STATE OF VERMONT
ENHANCED 9-1-1 BOARD
General Meeting #1
19 January 2021
Location: Meeting held via Microsoft Teams due to the pandemic.

10:05 AM – Call to Order
Chair Marcoux brought the meeting to order. The following were in attendance via Microsoft Teams:

Board Members Present	*Staff Members Present*	*Others Present*
Sheriff Roger Marcoux, Chair	Barbara Neal, Executive Director	Stephen Whitaker
Chief Steven Locke, Vice-Chair	Soni Johnson, Board Clerk	Lee Krohn
Captain Lance Burnham	Jared Lamere, E911 IT Manager	Matt DeTura
Heather Dale Porter*		Dave Hopkins
Jerome Pettinga		Phillip Sisk
Kelly Kennedy		Michelle Painter Lama
Brian Keefe		Anthony Skelton

*Dale Porter left the meeting at 11:08 AM.

Approval of Minutes
- General Meeting #4 – 11/5/20 – Motion: Captain Burnham made a motion to accept the minutes as written; 2nd by Jerome Pettinga. There was no discussion and the motion passed unanimously by voice vote.

Outage Notification Rule
Executive Director Neal provided an overview of the Outage Notification Rule and LCAR's comments.

Motion: Brian Keefe made a motion to adopt the approved rule; 2nd by Jerome Pettings. There was no discussion and the motion passed unanimously by voice vote. A copy of the adopted rule can be found on the E911 Board website (https://e911.vermont.gov/).

Governance Update and Discussion
Executive Director Neal provided an overview of an executive order issued by the Governor's Office concerning the creation of the Agency of Public Safety and the move of the Enhanced 911 Board to the new agency.
Public Comment: Mr. Whitaker commented that the E911 Board should not be part of the Agency of Public Safety. The VTA should be revived with an increased emphasis on resiliency and the E911 Board should be part of that. The Board should not give up its executive authority and be just an advisory board.
Board Discussion: The legislature could decide to make changes to the executive order. Executive order leaves the Board intact; Board would answer to the Agency Secretary instead of the Governor. E911 enabling statutes should continue to protect the program mission. Executive Director Neal & Chair Marcoux have had (and will continue to have) meetings with DPS Commissioner Schirling concerning this possible move/governance change.

Budget Status
Executive Director Neal provided a status update on the VUSF shortfall and its impact on E911's budget. E911 is not likely to receive its full appropriation for FY21.
Board Discussion: The VUSF is no longer a reliable source of funding. Changes cannot be made to the VUSF without involvement from the legislature. Will E911 be able to trim enough from the FY21 budget to make up the shortfall (possibilities include not filling a vacant position, not saving this year's installment of the system replacement fund, and not fully reimbursing PSAPs)? VUSF funds have been put aside (but not used) in the connectivity fund; could the legislature choose to release some of those funds to E911?

Chair Marcoux asked Executive Director Neal to reach out to legislative contacts to make sure they are aware of the issue. He will also consider forming a sub-committee to deal with this issue.

School ECS Compliance Status
Executive Director Neal provided a status update on VT school ECS compliance; a copy of her report is attached to these minutes. Executive Director Neal also provided a brief overview of the ECS compliance rule (how it applies to all ECS systems and not just the ones in schools) as well as giving a brief description of the E911 ECS compliance program.

Discussion of Nashville, TN Event
Executive Director Neal provided a summary of the 12/25/20 event and its impact on Tennessee 911 & First Net. She also provided details as to how the VT 911 system differs from the TN 911 system.
Board Discussion: Chief Locke asked for confirmation that the 7-digit "last ditch" number (set up to route 911 calls to PSAPs in case of system failure) was set up. Answer – yes.
Chair Marcoux suggested that board staff should coordinate with Vermont Emergency Management to create scenarios of different types of system failures/outages and conduct exercises accordingly.
Public Comment: Mr. Whitaker commented that the Board needs to test the resiliency of the system. He also stated that E911 should oversee an incident from the first 911 call all the way through dispatch; if a call can get through to 911 but 911 cannot connect to dispatch then the system is broken. Multiple documents/emails, provided by Mr. Whitaker, have been attached to these meeting minutes.

Public Comment
▪ Mr. Whitaker commended the Board on all its work on the Outage Notification Rule and reminded the Board that there are other rules that need to be created or updated.

