



Case Study: Summit County Sheriff's Office



"Our dispatchers take great pride in ensuring our officers' safety, first responders' safety, as well as the public's safety."

— *Melanie Crittenden*
Communications Director, Summit County Sheriff's Office

BACKGROUND

Summit County occupies a rugged mountainous area with 39 of the highest mountain peaks in Utah. Its 1,882 square miles include Ashley and Wasatch National Forests. Tourists are attracted to easily accessible ski resorts and beautiful mountain biking, hiking and camping areas throughout the year, exceeding the number of residents substantially. Home to the U.S. Ski Team and 2002 Winter Olympics, Park City also hosts the annual Sundance Film Festival.

The *Summit Communications Center* is staffed by certified dispatchers specially trained to manage pre-arrival in medical and law enforcement situations where response time to remote areas can take longer. They provide dispatch services for all public safety agencies in Summit County which include:

- Summit County Sheriff's Office
- AP&P (Adult Probation and Parole)
- Utah Highway Patrol
- Kamas City Police Department
- Summit County Sheriff Search and Rescue
- Summit County Animal Care and Control
- Summit County Public Works
- Utah Division of Wildlife Resources
- Utah State Parks
- US Forest Service Utah
- Utah Department of Transportation
- Park City Fire and EMS Services
- North Summit Fire and EMS Services
- South Summit Fire and EMS Services

Summit County Sheriff Search and Rescue (SAR) is comprised of dedicated volunteers, many specialized in technical skills and expertise in underwater recovery (ice and swift water), technical climbing and rope rescue (old mines and caves), winter rescue (snow, ice and avalanches) or summer rescue (lost hikers). These SAR volunteers are among the busiest in Utah, fielding numerous calls with as many as three major searches underway at one time.

CHALLENGES

Tourist activity in back country terrain brings varied challenges. SAR must be coordinated to respond and be directed to lost or injured tourists in remote areas where cellular coverage and communication are unreliable.

The Summit Communications Center dispatches to two-tone radio pagers using a Motorola Console. This required the dispatcher to press assigned buttons to activate the tone group and then speak the messages sent over the network. For multiple tone groups, this process was repeated several times. Only one person could speak at a time and it often required repeating addresses or other important details. In addition, multiple calls were made on another system for dispatchers to coordinate individual volunteers through radio, standard pages and phone calls.

While the dispatcher placed multiple call-outs to manage an incident, the caller was left to wait for the dispatcher's return for pre-arrival care. The number of calls, attention to details and critical timing for every step were highly stressful for dispatchers and for callers.

SOLUTION

After extensive analysis, it was determined that new technology was needed to fully address the challenge. Summit County selected HipLink, a strong partner of Spillman Technologies, to develop the solution. HipLink engaged Warning Systems, Inc. (WSI) for their RF interface that could link to existing RF tone paging infrastructure, and then created the connection between the CAD and the radios through HipLink. *"This was a strong collaborative effort between all parties to develop an innovative solution to a complex problem,"* stated Pamela LaPine, CEO of HipLink Software. Dispatching units by Command Line Activation allows Summit to consolidate the functions of multiple legacy paging consoles and systems under one umbrella, without requiring any equipment changes or replacement.

Fire and EMS Volunteers use various radios or pagers, such as Motorola MINITOR V™, ICOM IC-F50, Swissphone pagers, and Kenwood pagers. Compatibility is not an issue with the system, allowing individuals to use their own preferred device.

HOW IT WORKS

The dispatcher types a message into the Spillman CAD where the message goes to the integrated HipLink Server. Based on the dispatcher's instructions, the system automates multiple messages. The HipLink RF Module sends the text messages into the WSI box, converting the text to voice and broadcasting to volunteers on their two-tone radios.

Simultaneously, the same message is automatically sent to the appropriate cellphones and pagers. The HipLink **On-Duty** and **Escalation** features automate critical messages to volunteers on-call and notifies the right number of people as they are available. This one message can summon sheriff, police, fire, EMS, SAR or any of the entities within the system, and frees the dispatcher to turn full attention to the caller.

