N-ACAD3	CUST	BLANK	IOP 6
7	BLANK	N-CADET	BLDG	CAL90	IOP 7
8	TAC1	BLANK	CODE	CAL90D	IOP 8
9	TAC2	BLANK	OHNS	TAC91	IOP 9
10	BKUP-B	BKUP-D	BKUP-A	TAC91D	IOP10
11	BLANK	BLANK	JAIL1	TAC92	IOP11
12	BLANK	BLANK	CNLV1	TAC92D	IOP12
13	BLANK	BLANK	CNLV2	TAC93	IOP13
14	R S D	R S D	R S D	TAC93D	IOP14
15	EOC	EOC	EOC	TAC94	IOP15
16	PD911	PD911	PD911	TAC94D	IOP16

NORTH LAS VEGAS SNACC RADIO SYSTEM FLEET MAP

CHANNEL NUMBER	ZONE X	ZONE P
	FD/PD	PRE-REBAND
1	INFO1	NLV-S
2	NLVMCC	BLANK
3	FLEET	BLANK
4	C 2 C	BLANK
5	BLANK	BLANK
6	BLANK	BLANK
7	BLANK	ICALLS
8	TAC1	ITAC1S
9	OHNS	ITAC2S
10	BKUP-B	ITAC3S
11	JAIL 1	ITAC4S
12	CNLV1	ICALL
13	CNLV2	ITAC1
14	RSD	ITAC2
15	EOC	ITAC3
16	PD911	ITAC4

SPECIAL EVENT - VER 15.0 XTS2500II

CHANGING ZONES
PRESS THE KEY WITH THE SINGLE DOT ON IT UNDER THE WORD ZONE. USING THE LEFT OR RIGHT ARROWS SELECT THE DESIRED ZONE. PRESS AND RELEASE THE HOME KEY.

HOME
PRESS AND HOLD FOR 3 SEC. THE KEY ON THE FRONT OF THE RADIO WITH THE HOUSE SYMBOL ON IT.

UN-LOCK RADIO
MOMENTARILY PRESS AND RELEASE THE BOTTOM BUTTON ON THE LEFT SIDE OF RADIO.

E.4 North Las Vegas FD

Equipment Location

This radio cache is stored at 4040 Losee Road, North Las Vegas, NV, 89030

Responsible Agency

This radio cache is owned or managed by: NLVFD

Name: John Oceguera
Title: Asst Fire Chief Operations
Phone: 702-633-2891
24/7 Phone: (702) 408-8713
Email: ocegueraj@cityofnorthlasvegas.com

Service Area

City of North Las Vegas

System Type and Capacity

Cache Description:

Make / Model:	Motorola XTS-5000
Frequency Band:	
No. of Radios in Cache:	
No. of Available Channels:	
No. of Spare Batteries:	

Other Cache Description:

E.5 Clark County Fire Mobile Communications Unit

Equipment Location

This radio cache is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This radio cache is owned or managed by: [Agency/Jurisdiction]

Name: Kevin Chapman
Title: Deputy Chief
Phone: (702) 455-7700
24/7 Phone:
Email: KLC@co.clark.nv.us

Service Area

Regional

System Type and Capacity

Cache Description:

Make / Model:	
Frequency Band:	
No. of Radios in Cache:	
No. of Available Channels:	
No. of Spare Batteries:	

Other Cache Description:

Cache ID	Qty	Description
	15	Motorola MTS-2000, VHF handhelds, 146 -170 MHz
	15	Motorola MTS-2000, UHF handhelds, 450 - 470 MHz
	15	Motorola MTS-2000, 800 MHz handhelds, 806 - 869 MHz
	1	Motorola VHF Suitcase Repeater, Quantar, w/duplexer
	1	Motorola 800 MHz Suitcase Repeater, Quantar, w/duplexer
	1	ICRI Interconnect Switch

Channels Programmed on Cache

[Add text]

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

E.6 METRO PD

Equipment Location

This radio cache is stored [in or at] 4591 W. Russell Rd, Las Vegas, NV 89118

Responsible Agency

This radio cache is owned or managed by: Radio Systems Bureau

Name: Captain Herbert Baker
Title: Commander, Radio Systems Bureau
Phone: (702) 4300-1094
24/7 Phone: (702) 300-1094
Email: h3757b@lvmpd.com