New Business
▪ Position Move Request – Executive Director Neal informed the Board of a request from the Department of Public Safety to move a call-taking position from the Williston PSAP (currently has nine positions) to the Westminster PSAP (currently has seven positions). Discussion was had concerning the cost of this position move and possible impact to their ability to answer calls from their primary catchment areas. Executive Director Neal and board staff will look into both issues.

Next Meeting Date & Adjournment
The next quarterly board meeting will take place on April 13, 2021.

Motion: There being no further business, Captain Burnham made a motion to adjourn; 2nd by Chief Locke. There was no discussion and the motion passed unanimously by voice vote. The meeting adjourned at 11:53 AM.
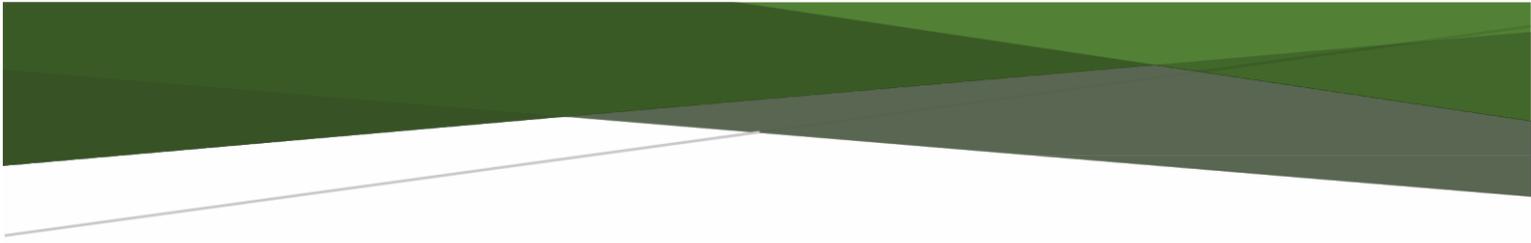
Respectfully submitted:

Soni Johnson   1/27/21
Soni Johnson, Board Clerk   Date

School ECS Compliance Status Report
January 12, 2021

Barbara Neal
Executive Director
Vermont Enhanced 911 Board
barbara.neal@vermont.gov

School ECS Compliance Status

Background: In the spring of 2016, the Enhanced 911 Board resumed its work of assessing the capabilities of telecommunications systems in Vermont's schools.   The assessment focused on whether existing multi-line telephone systems (MLTS), now referred to as Enterprise Communications Systems (ECS), could send accurate and specific location information to Vermont 911.

The phrase "accurate and specific location information" means that when a 911 call is placed from the school's phone system, the 911 call-taker can see not only the physical address of the school building, but also the unique phone number in use and the specific location (room number, floor number, etc.) of the caller within the school. This information is also referred to as the "dispatchable location". The ability of a 911 call-taker to see the dispatchable location information, and pass it on to emergency responders, is critical in events where a caller is unable to speak or does not know their specific location or phone number.

In the fall of 2016, only 60 of Vermont's 304 public schools (less than 20%) had demonstrated the ability to send all required location information to 911. By July 1, 2019, the number of schools capable of sending this information had increased to 178, or approximately 58% of public schools.   The increase was due in large part to heightened awareness of the requirements and the availability of funds through the 911 Compliance Grant Program (see page 3) to support technology upgrades in the schools.

July 2019:   New Rule Governing 911 Requirements for Enterprise Communications Systems: In July 2019, the Enhanced 911 Board adopted a new rule to codify the 911 location requirements for ECS systems.   In addition, a new requirement was incorporated to ensure that all users of an ECS system have the ability to directly initiate a call to 911 without having to dial any additional digit, code, prefix or post-fix. This requirement is commonly referred to as " Kari's Law ".

Current Status: (See Figure 1 on p. 2) As of 1/12/2021:

- o 242 of Vermont's 304 public schools (80%) are compliant with all requirements of the rule - including dispatchable location and direct dial capability. This is an increase of 64 schools since July 1, 2019.
- o 62 of Vermont's 304 public schools (20%) have not yet demonstrated compliance with the dispatchable location and/or direct dial requirements. Of these:
  - o 20 schools have been awarded compliance grant funds and have work in progress to upgrade their ECS to meet the requirements.
  - o 39 schools have an approved plan and waiver on file with the 911 Board, including appropriate interim steps to ensure end user awareness.
  - o 3 schools have been asked to provide a written plan to achieve compliance along with a formal waiver request. The deadline for providing the written plan has been extended multiple times as a result of the COVID-19 pandemic.