Kory Vernon, IT Specialist, Summit County Sheriff's Office, set up groups for each agency, each with their own unique tone pairs so that radio alerts can cross one frequency and reach the receivers. This frequency is strictly used as an alert channel only. If multiple alerts are sent out at once, they are positioned in a queue and immediately go through, eliminating bottlenecks in radio air time.

Paging channels were used as talking channels prior to implementation. This was an issue because if someone was talking and an alert was sent out, the alert would get canceled. Now it is strictly an alert frequency with no transmission allowed. Dispatchers can send multiple messages at once with the queue processing them in order. "HipLink Paging made that part of it great," comments Vernon.

ROI & BENEFITS

"Now we are sending notifications out 3-ways: text, RF and 800 MHz, with one activation. We are restricted to sending two-toned alerts over the 800 MHz system, but we can send a single alert tone and the message generated from text to speech so they hear it on their 800 MHz radios as well."

"All the dispatcher has to do is focus on sending one page out on the CAD to get the responders going. Prior to implementation, dispatchers may have had to put the caller on hold while they notified the services needed. Now they can start CPR instructions while the notification is going out through multiple messaging devices and they can focus on giving the caller pre-arrival instructions without pause."

"Dispatchers used to refer to a "call down list" for administrative personnel notifications. It required the dispatcher to personally make one or more calls. This is now automated with the HipLink-Spillman integration and sent out to the individuals who need to be notified of the incident. It's definitely a great tool," remarks Crittenden.

There is a regular need to hire dispatchers. Today, Summit County employs six more dispatchers than there were ten years ago but the workload has increased significantly. "The mountains are pretty full in the summertime, especially these past few years with the recession. Vacationers camp to save money," comments Crittenden. "With HipLink, dispatchers manage calls more efficiently, without compromising safety or care. Seconds saves lives and whatever tool that the dispatcher needs to accomplish this is a huge benefit to those that they service."

Time to dispatch messages has improved, also shortening response time. "It is at least 15% faster than before," comments Vernon. In an emergency accident, 6-7 page outs to the EMS, Fire, and Fire Warden are now consolidated to one command from the CAD line. "We don't have to use the Motorola screen to send out alert tones and wait for them to go out and clear for the voice instructions to be voiced over the radio. It saves minutes going across one system rather than three different radio frequencies separately," adds Vernon.

RESULT

In addition to the RF paging system, Summit County leverages HipLink for critical notification. "The initial information on the call to 120 radio pagers and digital messaging devices is significant. It has cut radio traffic and address verification via radio down to a minimum," comments Vernon. "HipLink notifies SAR, SWAT, county special needs teams, and the disaster assessment team. You can use HipLink to alert about anybody with a cellphone or digital messaging device. If we can alert them that way, then that is what we use."

When asked how she felt about HipLink, Crittenden replied "I love the system! As a dispatcher, knowing what it takes, I can focus on the caller and not switching over to a separate channel to get responders going. We are there to assist the caller and give pre-arrival care instructions. In some cases, the call is miles away from where the ambulances are located. It is critical to get them going because seconds count!"

"I think for the rural parts of the county and smaller agencies, this is going to be around for quite awhile. You don't have the infrastructure for the digital AGS. Some areas don't have the cellular coverage," adds Vernon. "HipLink has been reliable and the support team has been helpful and knowledgeable."

Information Tech Specialist, Kory Vernon, offers advice from his experience with implementing the HipLink and RF Radio systems to build the current radio infrastructure. "Know your infrastructure. Who do you need at the table to discuss the system, so that you have every resource, and can say what this system will do for you? There were issues that came along that way that we didn't know and we've learned a lot." He added, "As far as HipLink integrating, that was pretty smooth for us."

Asked if she would recommend HipLink integration with radio systems to other dispatch centers, Communications Director Melanie Crittenden answered a definite, "Yes." "It saves time for dispatchers and enables them to do their job much more efficiently. If you can focus on patient care and taking care of their emergency, the call will go much smoother for everyone involved. There is so much to do for each call, and utilizing HipLink gives the dispatcher more quality time with the caller as well as instant notifications on high priority calls. This has made our job easier on us."



HipLink Software
800 524-7503 Toll Free
HLsales@hiplink.com
www.hiplink.com