Service Area

Regional

System Type and Capacity

Cache Description:

Make / Model:	M/A-COM
Frequency Band:	700/800 MHz
No. of Radios in Cache:	127
No. of Available Channels:	
No. of Spare Batteries:	127

Other Cache Description:

Cache ID	Qty	Description

Channels Programmed on Cache

[Add text]

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

E.7 UNLV Department of Police Services

Equipment Location

This radio cache is stored [in or at]: UNLV Polices Services Dispatch Building on Harmon Avenue Las Vegas, NV 89154

Responsible Agency

This radio cache is owned or managed by: UNLV Police Services

Name: Sandra Barfield
Title: Dispatch Manager
Phone: (702) 895-5798
24/7 Phone: (702) 210-3471 cell (702) 895-3668 ext. 2 (Dispatch)
Email: sandra.barfield@unlv.edu

Service Area

Regional

System Type and Capacity

Cache Description:

Make / Model:	Ericsson LPE-200
Frequency Band:	700/800 MHz
No. of Radios in Cache:	12
No. of Available Channels:	16 per site
No. of Spare Batteries:	12

Other Cache Description:

NA

Channels Programmed on Cache

Mainly UNLV Polices Services Channels – but can be changed to area wide common channels.

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

E.8 DOE

Equipment Location

This radio cache is stored [in or at]:

Responsible Agency

This radio cache is owned or managed by:

Name:
Title:
Phone: (702)
24/7 Phone: (702)
Email:

Service Area

Regional

System Type and Capacity

Cache Description:

Make / Model:	
Frequency Band:	
No. of Radios in Cache:	
No. of Available Channels:	
No. of Spare Batteries:	

Other Cache Description:

NA

Channels Programmed on Cache

Radio System Name	Channel Identification

Talk Groups Programmed on Cache

[Add text]

Other Cache Notes:

[Add text]

Appendix F Mobile Communications Units check

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. Check "Deployment Area" for each MCU listing, right now all list anywhere in the US

Table F - 1 Las Vegas Urban Area/Southern Nevada Mobile Communications Unit(s)

Unit ID / Designator	FEMA Type	Owning Agency	Deployment Area
FRMAC		DOE	Nationwide
North LV MCC	1	North LV	Regional
Henderson MCU		Henderson PD and FD	Regional
Clark County IT MCU	4	Clark County IT	Regional
Southern Nevada Health District MCU	3	Southern Nevada Health District	Regional
Clark County Coroner's Office	4	Clark County Coroner's Office	Regional
Remote Communications Support Vehicle	4 pending to type 2	Nevada DPS	Statewide
Clark County Fire MCU	2	Clark County Fire	Regional
LV Fire and Rescue MCU	2	City of LV	Regional
Nevada Highway Patrol (NHP) MCU	3?	NHP	Statewide
Southern Nevada Regional Transportation Commission MCU	4	Southern Nevada Regional Transportation Commission	Regional
Clark County School District Police MCU	3?	Clark County School District	Regional
92nd CST MCU	3	National Guard	Statewide
Boulder City Fire MCU		Boulder City Fire	Regional
FBI		FBI	National
Nevada Task Force One Search and Rescue MCU	4	Clark County Fire/FEMA	Statewide
Clark County ARES/RACES MCU	4	LV Repeater Association	Regional
LVMPD ARMOR Unit		LVMPD	Regional

F.1 FRMAC

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 1 [Mobile Communications Unit [Equipment Name]

F.2 North LV MCC

Equipment Location

This Mobile Communications Unit equipment is stored in North Las Vegas

Responsible Agency

This Mobile Communications Unit is owned or managed by: City of North Las Vegas PD

Name: City of North Las Vegas PD
Title: Radio Systems Division Manager
Phone: 702-633-1390
24/7 Phone: 702-633-1390
Email: GarnichM@cityofnorthlasvegas.com

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	NLVPD MCC
Owning Agency	City of North Las Vegas
Type/Make/Model:	Cab, Chassis, Freightliner M2
Quantity:	1
Primary Deployment Method (Other)	Vehicle Chassis Mount
Deployment Method	N/A
MCU Storage Address	North Las Vegas, NV
Latitude	
Longitude	
Year Activated	2007
FEMA Type	Type 1, minus physical length
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	
Capability to Extend a Regional LMR System	
Dispatch Capability	