Note: All Vermont public schools have demonstrated the ability to provide 911 with the correct street address and town name for their facilities.
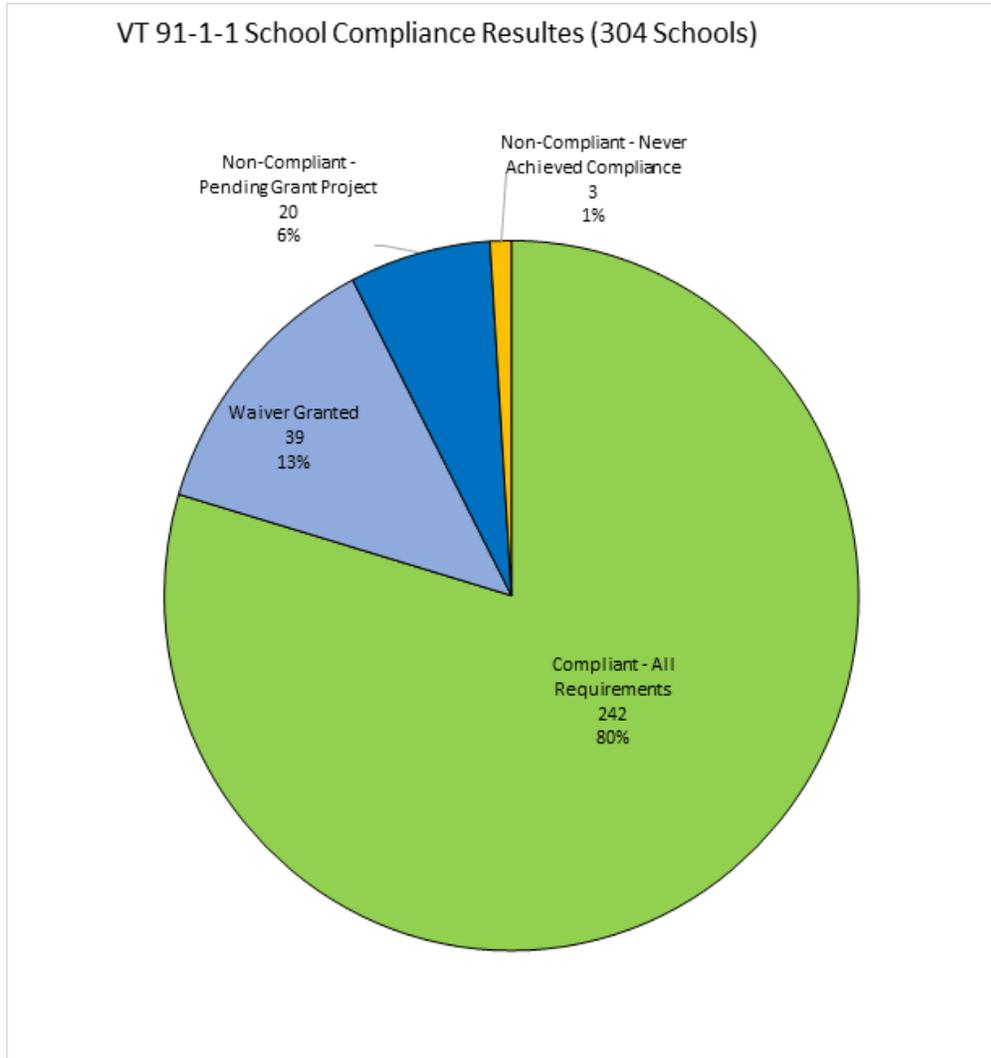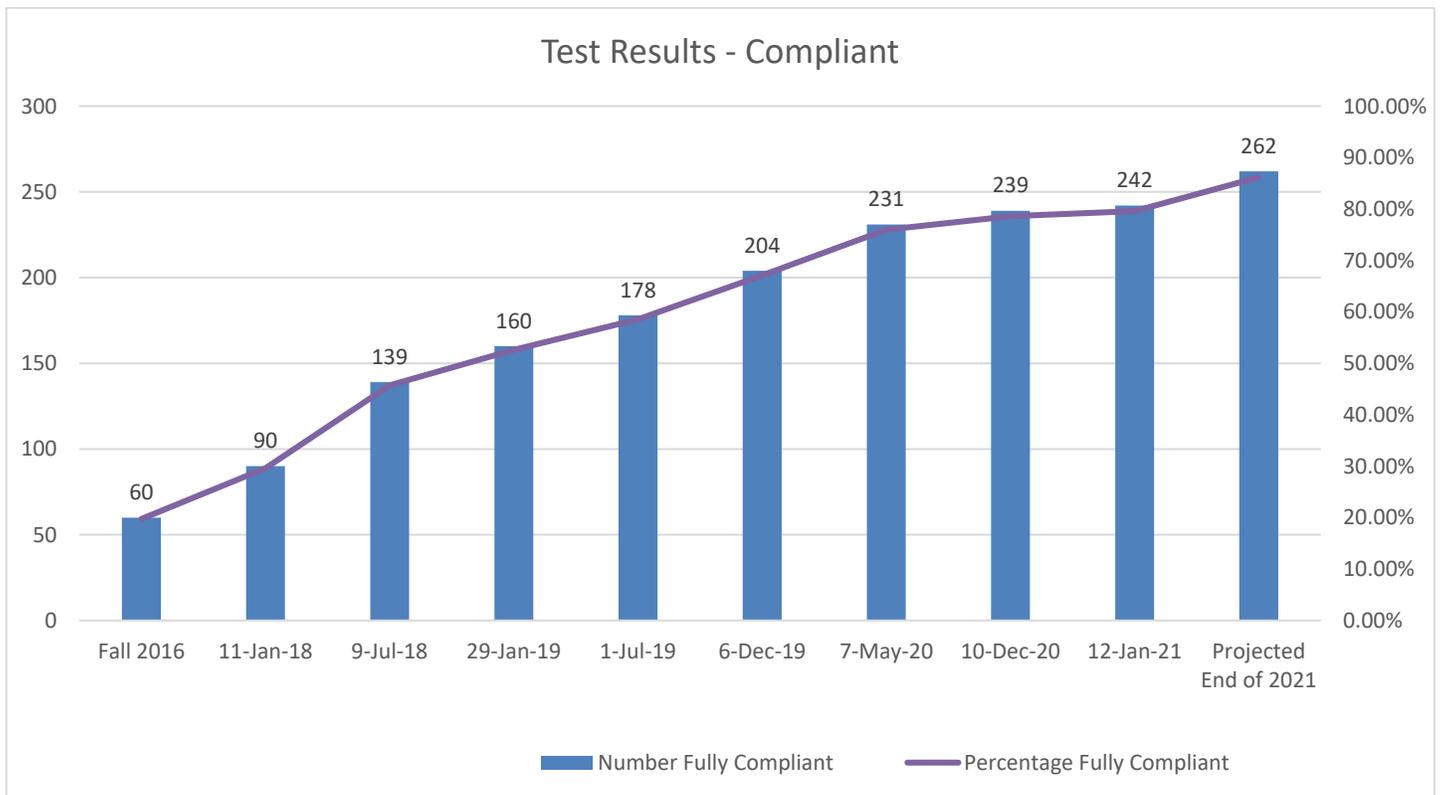
Figure 1: Current Status of School ECS Compliance

