

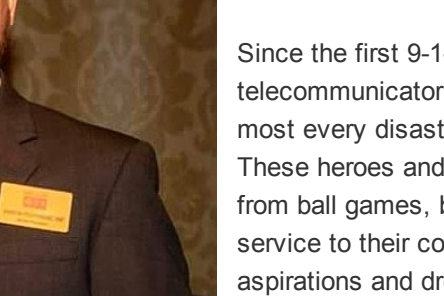


Department of Commerce & Insurance

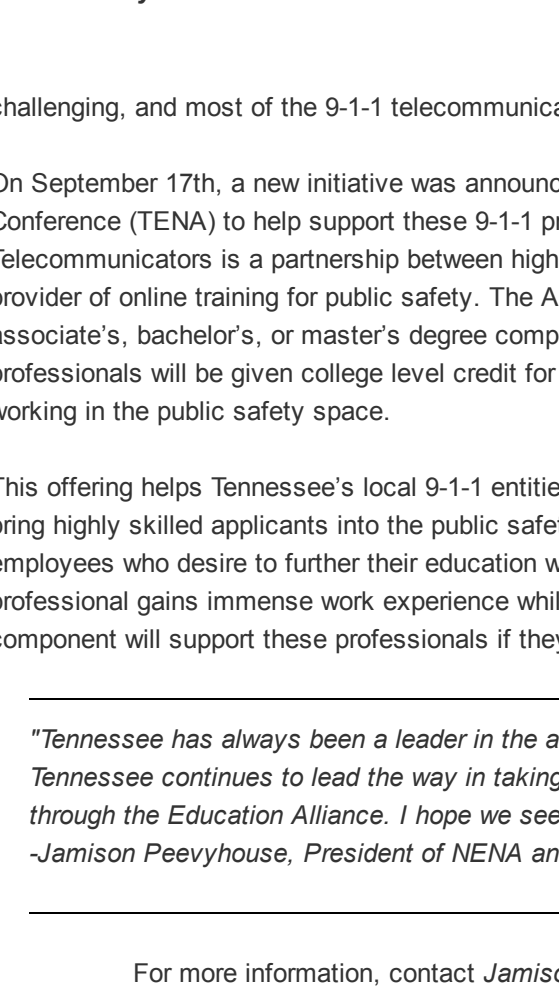
Tennessee Emergency Communications Board

# The Official Newsletter of the TECB

Serving the first, first Responders



TECB Website



**NENA President and TECB Training Coordinator Jamison Peevyhouse announces advanced education opportunities for 9-1-1 professionals at this year's TENA conference.**

## Tennessee Leading the Industry with New Higher Education Initiative

Since the first 9-1-1 call fifty years ago, the telecommunicator has been on the front lines of most every disaster, emergency, and public need. These heroes and heroines routinely give up time from ball games, birthdays, and family barbecues in service to their community. Many have laid aside aspirations and dreams to shoulder the intense demands of a career in 9-1-1.

For the vast majority, stress will force a 9-1-1 telecommunicator to pursue a different career long before retirement. As a comparison, the military typically has a retirement rate of 17%, with law enforcement professionals retiring at much higher rates. In the 9-1-1 profession, that number plummeted to a dismal 2%. Finding qualified applicants to fulfill the mission of 9-1-1 is challenging, and most of the 9-1-1 telecommunicator's hired today will leave the chair within 8 years.

On September 17th, a new initiative was announced at the TN Emergency Number Association Conference (TENA) to help support these 9-1-1 professionals. The Education Alliance for 9-1-1 Telecommunicators is a partnership between higher education providers and Virtual Academy, a leading provider of online training for public safety. The Alliance assists 9-1-1 professionals in obtaining their associate's, bachelor's, or master's degree completely online at a discounted rate. Additionally, 9-1-1 professionals will be given college level credit for in-person and online training they have received while working in the public safety space.