Number of Dispatch Consoles	0
SATCOM Capability	Yes
SATCOM Type	Trackstar
Number of Phone/Data Lines	6
Microwave Connectivity Capability	No
PBX Capability	Yes
Cellular PBX	No
Capability FAX Capability	Yes
Computer Server Capability	Yes
LAN Capability	Yes
Number of Workstations	12
Conference	Yes
Internet Access	Yes
Network Access Speed in KBPS	1500 KBPS
Video Teleconference Capability	Yes
On Scene Video Monitoring Capability	Yes
Self-contained Power Supply Capacity (Watts)	20,000
TV Reception Capability	Yes
Expandable Mast	Yes

Other Mobile Communications Unit Equipment Notes:

North Las Vegas Police Department Mobile Unit

F.3 Henderson MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 2 [Mobile Communications Unit [Equipment Name]

F.4 Clark County IT MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 3 [Mobile Communications Unit [Equipment Name]

F.5 Southern Nevada Health District MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 4 [Mobile Communications Unit [Equipment Name]

F.6 Clark County Coroner's Office

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 5 [Mobile Communications Unit [Equipment Name]

F.7 Clark County Fire MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 6 [Mobile Communications Unit [Equipment Name]

F.8 LV Fire and Rescue MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 7 [Mobile Communications Unit [Equipment Name]

F.9 Nevada Highway Patrol (NHP) MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 8 [Mobile Communications Unit [Equipment Name]

F.10 Southern Nevada Regional Transportation Commission MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 9 [Mobile Communications Unit [Equipment Name]

F.11 Clark County School District Police MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 10 [Mobile Communications Unit [Equipment Name]

F.12 92nd CST MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

r This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 11 [Mobile Communications Unit [Equipment Name]

F.13 Boulder City Fire MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 12 [Mobile Communications Unit [Equipment Name]

F.14 FBI

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 13 [Mobile Communications Unit [Equipment Name]

F.15 Nevada Task Force One Search and Rescue MCU

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 14 [Mobile Communications Unit [Equipment Name]

F.16 Clark County ARES/RACES MCU

Equipment Location

This Mobile Communications Unit equipment is stored at 4233 W. Warm Springs Rd., Las Vegas, NV 89118

Responsible Agency

This Mobile Communications Unit is owned or managed by: the Las Vegas Repeater Association, Inc., a Nevada Not-for-Profit Corporation.

Name: Frank J. Kostelac
Title: President
Phone: 702-325-8997
24/7 Phone: N/A
Email: frank@kostelac.com

Deployment Area

This Mobile Communications Unit is available for deployment throughout Clark County, Nevada.

System Type and Capacity

Unit ID / Designator:	LVRA ENG vehicle
Owning Agency	Las Vegas Repeater Association, Inc.
Type/Make/Model:	Chevrolet Suburban
Quantity:	One unit
Primary Deployment Method (Other)	Vehicle
Deployment Method	N/A
MCU Storage Address	4233 W. Warm Springs Rd., Las Vegas, NV 89118
Latitude	36.080056
Longitude	-115.213988
Year Activated	2008
FEMA Type	Type 4
Activation Method	Notify ARES/RACES Emergency Coordinator, Bill Smith at 702-281-8894
General Comments	MCU was originally a remote commercial tv broadcasting unit and has an air mast
Time to Setup	From time of arrival at designated location, within 20 minutes

Chassis Size	Approximately 20 feet
Capability to Extend a Regional LMR System	Yes, but only as to amateur radio
Dispatch Capability	Yes, but only as to amateur radio
Number of Dispatch Consoles	N/A
SATCOM Capability	No
SATCOM Type	N/A
Number of Phone/Data Lines	One
Microwave Connectivity Capability	Yes
PBX Capability	No
Cellular PBX	No
Capability FAX Capability	No
Computer Server Capability	No
LAN Capability	No
Number of Workstations	1
Conference	No
Internet Access	Limited
Network Access Speed in KBPS	128kbps
Video Teleconference Capability	Yes-but only to Orange County, CA
On Scene Video Monitoring Capability	Yes
Self-contained Power Supply Capacity (Watts)	5,000 watts AC generator & 4,000 watt inverter
TV Reception Capability	Yes
Expandable Mast	Yes-35 feet

Other Mobile Communications Unit Equipment Notes:

Voice Communications: 100 watt HF station; UHF repeater using input frequency of 444.150MHz and an output frequency of 449.150MHz; a 2 meter/ 70cm dual-band transceiver; able to link the mobile repeater with a fixed repeater to extend field operations. Scanner capability is planned.