Progress Over Time: Figure 2 shows the change in schools demonstrating compliance since the Fall of 2016:

Test Results - Compliant

Date	Number Fully Compliant
Fall 2016	60
11-Jan-18	90
9-Jul-18	139
29-Jan-19	160
1-Jul-19	178
6-Dec-19	204
7-May-20	231
10-Dec-20	239
12-Jan-21	242
Projected End of 2021	262

Legend: ■ Number Fully Compliant — Percentage Fully Compliant

Figure 2: Progress Over Time

Moving Forward: Based on known "projects in progress" as a result of 911 Compliance Grant awards, the Enhanced 911 Board anticipates at least 20 additional schools will become compliant with both the dispatchable location and direct dial requirements by the end of 2021.

911 Compliance Grant Program: The Board is currently assessing remaining grant funds availability to determine if another grant application period is possible before the end of the grant program on 6/30/2021.

END OF REPORT

Damage to communications grid in Nashville bombing prompts questions of preparedness

Monday, January 11, 2021

James Keck

The violent suicide bombing that rocked downtown Nashville, Tenn., on Christmas morning and devastated dozens of businesses in the area also exposed the difficulties with an American reliance on reactive, rather than proactive, emergency planning efforts.

While much focus has been placed on the bomber, Anthony Warner, and his potential motives, the wide-reaching effects of his act should be of greater concern, according to disaster management professor James Keck of the Virginia Commonwealth University's Homeland Security and Emergency Preparedness program. At the time, the bombing caused severe structural and infrastructure damage to a nearby AT&T service facility, plunging a swath of AT&T's service area into silence throughout the region. T-Mobile services faced interruption and the Nashville International Airport had to temporarily ground flights due to resulting communication issues.

Poor handling, both before and immediately after the incident, raises serious concerns about the future, according to Keck, who has previously worked as Deputy State Coordinator for the Virginia Department of Emergency Management.

"Dealing with terrorists is difficult," Keck said. "They only have to get it right once. Authorities have to get it right every time. The electrical infrastructure for example is very vulnerable."

He cited another incident from 2013 when domestic terrorists assaulted the Pacific Gas and Electric Company's Metcalf Transmission Substation in Coyote, Calif. Gunmen cut fiber-optic telecommunications cable used by AT&T and then opened fire on 17 electrical transformers, resulting in more than $15 million worth of equipment damage.

"We don't have 24/7 guarding of those kinds of facilities, so they're out there, some are in remote areas," Keck said. "Somebody that perhaps studies the infrastructure, knows a great deal about it, could wreak real havoc on the U.S. by knocking out power, which would also knock out communications."

That said, he noted that there are infrastructure methods of hardening certain facilities against such attacks. Backup systems like batteries and generators can go a long way. Mobile communication platforms, hosted by certain communications companies, also can be rolled out throughout the country, according to Keck, as a means of countering the sort of widespread damage seen most often in events like hurricanes. Several of these rolled out following the bombing in Nashville.

According to the First Responder Network Authority (FirstNet), which provides communications connectivity for first responders through AT&T, the system first switched to temporary battery power in the hours immediately following the explosion. However, the bomb destroyed two local water mains in the process, flooding backup power generators and leaving them inoperable.

For several hours, the network was left in a lurch as batteries ran out and services were unable to be rerouted. Local FirstNet services were restored within four hours after batteries were exhausted thanks to the deployment of Satellite Cells on Light Trucks and Cells on Wheels linked to FirstNet via satellite. Within 24 hours, AT&T deployed seven mobile cell sites downtown and throughout Nashville. As a result, the immediate vicinity had service again within the day, and nearly all other affected FirstNet users had services again within 48 hours.

"The purpose of FirstNet is to provide connectivity to first responders regardless of conditions or circumstances, and that places a heavy burden on the Authority and AT&T, the service provider, to deliver the most resilient network achievable," FirstNet Authority Board Chair Tip Osterthaler said. "As we absorb the lessons learned from this attack, we will adjust our risk management and investment strategies as appropriate to deal with the changing threat environment."

Mobile assets saved the situation in the case of Nashville, but they, like many redundancies that can mitigate the effects of attacks like this one, can be cost prohibitive.

"In the threat analysis of these kinds of things, they're looking at the frequency of these kinds of events – that's where they'll spend their money first," Keck said. "Even if it might be a large magnitude item, if it's not very likely to happen, the likelihood of spending money on it isn't really high. There's a number of systems that could be

purchased and put in place – backups to backups, so to speak.

"Most emergency management organizations have a number of backups, they have batteries, generators, even satellite phones for communications. Most of the first responders have those kinds of capabilities so they can always communicate in some manner. Some even have contracts with certain companies where they can provide mobile communications that are self-contained, have power, that sort of thing. But you have to understand these things cost money to maintain and keep them up to date. It's a critical component of this, in addition to providing training for them."

The nature of these communications platforms means that they can often be put on a truck or in a plane and moved around rapidly. Some reside in strategic locations. Yet Keck emphasized that they are very expensive, both to purchase and to maintain, and they can't solve all problems at once, especially with lone wolf situations, where the broadcasting of a perpetrator's intentions are limited.

The best way forward, according to the professor, is through proactive intelligence gathering and assessment. Yet in pointing to the U.S. track record, in events like 9/11, Keck noted that the nation isn't particularly well known for its success in this area. This hasn't been helped by the fact that actual successes often aren't publicized.

"It's a difficult thing to manage and deal with," Keck said. "But we tend to be reactive instead of proactive."