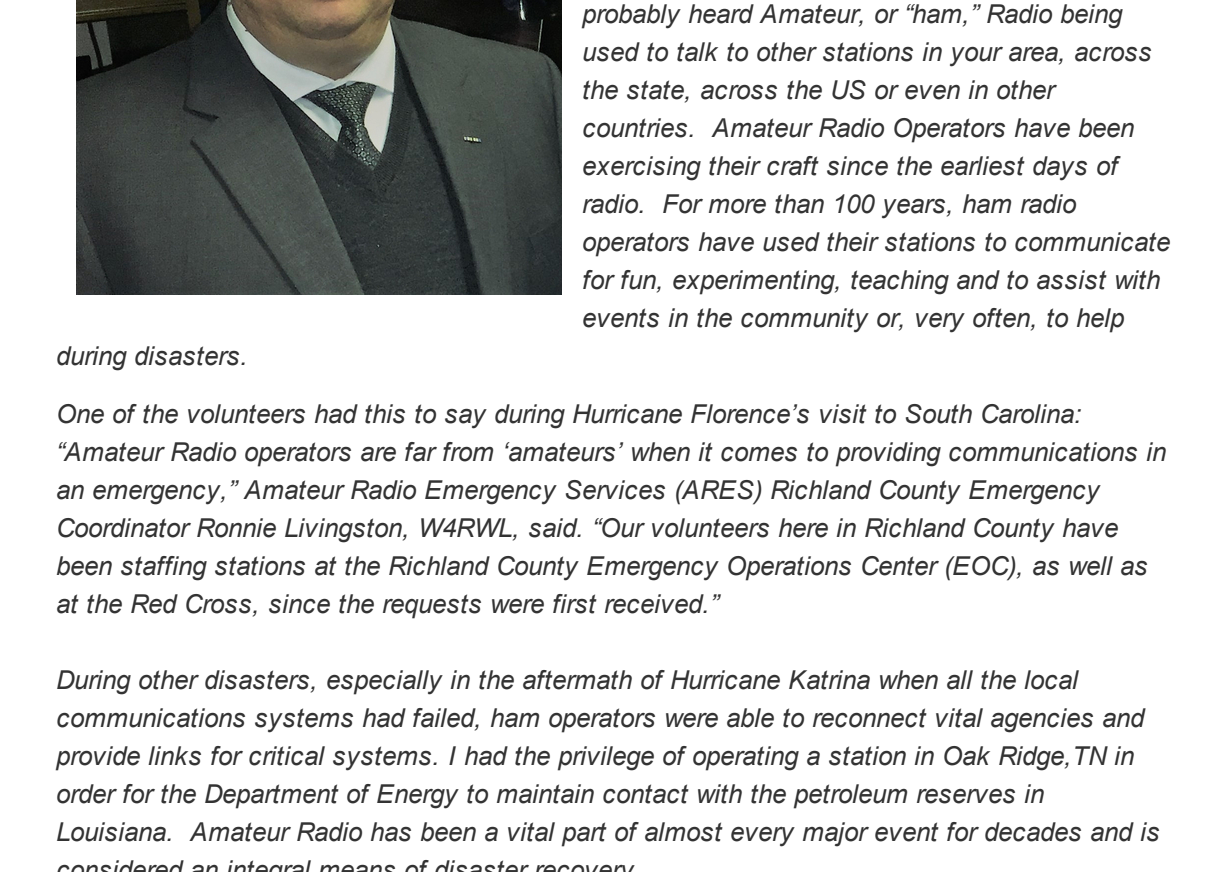
This offering helps Tennessee's local 9-1-1 entities as well. First, it is a recruitment and hiring tool to bring highly skilled applicants into the public safety field. Secondly, it is a retention tool for current employees who desire to further their education while serving the community. Lastly, each 9-1-1 professional gains immense work experience while serving in our industry. The addition of an education component will support these professionals if they leave 9-1-1 to pursue other careers.