Data Communications: Automatic Position Reporting System (APRS) digipeater using 144.39MHz. The antenna for this unit deploys on the airmast.

Video: The mast mounted TV antenna supports both analog and digital reception. The analog is used for local UHF Amateur TV (ATV) links to the MCU from local sources. The digital receiver is used for weather updates. There is also a video switcher and the MCU can be used as a hub for switching analog video to an EOC or to ICPs/MCPs. When deployed, a line-of-sight to Mt. Potosi will provide access to a local ATV repeater, which in turn can utilize an established amateur radio TV network in Southern California.

Internet/Digital: Using a broadband card, the MCU can introduce WiFi and expand the capability to include Internet Relay Linking Protocol (similar to VOIP) and ECHOlink access and email. By the end of 2009, the MCU will be capable of using D-Star technology, which introduces secure digital communications and at the same time adds internet data capability.

This MCU adds to the existing comprehensive amateur radio infrastructure by providing multiple VHF and UHF repeater systems, some of which are linked out of the Las Vegas valley to Southern California, Arizona, Utah and beyond.

Figure F - 15 [Mobile Communications Unit [Equipment Name]

F.17 LVMPD ARMOR Unit

Equipment Location

This Mobile Communications Unit equipment is stored [in or at] [address], [City/County], [State], [zip code]

Responsible Agency

This Mobile Communications Unit is owned or managed by: [Agency/Jurisdiction]

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

Deployment Area

This Mobile Communications Unit is available for deployment anywhere in the United States.

System Type and Capacity

Unit ID / Designator:	[Unique Name]
Owning Agency	[Owner of the MCU]
Type/Make/Model:	[Enter Information]
Quantity:	[#]
Primary Deployment Method (Other)	[Vehicle Chassis Mount, Trailer, Airlift Container, Other]
Deployment Method	[Describe Method if Above is Other]
MCU Storage Address	[Add Address]
Latitude	[Optional/Add Lat where MCU is stored]
Longitude	[Optional/Add Long where MCU is stored]
Year Activated	[Year]
FEMA Type	[Type 1, Type 2, Type 3, Type 4, Other]
Activation Method	[Describe]
General Comments	[Comments]
Time to Setup	[# of Minutes Expected to setup the Unit]
Chassis Size	[Chassis Size in Feet]
Capability to Extend a Regional LMR System	[Yes/No]

Dispatch Capability	[Yes/No]
Number of Dispatch Consoles	[#]
SATCOM Capability	[Yes/No]
SATCOM Type	[INMARSAT, AMSC, etc.]
Number of Phone/Data Lines	[#]
Microwave Connectivity Capability	[Yes/No]
PBX Capability	[Yes/No]
Cellular PBX	[Yes/No]
Capability FAX Capability	[Yes/No]
Computer Server Capability	[Yes/No]
LAN Capability	[Yes/No]
Number of Workstations	[#]
Conference	[Yes/No]
Internet Access	[Yes/No]
Network Access Speed in KBPS	[#]
Video Teleconference Capability	[Yes/No]
On Scene Video Monitoring Capability	[Yes/No]
Self-contained Power Supply Capacity (Watts)	[#]
TV Reception Capability	[Yes/No]
Expandable Mast	[Yes/No]

Other Mobile Communications Unit Equipment Notes:

[Add notes]

Figure F - 16 [Mobile Communications Unit [Equipment Name]

