

A conversation with . . . Roger Marcoux
Lamoille County Sheriff



Roger Marcoux has served as Lamoille County Sheriff since 2001 and has worked in law enforcement for more than 30 years. Through his work as a police officer, investigator, and sheriff, he has seen public safety communication change considerably with technological advances. We talked with Sheriff Marcoux about his department and how he believes the development of FirstNet will benefit public safety.

Would you describe the Lamoille County Sheriff Office?

The department currently employs 53 people, all who are deputized, and includes 8 uniformed deputies. Our programs are quite broad and include executing civil processes, prisoner transportation, dispatch, and several mental and community health programs. We established the first countywide 911 center in Vermont in 1977 and currently operate one of just six dispatching Public Safety Answering Points in the state. We worked with the Vermont Department of Mental Health to develop a security program to minimize or eliminate restraints for individuals in mental distress and also fulfill a statewide role in the collection and disposal of prescription and over-the-counter drugs.

With your larger staff and varied programs, communication must get challenging.

Communication is the cornerstone of our department. Not only must the dispatch center be operational 24/7, we must ensure we have reliable communication with our deputies and volunteers in the field. Two-way radios remain our primary means of communication. Many of our programs use volunteers and we primarily use cell phones to communicate with them. Our patrol deputies are issued cell phones and we rely on them as a back-up source for communication. We use our work email system for nonemergency messages.

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www.PSBC.Vermont.gov

VT Public Safety Broadband Commission
Department of Public Safety
45 State Drive
Waterbury, VT 05671-1300

FirstNet's mission is to deliver a nationwide broadband network dedicated to public safety to help strengthen their emergency communications abilities, making them safer and more effective on the job. As designated by law, FirstNet was to secure a private partner to deploy the Nationwide Public Safety Broadband Network. Following a competitive RFP in 2017, AT&T was awarded the contract to build, operate and maintain the network.

VERMONT SUPPORT TEAM

For questions, or to arrange a presentation for your team:

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VERMONT UPDATE

FirstNet for First Responders

Department of Public Safety

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Vermont Receives First SatCOLT

The presence of the Nationwide Public Safety Broadband Network (NPSBN) in Vermont is growing. Vermont was the first state in New England to receive one of the new SatCOLTs built by AT&T under the FirstNet contract. The SatCOLT (Satellite Cell Site on Light Truck) was on display at the Vermont Emergency Preparedness Conference in September. Seventy members of the public safety community attended the FirstNet demonstrations on deployable technology at the conference and had a chance to see the new unit. The SatCOLT is owned and operated for public safety by AT&T and is housed at the company's facility in South Burlington.



Vermont was the first state in New England to receive an AT&T SatCOLT built for public safety under the FirstNet contract. The unit is stationed at the AT&T facility in South Burlington.

(Photo by Grant Clarke)

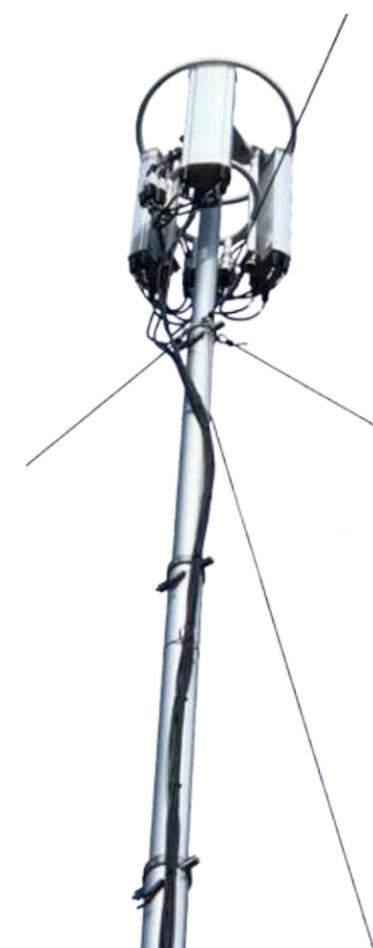
The mast antenna is 60 feet high and has a range of 1.5 miles. There can be up to 300 concurrent users. The unit can broadcast a signal over Band

Class 14 or the existing commercial spectrum, depending on what is needed. There is no charge to request or use any of the SatCOLTs. However, the requesting agency must be a FirstNet participating organization and the first responders must use a FirstNet subscriber device to process a Band Class 14 signal. If the SatCOLT is transmitting on the commercial LTE spectrum, first responders can use any typical AT&T cellular device to communicate. The remaining two SatCOLT units are slated for delivery to Vermont by the end of the year.