"Tennessee has always been a leader in the advancements of 9-1-1. It is great to see that Tennessee continues to lead the way in taking care of the caller, and now the 9-1-1 professional, through the Education Alliance. I hope we see this initiative blossom in every state of the union." -Jamison Peevyhouse, President of NENA and TECB Training Coordinator

For more information, contact Jamison.Peevyhouse@tn.gov or call 800-203-4486.

## Washington County 9-1-1 Shows Training Pride!

Congrats to Washington County 9-1-1 who completed the "Understanding Stress" module under the TECB's online training through Virtual Academy!

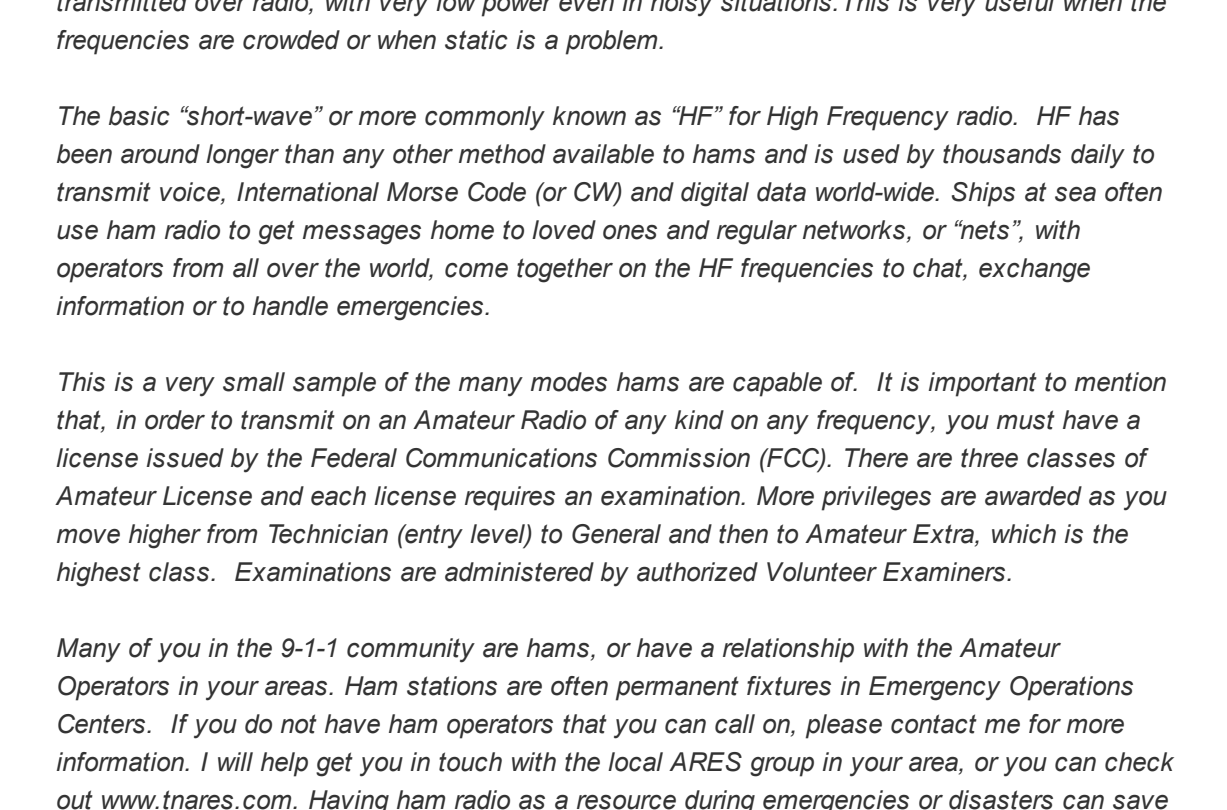


**Washington County 9-1-1**

L to R: *Lohie Haggerty, Amanda Plummer, Donnie Graham, Chelsy Dunbar, Wanda Northrup, Misty Hyton, Melissa Stansberry and Terri Steward.*