From:	Roger Marcoux <Roger.Marcoux@LamoilleSheriff.org>
Sent:	Wednesday, January 06, 2021 9:22 AM
To:	Neal, Barbara
Subject:	Fw: not bullets but a fussilade

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

From: Stephen Whitaker <whitaker.stephen@gmail.com>
Sent: Tuesday, January 5, 2021 8:07 PM
To: Roger Marcoux
Subject: not bullets but a fussilade

E-911 is a subset, albeit a critical one, of the communication needs in Vermont. Vermonters and visitors will always need a reliable way to speak and text their emergency conditions to the emergency response systems and personnel. These systems must not be allowed to continue to become less reliable and resilient as broadband rolls out.

A resilient telecommunications system will support these voice and broadband data services for every address and mobile voice, cellular systems for when emergencies occur away from home, on the road or on the trail, or in the field.

The coordination of mobile wireless communications is currently only being done in a market driven fashion which leaves some households and vast geographic areas in the lurch or even many "served" areas with only one carrier.

The Vermont Telecommunications Authority was formed to address broadband, middle mile fiber and mobile wireless, filling gaps that markets cannot economically address. A revived VTA can lead and build the coordination so that the infrastructure - fiber and fixed wireless is designed, funded and operated in such a way that E-911 call delivery - no matter what - is addressed as a fundamental. This support is needed now by the emerging Communications Union Districts or CUDs.

Related to E-911 is the overall transition of other emergency communications to a mobile broadband system that allows for high speed voice and data supporting emergency response and disaster preparedness/recovery. Nashville has demonstrated that this must be much more than FirstNet. This too will ultimately become a system that has a resilient and diverse routed fiber back bone to allow for coverage in times of emergency and when some components fail or are at risk due to weather events, pole failure, fiber cuts or other disruptions.

Needless to say, we are not there yet and we now need both skilled team and a focused mission to muster the coordinating function to help us get there.

These examples are just the tip of the iceberg with regards to the functions that a resilient telecommunications system will support. The Covid crisis has emphasized the need for ubiquitous high speed data transmission for remote learning, remote work, telemedicine and the social interactions represented by Zoom and its equivalent or better videoconferencing tools.

Similarly, the need for mobile wireless communications will benefit from the use of a ubiquitous resilient fiber backbone supplying small cells connectivity to complement the existing tall cell towers that have limited ability to reach areas tucked into our rural valleys.

5G is the new buzzword and a neat marketing message, having little relevance to most of Vermont's rural areas, but Vermont will be left even further behind if we fail to craft and implement our own strategy or follow the same laissez faire path that has left large parts of the state still without the earlier generations of 3G and 4G.

We can do this!

Nashville bomb cut 911 lines, blacked out medical records

TALI ARBEL

NASHVILLE, TENN. — The Christmas Day bombing in downtown Nashville led to phone and data service outages and disruptions over hundreds of miles in the southern U.S., raising new concerns about the vulnerability of U.S. communications.

The blast seriously damaged a [key AT&T network facility](#), an important hub that provides local wireless, internet and video service and connects to regional networks. Backup generators went down, which took service out hours after the blast. A fire broke out and forced an evacuation. The building flooded, with more than three feet of water later pumped out of the basement; AT&T said there was still water on the second floor as of Monday.

The immediate repercussions were surprisingly widespread. AT&T customers lost service — phones, internet or video — across large parts of Tennessee, Kentucky and Alabama. There were 911 centers in the region that couldn't take calls; others didn't receive crucial data associated with callers, such as their

locations. The Nashville police department's phones and internet failed. [Stores went cash-only](#).

At some hospitals, [electronic medical records](#), internet service or phones stopped working. The Nashville airport halted flights for about three hours on Christmas. Rival carrier T-Mobile [also had service issues](#) as far away as Atlanta, 250 miles away, because the company uses AT&T equipment for moving customer data from towers to the T-Mobile network.

"People didn't even realize their dependencies until it failed," said Doug Schmidt, a Vanderbilt University computer science professor. "I don't think anyone recognized the crucial role that particular building played" in the region's telecom infrastructure, he said.

The explosion, which took place in the heart of the Nashville's historic downtown, killed the bomber, injured several people and damaged dozens of buildings. Federal officials are investigating the motive and haven't said whether the AT&T building was specifically targeted.

