



A conversation with . . .

Chris LaMonda

Barre Town EMS Department Director

Chris LaMonda began his EMS career when he volunteered in 2003 at Essex Rescue and continued that work for 10 years. During that time, he also worked as a full-time public school teacher. Combining his interests in education and EMS, he eventually moved to the University of Vermont. At UVM he worked as a full-time faculty member and EMS instructor. He joined the Barre Town EMS Department in 2014 as a full-time field medic. He stepped into the full-time director position in 2015. The department has 14 full-time EMS providers and 10 per-diem EMS staff. They responded to 3,800 calls last year and operate out of three stations. They serve the towns of Barre, Berlin, Washington, Orange and Topsham.

What are the communication challenges facing Barre Town EMS?

Our most pressing need is for better radio and cell phone connections. We need reliable service that ensures our cell phones work every single time we need them—whether to make a call to the hospital or using Active911 to see the latest maps. We have little or no cell phone coverage in some of our service areas. Topsham, Washington and Orange are particular problem areas. The geography of the area even impacts our radio coverage. On Highway 302 there is an area called “the heights.” Depending on what side of the road you are on, you will either lose or pick up service.

What technology do you rely on to do your job?

In addition to two-way radios, employees use cell phones to communicate with the hospital and between stations. We have three ambulances that are in service each day. A laptop is carried in each in-service ambulance for the day. We have used the laptops for the last two years to collect data needed for state reporting requirements.

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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. A new, innovative public-private partnership will be established to deploy the Nationwide Public Safety Broadband 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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FirstNet Set to Announce National Partner Soon

The public safety community nationwide is watching and waiting for a contract to be awarded to a commercial partner for the building of a Nationwide Public Safety Broadband Network (NPSBN). The First Responder Network Authority (FirstNet) was set to announce the winner of the Request for Proposal in November, but a legal challenge by one of the bidding groups has delayed that announcement. Rivada Mercury filed a lawsuit in the U.S. Court of Federal Claims protesting that their proposal was deemed not good enough to be included in the competitive range. It appears that the earliest this protest could be addressed in court, and a subsequent award made to the winning company, is March. However, once a contract is awarded, Vermont and the rest of the states are slated to benefit from the buildout of the first high-speed, nationwide wireless broadband network dedicated to public safety entities. Such a network aims to provide a single interoperable platform with priority access for public safety communications. For a detailed description of the network go to www.PSBC.Vermont.gov. This newsletter is meant to provide a project update to the public safety community and news on topics related to technology and the broadband network.



“Today, every crime we investigate could have some kind of tech involved. Technology has shifted our approach to solving crimes.

- Michael Fitzgerald, Chief
Brattleboro Police Department

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Vermont’s Preparation

To guide and prepare for the development of the NPSBN in this state, the Vermont Public Safety Broadband Network Commission was established by Executive Order in 2013. The PSBC is supported administratively by the Department of Public Safety. The PSBC was created to help plan and facilitate the building of a public safety broadband network in Vermont. The PSBC advises FirstNet and the Governor on issues related to the network. Currently, the PSBC is preparing to receive a draft state plan from FirstNet for the buildout of the network in Vermont. An RFP for technical advising was recently issued by DPS and it is hoped a contract will be signed soon.



Terry LaValley, First Net SPOC & PSBC Chair

The intent is to have in place the technical broadband expertise the commission will need to evaluate the draft plan when it is received. The PSBC and DPS hope to facilitate a meeting on FirstNet and a technical demonstration for Vermont first responders after FirstNet announces the winner of the national contract to build the network. It is anticipated such a meeting will be held this summer. Once buildout begins nationwide, the network is required to be substantially in operation by 2022.

In This Issue

- Update on Vermont preparations for FirstNet
- Vermont first responder use of technology

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



Tech Shifts Approach to Solving Crime

With more than 10,000 calls per year, the Brattleboro Police Department eagerly investigates any new technology that enables them to respond more quickly and safely. This perspective has allowed them to increase the efficiency of their evidence processing and expand their investigative tool base.

"We've been fortunate to have people on staff who are enthusiastic about technology," said Police Chief Michael Fitzgerald. "They, in turn, train others and show the benefits of new technology. Resistance to technology, many times, is out of fear of something a person is unfamiliar with. We need to view change as good."

Brattleboro PD has 42 staff members, 27 of them are sworn officers. As with most of today's police forces, they are increasingly asked to deal with quality of life issues. They serve a 32-square-mile area and a population of more than 12,000 people. Officers respond not only to criminal complaints, but also to mental illness related incidents, family disturbances, and neighborhood noise complaints. It can stretch their resources very thin. When an opportunity arose in 2004 to save both time and storage space, the department jumped on it. They put in place a new evidence bar coding system.



BPD Chief Michael Fitzgerald & Detective Erik Johnson

"We used to use three-ring binders to track and store evidence. We generated lots of paperwork that had to be tracked, stored and retrieved when needed," explained Detective Erik Johnson. "It was very time consuming."