## TECB Activities: TENA 2018

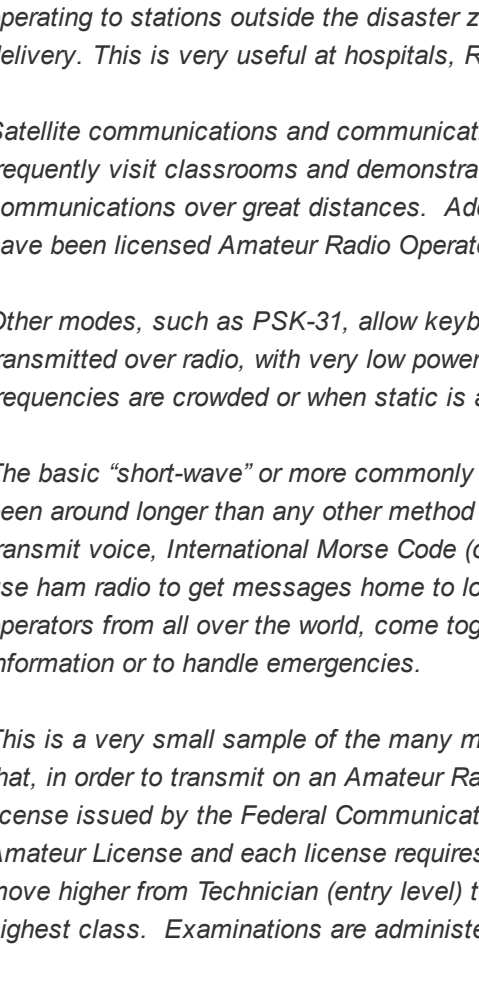
The TECB and staff participated in the 2018 TENA Conference and Expo at the Embassy Suites in Murfreesboro on September 17th. Discussions included the latest updates on Next Generation 911, new board member information, text-to-9-1-1 and roundtable Q&A with the board and staff. For more information about TENA visit <https://www.tena911.com/>



**Executive Director Curtis Subton and staff speak about the TECB's current projects.**

**The Operations Committee met to discuss the possibility of a mobile PSAP for the state.**

**AT&T's Jimmy Lichtenstein speaks about the latest options in 9-1-1 technology.**



## Tech Tip: Next Gen Update

### Amateur Radio in Emergencies

Have you ever heard the phrase, "CQ CQ this is (call sign) calling any station?" If so, you have probably heard Amateur, or "ham," Radio being used to talk to other stations in your area, across the state, across the US or even in other countries. Amateur Radio Operators have been exercising their craft since the earliest days of radio. For more than 100 years, ham radio operators have used their stations to communicate for fun, experimenting, teaching and to assist with events in the community or, very often, to help during disasters.

One of the volunteers had this to say during Hurricane Florence's visit to South Carolina: "Amateur radio operators are far from 'amateurs' when it comes to providing communications in an emergency." Amateur Radio Emergency Services (ARES) Richland County Emergency Coordinator Ronnie Livingston, W4RWL, said, "Our volunteers here in Richland County have been staffing stations at the Richland County Emergency Operations Center (EOC), as well as at the Red Cross, since the requests were first received."

During other disasters, especially in the aftermath of Hurricane Katrina when all the local communications systems had failed, ham operators were able to reconnect vital agencies and provide links for critical systems. I had the privilege of operating a station in Oak Ridge, TN in order for the Department of Energy to maintain contact with the petroleum reserves in Louisiana. Amateur Radio has been a vital part of almost every major event for decades and is considered an integral means of disaster recovery.