AT&T said 96% of its wireless network was restored Sunday. As of Monday evening, AT&T said "nearly all services" were back up. On Wednesday, it was "activating the last of the remaining wireline equipment."

AT&T said it sent temporary cell towers to help in affected areas and rerouted traffic to other facilities as it

worked to restore power to the Nashville building . But not all traffic can be rerouted, spokesperson Jim Greer said, and there was physical equipment that had to be fixed in a building that was part of an active crime scene, which complicated AT&T workers' access.

"We are all too dependent on phone, cell phone, TV and internet to have outages for any reason," Rep. Jim Cooper, the Democrat who represents Nashville in Congress, said in an emailed statement Wednesday. He said the U.S. "needs to harden our telecom facilities so we have greater redundancy and reliability" and called for congressional hearings on reducing telecom vulnerabilities.

Smoke rises from downtown on Dec. 25, 2020 in Nashville. (Andrew Nelles / The Tennessean)

The impact on emergency services may have raised the most serious flags. At one point, roughly a hundred 911 centers had service problems in Tennessee alone, said Brian Fontes, head of the National Emergency Number Association. A 911 call center should still be operational even if there is damage to a phone company's hub, said David Turetsky, a lecturer at the University at Albany and a former public safety official at the Federal Communications Commission. If multiple call centers were out of service for several days, "that is of concern," he said.

Cooper and experts like Fontes also gave AT&T credit for their work on reinstating services. "To be able to get some services up and running within 24 to 48 hours of a catastrophic blast in this case is pretty amazing," Fontes said.

Local authorities turned to social media on Christmas Day, posting on Facebook and Twitter that 911 was down and trying to reassure residents by offering other numbers to call. A Facebook page for [Morgan County 911](#) in northern Alabama said Saturday that Alabama 911 centers were up and running but advised AT&T customers with issues to try calling via internet, and to go to the local police or fire station for help if they couldn't get through.

The Nashville police department uses the FirstNet

system built by AT&T, which the carrier boasts can provide "fast, highly reliable interoperable communications" in emergencies and that is meant to prioritize first responders when networks are stressed. But problems emerged around midday Friday, said spokesperson Kristin Mumford. The department had to turn to a backup provider, CenturyLink, for its landlines and internet at headquarters and precincts and obtained loaner cellphones and mobile hotspots from Verizon.

The transition to backups was "actually rather seamless," Mumford said, although the public couldn't make calls to police precincts. She said the AT&T service started coming back Sunday and as of Wednesday morning, overall service with cellphones, internet and landlines was "about 90% up."

The Parthenon, a museum replica of the Parthenon in Athens located about three miles from the explosion, still didn't have a working phone four days after the blast. But its credit-card system came back online Tuesday, said John Holmes, an assistant director of Metro Parks, the museum's owner. During the weekend, the museum was cash-only, although it let in people without cash for free.

It's not as if the physical vulnerability of communications networks comes as a surprise. Natural disasters like hurricanes frequently wipe out service as the power goes out and wind, water or fire damage infrastructure.

Recovery can take days, weeks or even longer. Hurricane Maria left Puerto Rico in a [near communications blackout](#) with destroyed telephone poles, cell towers and power lines. Six months later there were still areas without service.

Software bugs and equipment failures have also caused widespread problems. A [December 2018 CenturyLink outage](#) lasted for more than a day and disrupted 911 calls in over two dozen states and affected as many as 22 million people. That included blocked calls for Verizon customers and busy signals for Comcast customers, which both used CenturyLink's network.

"Avoiding single points of failure is vital for any number of reasons, whether it has to do with physical damage, human error, hostile action or any of the above," Turetsky said. "We need our networks to be resilient regardless of earthquake, tornado, terrorist, cyber attacker or other threat."

Recommended on Chicago Tribune

Neal, Barbara

From:	Roger Marcoux <Roger.Marcoux@LamoilleSheriff.org>
Sent:	Wednesday, January 06, 2021 9:21 AM
To:	Neal, Barbara
Subject:	Fw: What's different now, warranting a New Vermont Telecommunications Authority?

From: Stephen Whitaker <whitaker.stephen@gmail.com>
Sent: Tuesday, January 5, 2021 8:08 PM
To: Roger Marcoux
Subject: What's different now, warranting a New Vermont Telecommunications Authority?

>Date: Sun, 20 Dec 2020
>
>The Vermont Telecommunication Authority was created in statute around 2007.