Appendix G Communications Unit Leader

Appendix G - Las Vegas Urban Area/Southern Nevada Communication Unit Leaders

Name	Status	Agency	Phone	Email
Aurich, Keith	COML-3	Clark County	702-604-0426	kau@co.clar.nv.us
Barfield, Sandra		UNLV PD, Dispatch Manager	702-895-5798	sandra.barfield@unlv.edu
Beinhauer, John			541-776-6236 x 225	
Bird, Steve	COML-3			
Campbell, Jess	COML-3	Las Vegas Fire & Rescue	702-229-0426	
Cook, Jack	COML-3	Las Vegas Red Cross/Comms	702- 671-5949	
Emer, Dudley	COML-3	DHS/FEMA/USAR, NV-TASK FORCE 1	702-521-8577	
Fuge, Gerald	COML-3			
Gagliardo, Andy	COML-1,3	Clark County IT - Telecommunications Div.	702-604-0427	aga@co.clark.nv.us
Garnich, Mike	COML-3	City of North Las Vegas PD	702-633-1713	
Goss, Dave	COML-3	SNACC, Comm Mgr	702-455-7390	
Halligan, Patrick	COML-3	Nevada DPS/Investigation	702-486-5808	
Hoppe, Ken		Las Vegas Fire & Rescue, Radio Shop	702-229-0236	
Javier, David		UNLV IT, IT Manager	702-895-5784	david.javier@unlv.edu
Jones, Fred	COML-3	Nye Co. Emergency Services	775-751-4279	
Kostelac, Frank	COML-3	FEMA	702-361-6080	
Kramer, Steve	COML-3	Southern Nevada Health District	702-759-1658	
Lewis, Lester		Clark County	702-455-4023	llewis@co.clark.nv.us
Manzo, Jason		SNACC, Comm Tech	702-455-7390	jmanzo@co.clark.nv.us
Odom, Michael		Clark County	702-455-6108	odom@co.clark.nv.us
Petrakis, Tom		Clark County	702-526-0611	
Starr, Dan	COML-3	Clark County ARES/RACES	702-455-6388	
Strenberg, Victor	COML-3	Las Vegas Fire & Rescue, Radio Shop	702-229-0236	
Tsursato, Randy		Fire Training Officer	702-249-7326	r6768t@co.clark.nv.us
Vasquez, Chris	COML-1,3	City of North Las Vegas PD	702-633-1713	
Wilson, Jim	COML-3	Clark County ARES/RACES	702-341-9696	
Yeagley, Jeff	COML-3	Las Vegas Metropolitan Police Department	702-828-3927	

Core Competencies for Communications Unit Leaders

In December 2006, the U.S. Department of Homeland Security Office of Grants and Training issued a draft version of the Communications Unit Leader Core Competencies

handbook. It is currently found at:
http://www.fema.gov/emergency/nims/ics_competencies.shtm.

Competency: Assume position responsibilities

Description: Successfully assume role of Communications Unit Leader and initiate position activities at the appropriate time according to the following behaviors.

Behaviors:

- √ Ensure readiness for assignment.
- √ Ensure readiness of self and subordinates [crew] for assignment.
- √ Ensure availability, qualifications, and capabilities of resources to complete assignment.
- √ Gather, update, and apply situational information relevant to the assignment.
- √ Establish effective relationships with relevant personnel.
- √ Establish organization structure, reporting procedures, and chain of command of assigned resources.
- √ Understand and comply with ICS concepts and principles.

Competency: Lead assigned personnel

Description: Influence, guide, and direct assigned personnel to accomplish objectives and desired outcomes in a rapidly changing, high-risk environment.

Behaviors:

- √ Model leadership principles of Duty, Respect and Integrity.
- √ Ensure the safety, welfare, and accountability of assigned personnel.
- √ Establish work assignments and performance expectations, monitor performance, and provide feedback.
- √ Emphasize teamwork.
- √ Coordinate interdependent activities.

Competency: Communicate effectively

Description: Use suitable communication techniques to share relevant information with appropriate personnel on a timely basis to accomplish objectives in a rapidly changing, high-risk environment.

Behaviors:

- √ Ensure all relevant information is exchanged during check-in, briefings and debriefings.
- √ Ensure documentation is complete and disposition is appropriate.
- √ Gather, produce and distribute information as required by established guidelines and ensure understanding by recipient.

√ Communicate and assure understanding of work expectations within the chain of command and across functional areas.

Competency: Ensure completion of assigned actions to meet identified objectives

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established timeframe.