Often, when people think of Amateur Radio they think of someone in the basement behind stacks of electronic equipment, glowing tubes and strange noises coming from a speaker. There's ham radio, however, is much different and has evolved with changes in technology. Here are just a few ways Amateur Radio is used today:

Voice communications through local repeaters, allowing seamless coverage for special events (races, marathons, bike rides, etc), or just to stay in touch with fellow hams. Hams have access to VHF and UHF frequencies and there are thousands of repeaters around the country, both digital and analog. These are very similar to the public safety systems you are used to. Using Amateur Radio to cover these types of events can free up public safety resources.

E-Mail over Radio: messages can be sent from a disaster area where no infrastructure is operating to stations outside the disaster zone where they are relayed into Internet gateways for delivery. This is very useful at hospitals, Red Cross shelters and government agencies.

Satellite communications and communications with the International Space Station. Hams frequently visit classrooms and demonstrate how Amateur Radio Satellites allow communications over great distances. Additionally, almost all of the astronauts aboard the ISS have been licensed Amateur Radio Operators and will talk to kids during demonstrations.

Other modes, such as PSK-31, allow keyboard-to-keyboard communications from a computer, transmitted over radio, with very low power even in noisy situations. This is very useful when the frequencies are crowded or when static is a problem.

The basic "short-wave" or more commonly known as "HF" for High Frequency radio. HF has been around longer than any other method available to hams and is used by thousands daily to transmit voice, International Morse Code (or CW) and digital data world-wide. Ships at sea often use ham radio to get messages home to loved ones and regular networks, or "nets", with operators from all over the world, come together on the HF frequencies to chat, exchange information or to handle emergencies.

This is a very small sample of the many modes hams are capable of. It is important to mention that, in order to transmit on an Amateur Radio of any kind on any frequency, you must have a license issued by the Federal Communications Commission (FCC). There are three classes of Amateur License and each license requires an examination. More privileges are awarded as you move higher from Technician (entry level) to General and then to Amateur Extra, which is the highest class. Examinations are administered by authorized Volunteer Examiners.

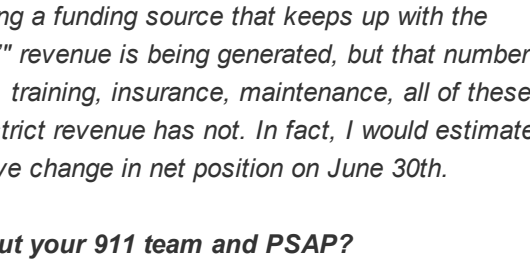
Many of you in the 9-1-1 community are hams, or have a relationship with the Amateur Operators in your areas. Ham stations are often permanent fixtures in Emergency Operations Centers. If you do not have ham operators that you can call on, please contact me for more information. I will help get you in touch with the local ARES group in your area, or you can check out [www.tnares.com](http://www.tnares.com). Having ham radio as a resource during emergencies or disasters can save lives.

For more information on Amateur Radio or getting your license, please visit the ARRL, the National Association for Amateur Radio at [www.arrl.org](http://www.arrl.org).