>In 2014, a bill was passed putting the VTA into
>dormancy. Noteworthy is that the statute was not repealed!
>
>A provision was wisely inserted in the dormancy
>law allowing the Joint Fiscal Committee, when
>the legislature is not in session, to order the
>VTA to resume operations after making a finding
>of significantly changed circumstances. Now is
>such a time as the crutial months that will
>needed to complete Telecommunications plans and
>develop staff and a new governing board
>necessitate that this process begin now rather
>then three or more months from now. $100M in
>federal stimulus for broadband will likely begin
>to arrive in July 2021 so time is of the essence.
>
>The assets and responsibilities of the VTA were
>transferred to the Department of Public Service
>as a new Connectivity Division begining in 2015
>with a statutory Telecommunications and
>Connectivity Advisory Board also created to
>advise the Commissioner on Telecommunications
>plans, grants, minimum speeds and to hold a
>required annual public hearing on these topics.
>No such hearing has been held since 2015. Not one!
>
>The Public Service Department has also
>consistently failed to complete numerous
>versions of the Ten Year Telecommunications
>Plan, plans required under statute, having not
>completed Â a single duly adopted

>Telecommunications Plan since 2004 despite an
>unambiguous statutury requirement that the
>complete Plan be revised and revewed in both
>public and legislative hearings every three
>years! (2007, 2010, 2013, 2017, 2020)
>
>Mapping requirements of both wired and wireless
>coverage, Â inventory of radio frequency
>licenses useful for broadband deployment,
>recommendation of minimum speeds to assure that
>built technology was not soon outmoded, support
>of competitive choice and open access to
>facilities of, and by, competitors to foster not
>only competition, but to enhance service quality
>and lower prices have all fallen by the wayside
>since the Department of Public Service took over
>VTA. Short sighted vision, conflicting politics
>and disregard for statute have been the
>recurring themes of the Department's failures.
>
>Middle mile fiber construction and coordination
>of statewide fiber and mobile wireless service
>enhancements were some of the primary duties of
>the original VTA and would continue to be so
>with a revived VTA, however the emergence of
>Communications Union Districts as a key part of
>a statewide broadband strategy and finance
>framework requires now a surgical enhancement of
>the VTA powers and duties. This can best be done
>with a companion bill introduced after the VTA
>is revived by a vote of the JFC before January.
>
>Resiliency, backup power and E911 call delivery
>Engineered designs for resiliency of core
>transport networks, interconnection with VELCO
>fiber among CUD fiber networks, backup power
>stategies both at homes and mid-network to
>assure emergency call delvery after anticipated
>power outsges, ice and wind storms are all areas
>where statewide uniformly applied design
>principles are needed and will enhance public safety and economic efficiency.Â
>
>Hardened networks designed to "public safety
>grade" can further assure that emergency
>dispatch radio systems will be better able to
>deliver communications among first responders
>and to support recovery efforts after major
>disasters. CUDs also can accrue revenue from
>carrying backhaul from small cells for 4G/LTE
>and radio dispatch system network operators.
>
>The roles and responsibilities of CUDs, their
>obligations to adhere to statewide planning, and
>open access, competitive choice and mobile
>wireless statutory goals, as well as public
>records requirements, and rapid development of
>plans on how best to spend or invest the massive
>$100M in federal stimulus dollars will all

>consume legislative bandwidth so these
>discussions will best be guided by a parallel
>capacity building within the New VTA, rather
>than being mired in an "if then" cunundrum,
>wasting precious time, and likely to result in
>further waste and missed opportunities. That
>bill might also require that VTA Board members
>appointed by the Governor be subject to the advice and CONSENT of the Senate!
>
>These are all issues that were intended to be
>addressed by the revival of the Joint
>Information Technology Oversight Committee, as
>well as where and how the e911 system will also
>begin to catch up on decades overdue rulemaking
>and devise strategies to assure that broadband
>deployments do not further erode the raliability
>of e911 call delivery due to power outages and
>unprotected network architectures.Â
>
>The new E911 Outage Reporting rules just
>completed demonstrate a growing capacity of that
>team to begin to address coverage mapping,
>network reliability and integrated planning
>which may well be a sufficient reason to attach
>the E911 staff to the revived VTA to provide
>wireless mapping and GIS support to this urgent
>broadband resiliency and mobile wireless effort.
>
>Stephen Whitaker