Behaviors:

√ Make appropriate decisions based on analysis of gathered information.

√ Utilize information to produce outputs.

√ Take appropriate action based on assessed risks.

√ Modify approach based on evaluation of incident situation.

√ Follow established and safety procedures relevant to given assignment.

√ Provide logistical support as necessary.

√ Ensure functionality of equipment.

√ Transfer position duties while ensuring continuity of authority and knowledge and taking into account the increasing or decreasing incident complexity.

√ Plan for demobilization and ensure demobilization procedures are followed.

Based on the core competencies of a Communications Unit Leader, the following individuals have been identified as candidates for the Las Vegas Urban Area.

Communication Unit Leader Tasks:

- Receive Incident Action Plan (IAP); determine needs to support the IAP
- Determine requirements for communications to be established and make initial recommendations using information obtained from the IAP, section briefings, and agency briefings, immediately order supplies, materials, and equipment necessary to support the projected incident size
- Coordinate all actions with the Unified Command/Incident Command, involve Communications Centers, and/or Emergency Operations Centers/Multi-agency Coordination Center as needed
- Participate in incident planning meetings as the technical expert for communications needs
    - Determine the feasibility of providing the required communications support
    - Provide operational and technical information on communications equipment available for the incident
    - Provide operational and technical information on communications equipment capabilities and restrictions
- Design communications systems to meet incident operational needs
    - Coordinate the availability of frequencies with involved communications centers in accordance with pre-established agreements

  - Determine additional resource needs and order necessary equipment and personnel
  - Prepare Incident Communications Plan, ICS Form 205 or equivalent
  - Request any additional communications vendor services (e.g., telephone, satellite communications, microwave, etc.)
  - Coordinate the locations for equipment to be installed (e.g., repeaters or telephone lines) through the chain of command
  - Provide communications support for internal and external data operations
- Install communications equipment
  - Obtain equipment as needed
  - Install and test all components of the communications system to ensure the incident's systems are operational
  - In conjunction with command, develop installation priorities while adhering to safety standards regarding communications needs of tactical personnel
- • Assign communications equipment
  - Identify kinds and numbers of communications equipment to be distributed to specific units according to the communications plan
  - Provide resources and unit leaders with appropriate equipment based on the communications plan
  - Maintain equipment inventory to provide accountability
- Establish Incident Communications Center (ICC)
  - The ICC is functionally collocated with the Incident Command Post until COML determines otherwise
- Verify ETA of communications personnel (can include tactical dispatchers, radio personnel) and establish assignments based on incident requirements. Set schedules around operations requirements
  - Obtain necessary supplies for the ICC to function properly
- Manage Operations of the ICC
  - Document radio/ telephone activities on appropriate forms
  - Set up filing system for ICC documentation
  - Direct radio/ telephone traffic to proper destinations
  - Establish notification procedures for emergency messages
  - Identify system problems, both technical and operational, and determine appropriate solutions
  - Follow established routing procedures for messages
- Coordinate frequencies, activities, and resources with the communications coordinators for other incidents in the region
  - Identify communications equipment and personnel that are excess to incident needs and demobilize, if appropriate
  - Identify resources as to qualifications, quantity, and location
- Notify other involved or adjacent local, state, and federal agencies of the system design and frequency allocations

- Initiate and maintain accurate records on all communications equipment
  - Initiate and maintain accountability system for issuing radio resources
  - Document geographic locations of equipment and transfer this information to local maps (latitude/ longitude, legal)
  - Keep records for local and national resources to ensure return to proper locations
- Perform operational test of communications equipment throughout the duration of the incident as needed
  - Identify and take necessary action to accomplish minor field repair or place orders for replacement of equipment
  - Plan for battery replacement
  - Act decisively to minimize interruptions in system operation
- Interact and coordinate with appropriate unit leaders and operations personnel
  - Coordinate with all groups, branches, and units for communication needs
  - Participate in planning meetings and briefings
  - Coordinate with operations regarding system coverage and needs

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 [Name of Policy, Governing, MOU, and/or Agreement]

[Add a reference and/or link to the above named document]

H.2 [Name of Policy, Governing, MOU, and/or Agreement]

[Add a reference and/or link to the above named document]

H.3 [Name of Policy, Governing, MOU, and/or Agreement]

[Add a reference and/or link to the above named document]

H.4 [Name of Policy, Governing, MOU, and/or Agreement]

[Add a reference and/or link to the above named document]

Appendix I Incident Command System 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 Reference Materials

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.