- Eddie Burchell, K4TYS

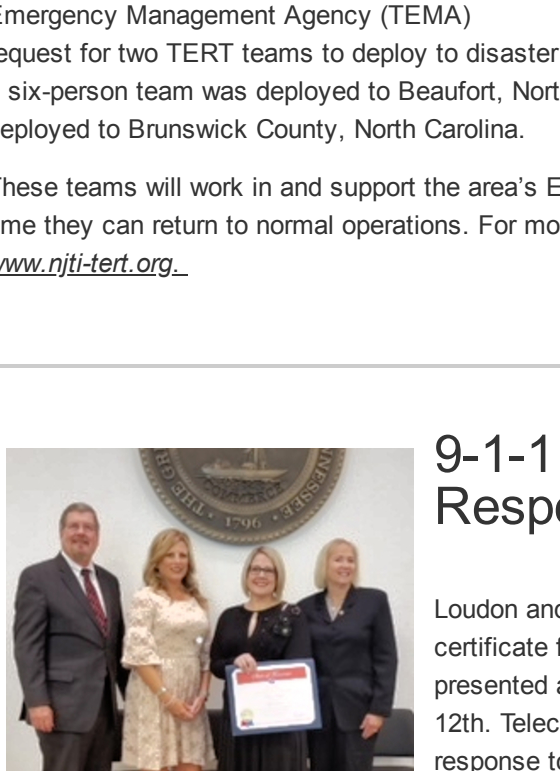
## GIS: True North

This year at the TENA conference, True North announced two new reports that will be included in the regular QA e-mails starting in October. The first concerns ESN topology. NENA guidelines specify there can be no gaps or overlaps between coverage areas, so internal and external polygons must edge-match. This report will contain spatial layers that highlight the gaps and overlaps within your jurisdiction, and also on the boundary with your neighbors. As always, True North is available to help you make these corrections and coordinate boundary changes with neighboring districts. The second report will contain information regarding the road centerlines and how well they match your address points. Feedback was received during the True North TENA presentation, and currently a spatial layer as well as a tabular deliverable will be available to help identify these issues. Both of these reports are part of an effort to shore up these feature classes, and to prepare the centerlines for use in the XLOST function. If you have any questions about these new deliverables, please let us know.



Efforts are under way to start a statewide 9-1-1 GIS user group. Collaboration between districts on hurdles specific to vendor and localized GIS issues would certainly be beneficial. Ed Hawkins is spearheading this effort, so if you are interested, please contact him at [elh1964@gmail.com](mailto:elh1964@gmail.com) or by phone at (731) 358-7932.

True North is still actively engaged with in-person training at various locations across the state. Please visit the training section of the TECB website to find dates and locations near you, or send an e-mail to the Training Coordinator, [Jamison.Peevyhouse@tn.gov](mailto:Jamison.Peevyhouse@tn.gov). True North staff is also available to come on-site and help with training or implementation needs. As always, if you have any questions, concerns, or requests, please send an e-mail to [support@truegeo.com](mailto:support@truegeo.com).



## Industry News

### X, Y Down and Z to Go

In our previous issue, we focused on the Federal Communications Commission (FCC) location accuracy rules. Since that edition, there has been a flurry of activity demonstrating the continued need and emphasis on improved location accuracy for the public safety industry. Here's a look at what's gone down: 1) On September 17th, Apple released iOS 12 which supports device-based hybrid location (DBH), 2) Google announced a partnership with T-Mobile and RapidSOS, bringing location information for Android devices to legacy ALLI systems for T-Mobile callers and the NG911 Clearinghouse for all wireless carriers 3) The Cellular Telecommunications Industry Association (CTIA), the trade association that represents wireless communications carriers, announced that the four largest nationwide wireless carriers will integrate DBH location solutions into its network this year.

Whether location information is provided to the public safety answering point (PSAP) via the call flow, an integrated clearinghouse, or web-based portal, these technologies are still missing a vertical axis (Z-Axis), especially important for those living in urban areas. Pursuant to the FCC's 2015 Wireless E911 Location Accuracy Fourth Report and Order, wireless carriers are to deliver either dispatchable location or Z-axis information in the top 25 cellular market areas (CMAs) in the year 2021.

Testing has been underway to determine technology submitted and proposed with accuracy benchmarks for the Z-axis. On August 3, 2018 CTIA collaborated with its recommended Z-axis proposal to the FCC. Among other details, this report proposed an accuracy level for Z-axis at +/- five meters. While the activity and focus of the carriers is promising, many in public safety are concerned that the range is too broad and should be narrowed to three meters, as five meters of vertical uncertainty could easily result in a dispatchable location that sends responders to the wrong floor.

That said, the industry remains optimistic and enthusiastic about the rapid adoption of DBH technology and the impact that greater location accuracy brings to citizens and the public safety community.