The new system allowed the department to record and track evidence through a bar code affixed to each piece of evidence. The item is scanned and recorded into a database that automatically generates a report. The binders were gradually replaced by digital reports. The system also flags evidence and lets personnel know when it can be disposed of, further saving storage space.

In recognition of their efforts, the department received a Leadership in Technology Award from the International Association of Chiefs of Police.

Since then, the department has instituted digital cameras in their cruisers. All footage is recorded on a digital loop and the encrypted video is loaded on a department server. A simple software interface enables officers to review footage and pull up only the portions of a recording needed as evidence. On-duty patrol officers utilize rugged laptops in their cruisers with an internet connection to access criminal justice information. One cruiser is equipped with a license plate reader to do DMV checks. A department intranet allows reports to be generated electronically and then become accessible to both the officer and other personnel. The department also uses MorphoTrak, a fingerprint identification system that allows for the scanning and storage of fingerprints. Smart phones are issued to supervisors and detectives.

Chief Fitzgerald is hopeful that FirstNet will usher in faster and more reliable broadband service to their area. As is the case in much of Vermont, the topography of the area makes cell coverage difficult in some locations. With a dedicated high-speed broadband service available to them, Brattleboro PD may be able to file all of their cases electronically and generate little or no paperwork.

"Technological changes definitely have impacted how we extract, store and access information," said Fitzgerald. "We look forward to any new technology that allows us to do our job more effectively."

How are VT first responders using technology?

With a challenging topography and rural landscape, Vermont's first responders must be resourceful in putting in place ways to communicate effectively while on the job. We asked first responders about what technology is currently working for them and what they look forward to from a public safety high-speed wireless broadband network. There are longer stories on each department on our web site at www.PSBC.Vermont.gov.

We operate with 45 members, protect 4.6 sq miles and respond to 500+ calls per year.

Primary means of communication is 2-way radio. Use an incident command app, *I Am Responding*. iPads are used in engine, ladder truck and mobile command truck. Personnel utilize own cell phones.

"FirstNet is something that will enable future technology use—be it a CAD system or GPS locators in all vehicles. Technology has helped us be more efficient, allowing for better response times and accounting."



Essex Junction Fire Department Chief Engineer Chris Gaboriault

We operate with 5 full-time officers, 5 part-time officers and respond to 1,850 calls per year, with 177 arrests.

Primary means of communication is LMR and rugged laptops with air cards in cruisers. There is one town-issued smart phone, others use personal cell phones. All full-time officers have body cameras.

"The biggest challenge for smaller agencies is having the budget to supply the infrastructure needed to do our jobs. We will need additional funding resources to leverage the new technology enabled by FirstNet."



Castleton Police Department Police Chief Peter Mantello

We have 26 volunteer firefighters and one full-time paid Fire Chief, protect 36 sq miles and respond to 250 calls annually.

Primary means of communication is LMR. Use personal cell phones as a secondary call system and an app, *TwoToneDetect*, to page personnel. Cannot afford to use laptops and tablets.

"With a reliable broadband service, we would know that services like VT-ALERT would work all of the time. Everyone has a cell phone. Anything that is done to make our cell signals more reliable is a benefit to us. If it benefits the fire department, it is a benefit to the community."



Newport City Fire Department Fire Chief Jamie LeClair

FirstNet was made possible by public safety's successful fight for D-Block 700 MHz spectrum, also known as Band Class 14.



When FirstNet launches it will provide high-speed data services to supplement the voice capabilities of today's Land Mobile Radio (LMR) networks. The network will be used for sending data, video, images and text. As the 4G LTE standard used by the network matures, voice communication will also be part of the FirstNet offering.

What is a broadband network?

The term broadband commonly refers to high-speed internet access that is always on and faster than the traditional dial-up access.

What is 4G LTE?

The term 4G refers to the fourth generation of data technology for cellular networks. LTE stands for Long Term Evolution and is short for a developing process for high-speed data for phone and other mobile devices.

(Chris LaMonda continued pg. 4)

You started using Active911 a year ago. How is this application benefiting the department?

Active911 makes the call information very clear, much better than relying on a garbled radio message. The software automatically sends the call out through Lamoille Dispatch. The tone is posted within seconds. We can also send messages to each other. The simplified texting can be very useful in requesting extra trucks. We've found the mapping feature to be helpful, especially in rural areas. It is very affordable. It costs just \$10 per person for the year. However, the application needs reliable cellular access.



Barre Town EMS Department EMS Director Chris LaMonda

What is your opinion about FirstNet?

It makes sense. Emergency services should have priority for coverage. It will be important to see how FirstNet defines who is a first responder. Cost will also be important. I do not want to carry two cell phones. How will FirstNet costs compare to what I am paying now on my family plan?"

FirstNet Note - How EMS Will Benefit

Using the FirstNet network can improve situational awareness and decision-making by bringing broadband, high speed data connectivity to the ambulance and the patient in the field. The network will make it possible to use new diagnostic tools, such as ultrasound and CT in the ambulance, to enhance treatment capability. This kind of connection, while units are on the scene and during transport, aims to improve all levels of pre-hospital care.