- 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.

- [State]. *(include website link, if applicable)*

  The [State] *Statewide Communications Interoperability Plan* (SCIP) is designed to enhance emergency communications interoperability throughout the State. [State] 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.

Appendix K Glossary

Item/Acronym	Definition
ACU-1000	Audio bridge used in fixed and mobile configurations. Requires radio from each connected communications system. Gateway device used to link disparate radio systems.
AFB	Air Force Base
AM	Administrative Manager
ARES	Amateur Radio Emergency Service
ARES/RACES	Amateur Radio Emergency Services/RACES: Radio Amateur Civil Emergency Services
ARMOR	All HAZARDS Multiagency Operations and Response
ASPCA	American Society for the Prevention of Cruelty to Animals
ATF	Bureau of Alcohol, Tobacco and Firearms
Audio Bridge	Connects four-wire audio from disparate radio systems to provide interoperability.
AZ	Arizona
BLM	Bureau of Land Management
CA	California
CAM	Communication Assets Mapping
CAS	Communication Assets Survey
CASM	Communication Assets Survey and Mapping
CDC	Centers for Disease Control (US government)
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
COW	Communications on Wheels
CST	Civil Support Team
DEA	Drug Enforcement Agency
DHS	Department of Homeland Security
DOE	Department of Energy

Item/Acronym	Definition
DPS	Department of Public Safety
ECC	Emergency Communications Center
EMS	Emergency Medical Services
EOC	Emergency Operations Center
ESF	Emergency Support Function
FAO	Fire Alarm Office
FCC	Federal Communication Commission
FD	Fire Department
FEMA	Federal Emergency Management Agency
FRMAC	Federal Radiological Emergency Response Plan
HAZMAT	Hazardous Material
IC	Incident Command
8CALL90	NPSPAC 800 MHz mutual aid calling channel
ICC	Incident Communications Center
ICE	Immigration and Customs Enforcement (US Department of Homeland Security; formerly parts of Immigration & Naturalization Service and US Customs)
ICP	Incident Command Post
ICRI	Incident Commander Radio Interface
ICS	Incident Command System
ICTAP	Interoperable Communications Technical Assistance Program
ID	Identification
INCM	Incident Communications Center Manager
Inter-agency	Located or occurring between two or more agencies
Interoperability	Ability of a system to use the parts or equipment of another system
IT	Information Technology
8TAC	NPSPAC 800 MHz interoperability channels
JFO	Joint Field Office
LEPC	Local Emergency Planning Committee
LV	Las Vegas
LVMPD	Las Vegas Metropolitan Police Department
MCC	Mobile Communicaiton Center

Item/Acronym	Definition
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
NCSC	Nevada Communications Steering Committee
NDOW	Nevada Department of Wildlife
NHA	Nevada Hospital Association
NHP	Nevada Highway Patrol
NIMS	National Incident Management System
NPSPAC	National Public Safety Planning Advisory Committee
NSRS	Nevada Shared Radio System
NSSE	National Special Security Event
PD	Police Department
POC	Point of Contact
PSAP	Public Safety Answering Points
RACES	Radio Amateur Civil Emergency Service
RADO	Radio Operator
REACT	Clark County Radio Emergency Associated Communications Teams
RF	Radio Frequency
RTIC Plan	Northwest Nevada Region TIC Plan
SHARES	Shared Resources High Frequency Radio Program
SNACC	Southern Nevada Area Communications Council
SOP	Standard Operating Procedure
Talkgroup	Term ususally used with trunked radio systems. A talkgroup is a virtual channel established in a trunked radio system which allows users to communicate
THSP	Technical Specialist
TIC Plan	Tactical Interoperable Communications Plan
UACSC	Urban Area Communication Steering Committee
UASI	Urban Area Security Initiative

Item/Acronym	Definition
UAWG	Urban Area Working Group
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).
UNLV	University of Las Vegas
USCG	United States Coast Guard
UT	Utah
VA	Veterans Affairs
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.
VoIP	Voice over Internet Protocol