## Local Light: Hamblen County 9-1-1



Hamblen County 911 Director Eric Carpenter spoke to the TECB's Amber McDonald about his team and center.

L to R: **Jennifer Brian Fugate, Supervisor David Peoples, Deputy Director Stacey Johnson, Executive Director Eric Carpenter, Supervisor Joe Cummings.**

**Q: What do you find the most rewarding about working in public safety?**

**A:** Public safety is all about service. It is extremely rewarding to know that this profession is a vital link in a critical team. We are truly the first point of contact for our citizens at the worst time of their lives; and we have the honor and privilege to help them take the first steps necessary toward the resolution of their needs. Though we may not be recognized as often as other responders, it is gratifying to know that what we do is not a small task.

**Q: What do you find most challenging about the industry?**

**A:** For the industry as a whole, the biggest operational challenge is the recruitment and retention of quality personnel. The salary and benefits that most ECDs can provide – when compared to the scheduling, stress, and efficiency requirements placed on our employees – does not put this profession on the top of the list for those seeking job opportunities. Administratively, for Tennessee's ECDs, the current challenge is fixing a funding source that keeps up with the industry's advancements. It's true that "excess" revenue is being generated, but that number is based upon 2012 revenue collections. Services, training, insurance, maintenance, all of these things have seen increases in six years; yet district revenue has not. In fact, I would estimate that close to a third of local ECDs had a negative change in net position on June 30th.

**Q: What do you want the public to know about your 911 team and PSAP?**

**A:** We are a fully dispatched ECD that serves Hamblen County and the City of Morristown. We are a smaller center; dispatching approximately 76,000 calls for service annually with a team of telecommunicators who have experience ranging from one year to thirty-four years. We handle all emergency and non-emergency calls in the county, serve ten emergency service departments, provide EMD for our emergency medical teams, and provide NCIIC services to our law enforcement agencies as TBI's terminal agency in the county. Over the past few years, we have focused on providing more training and professional development opportunities to our staff as a way of allowing them to have an active part in maintaining our high standards.

## Hamilton County TERT Responds to Hurricane Florence



L to R: **Jennifer Sheets, Janet Tolbert, Jean Rogers and Nicole Tomaszewski.**

Hamilton County Unified Emergency Communications has over thirty Public Safety Telecommunicators trained and equipped to support requests for mutual aid assistance as members of a Telecommunicator Emergency Response Taskforce (TERT). TERT teams aid other Public Safety Communications Centers in times of disaster when their resources are limited and/or stressed.

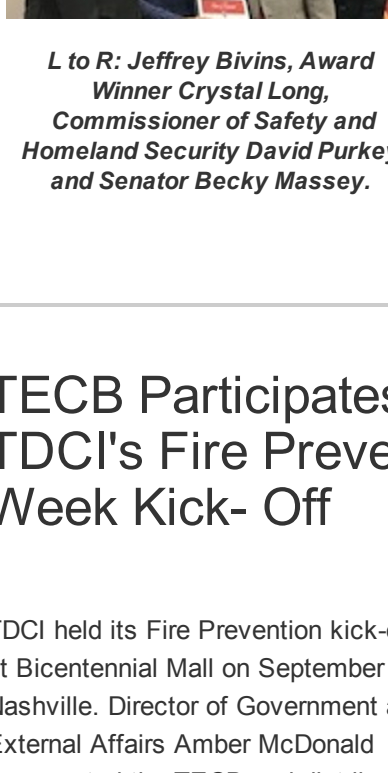


L to R: **Josh Dover, Brack Austin, Katherine Rountree, Ashley Brackett, Lorrie Piatt and Chris Hollingsworth.**

Hamilton County Emergency Communications responded to a Tennessee Emergency Management Agency (TEMA) request for two TERT teams to deploy to disaster areas in North Carolina. In less than 12 hours, a six-person team was deployed to Beaufort, North Carolina and a four-person team was deployed to Brunswick County, North Carolina.