"DPS will have a cache of phones that will be available for use in a deployable situation. However, the cache is limited and we would also rely on the responders having their own devices in a response situation," said LaValley.

Coverage in Vermont remains a primary concern for the public safety community. First responders who are now in AT&T coverage areas are subscribing to the service. AT&T reports that as of the end of August there were more than two dozen different public safety organizations in Vermont with subscribers for a total of 975 FirstNet subscriber lines.

(Story continued pg. 2)



In This Issue

- First SatCOLT in VT
- Lamoille County Sheriff & Communications
- Public Safety App Use

There's more information at www.PSBC.Vermont.gov



How is Public Safety Using Apps?

Rapid changes in technology has transformed the phone from a simple communication device to a multitasking minicomputer. The advent of the smart phone, a growing cellular network nationwide, and new applications have radically changed how people use personal cellular devices. Public safety personnel are finding that new applications, like Active911, allow for quicker response times and greater safety for responders.

MissionCritical Communications magazine and Sierra Wireless recently shared results of a survey on application use by first responders. The top applications used varied by discipline, but firefighters, law enforcement and EMS all cited Computer Aided Dispatch and automatic vehicle location among the top three apps currently in use. Other popular apps for firefighters included incident management software for hazardous materials and critical response. EMS personnel cited electronic patient care reporting and patient monitoring devices as top app use areas. Law enforcement listed vehicle-mounted records management systems and in-vehicle video systems as leading application tools.

Vermont first responders are also using apps. App use ranges from alerting applications for volunteer fire crews to GPS based apps that enable dispatch to track the location of responding law enforcement officers. The public safety community will increasingly find the use of apps more viable as cellular coverage expands in the state. The Department of Public Safety and the Public Safety Broadband Network Commission would like to better understand how Vermont first responders currently use broadband. In October, a short online survey will be sent to Vermont first responders. Responders will receive an email with a link to the survey. If you receive a survey link, we ask that you please take a moment and respond. The survey results will provide guidance to DPS and the PSBC for identifying future programs and resources that will assist the greater public safety community.

For more information on public safety applications, visit the Association of Public Safety Communications Officers (APCO) application community web site at www.AppComm.org.

What is limiting your ability to adopt wireless technologies? First Responders surveyed said ...



In 2015, Vermont first responders participated in a FirstNet survey. (above) A new online survey will seek an update on Vermont's wireless adoption and collect information on application uses.

PSBC MEMBERSHIP

Commission members are appointed by the Governor. The PSBC is supported administratively by the Department of Public Safety through the Radio Technology Services unit.

Terry LaValley
PSBC Chair, DPS RTS Director

Chris Herrick
DPS Deputy Commissioner

Steven Locke
Professional Firefighters of VT
Burlington Fire Department Chief

Al Barber
VT Fire Chiefs Association
Hinesburg Fire Department Chief

Ron Kumetz
VT State Firefighters' Association
Alburgh Volunteer Fire Department Chief

Dan Manz
VT Ambulance Association VP

Douglas Johnson
Springfield Police Department Chief

Thomas Hango
Capt. VSP Emerg. Comm. Commander

Jim Porter
Department of Public Service
Public Advocacy Director

Barb Neal
E 911 Board Executive Director

Robert White
AOT Senior Manager

Frank Costantino
ADS ERP Tech Services Director

Ken Jones
ACCD Economic Research Analyst

EMERGENCY DROP KITS

AT&T has announced their development of a long-awaited solution to the dire need for telecommunications by first responders in hard-to-reach areas: Emergency Drop Kits.

"This is a problem space we identified early on," said Ryan Fields-Spack, AT&T's Director of Public Safety Strategy and Policy. "We've taken all these tried-and-true technology elements and bundled it together in this interface."

The Emergency Drop Kits are a 25-pound, mobile, Pelican protective case carrying four rugged phones (Sonim XP8 devices), a Cradlepoint router, and an Inmarsat satellite link to the FirstNet system. The equipment is designed to be carried by first responders into the field of engagement, such as a forest fire or aftermath of a hurricane, and create a 300-foot connectivity "bubble" to enable communications.



The Drop Kit includes a 12-hour battery built into the case, Fields-Spack said, allowing for users to connect to the Wi-Fi via myriad ways, including text-via-voice, voice-over-internet, and enhanced push-to-talk. "They'll have data, interoperability, and capacity to get information just like surfing the web," Fields-Spack added.

In a statement shared on AT&T's website, senior vice president of AT&T-FirstNet Chris Sambar said, "To create the Emergency Drop Kits, we're pulling in expertise from public safety and across the industry. The kits will make it even easier for first responders to stay connected to the full capabilities of the network—no matter where their mission takes them."

So far, Fields-Spack said the response has been encouraging. "We're getting a number of requests and interest from different agencies," Fields-Spack said. "Small, local fire departments and higher up into the government space."

He said the FirstNet team's design of the Emergency Drop Kit developed from understanding the needs of emergency response personnel. "It's a direct result from that team effort, asking, 'what does the customer need?'"

According to a release from AT&T, the kits are "currently moving from a proof of concept to a reality for future availability to purchase."

This article is composed of excerpts from a story published on the web site allthingsfirstnet.com. It was written by Christopher Vondracek, a freelance journalist living in Washington D.C. Go to this web site to read the entire story.



TRENDING

Check out these stories on FirstNet, interoperability and public safety technologies.

National Institute of Standards and Technology
Flying Drones Compete to Complete Unprecedented Feat
<https://www.nist.gov/blogs/taking-measure/flying-drones-compete-complete-unprecedented-feat>

First Responder Network Authority
FirstNet Responds After Strong Storms Hit Western Connecticut
<https://www.firstnet.gov/newsroom/blog/firstnet-responds-after-strong-storms-hit-western-connecticut>

SIGNAL Magazine
DHS Tackles Emergency Communications Interoperability
<https://www.afcea.org/content/dhs-tackles-emergency-communications-interoperability>

IWCE Urgent Communications
AT&T announces NPPGov agreement to ease first responder agencies' adoption of FirstNet
<http://urgentcomm.com/ntiafirstnet/att-announces-nppgov-agreement-ease-first-responder-agencies-adoption-firstnet>

(Roger Marcoux continued pg. 4)

How does your dispatch center keep in touch with your patrol staff?

We utilize analog LMRs in our communication, but must contend with some dead spots. Our dispatch center uses cellular technology to locate and track our patrol units via GPS. We have a screen active in our center that pinpoints the location of the patrols. This provides an added level of security for our personnel, should they encounter a serious incident and are unable to communicate with dispatch.

You mentioned some dead spots in your LMR network. How is the cell coverage in Lamoille County?

Coverage is an issue in our county. Whether you are using Verizon or AT&T, we experience dead spots and dropped calls, particularly in the northern and eastern parts of the county. We have mobile data terminals we simply can't use in some areas. We are looking forward to expanded coverage in our area.

Despite challenging coverage issues in Vermont, the cell phone remains a primary means of communication for the general public. How has that impacted your dispatch?

We average more than 16,000 calls to our PSAP each year. Of those, the majority are from cell phones. Our concern for better coverage isn't just for our own personnel, but also for the public which relies on cell phones to communicate in an emergency.

The federal FirstNet Authority has the mission to deliver a nationwide public safety broadband network, with particular emphasis on providing coverage in rural areas. How would your department capitalize on improved coverage in Lamoille County?

We would look at expanding our use of applications. If the coverage was reliable, I could see the department using cell phones more frequently to communicate. Right now, our geography prohibits communication in some areas. I have high hopes that expanded coverage will improve our ability to serve the people of Vermont.

(First SatCOLT continued pg. 1)

AT&T continues work on new site builds in Vermont. Under the FirstNet contract, AT&T is committed to building more than 35 new sites. A part of Vermont's opt-in process was to identify those areas of the state most in need of coverage and press for new infrastructure. That resulted in the identification of general site locations. AT&T has contacted landowners at all of the new tower sites and they have begun the engineering process. More than half of the new tower sites are being built at locations where there currently is no cell tower. AT&T has until 2022 to fulfill its commitment for site builds in Vermont or the company will face federal fines. Beyond 2022, AT&T will continue to expand its nationwide network.

"While the Public Safety Broadband Network Commission identified specific areas for sites, we anticipate that a range of barriers could prohibit some of the towers from going up at the targeted locations," explained LaValley. "The commission urges anyone with suggestions for site locations to contact us. There could be areas where a viable alternative might be identified for a location AT&T is having difficulty building on. The PSBC will actively monitor progress made in this area."

To contact the PSBC, go to the commission web site at www.PSBC.Vermont.gov.