These teams will work in and support the area's Emergency Communications Centers until such time they can return to normal operations. For more information about TERT visit their website at [www.nli-tert.org](http://www.nli-tert.org).

## 9-1-1 Receives First Responder Awards



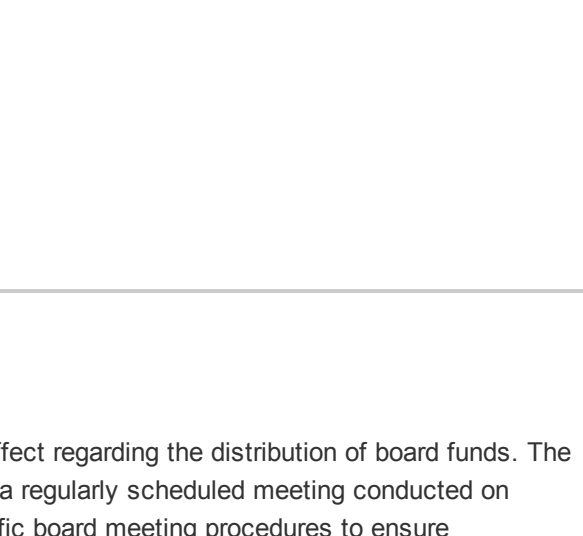
L to R: **Tennessee Chief Justice Jeffrey Bivins, Loudon County 911 Director Jennifer Estes, Award Winner Tristany Boyd and Senator Becky Massey.**

Loudon County 9-1-1 received the Governor's certificate for first responder awards. The awards were presented at the Governor's Residence on September 12th. Telecommunicator Tristany Boyd was awarded for her response to a child locked in a vehicle. She used her skills and knowledge to remove the child from the car and perform CPR until the ambulance arrived.

Crystal Long, from Meigs County 9-1-1 was awarded for obtaining information and providing it to responders that resulted in a handicapped man being saved from a house fire. State Senator Becky Massey, Commissioner of Safety and Homeland Security David Purkey and Tennessee Chief Justice Jeffrey Bivins presented Boyd and Long their awards. Loudon County 911 Director and former TECB Chair Jennifer Estes was also in attendance and took part in the awards ceremony.

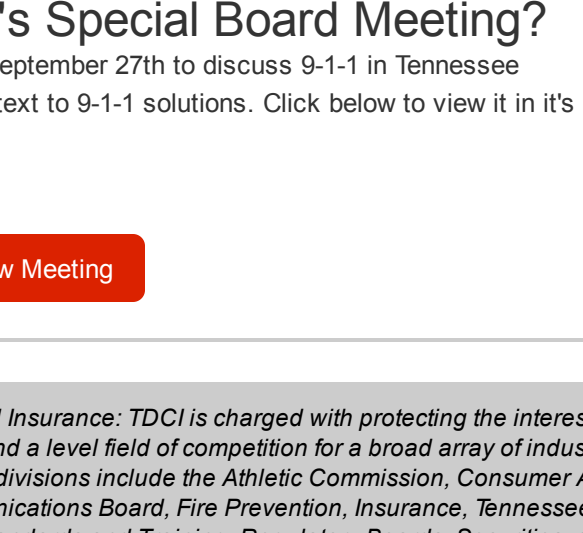
Congratulations to each of the award recipients and to our first, first responders for their tireless efforts!

## TECB Participates in TDCI's Fire Prevention Week Kick- Off



The Guevara family visited the TECB's outreach booth and posed for a picture with the TECB's Amber McDonald.

TDCI held its Fire Prevention kick-off week at Bicentennial Mall on September 28th in Nashville. Director of Government and External Affairs Amber McDonald represented the TECB and distributed promotional and educational material about 9-1-1 and the agency. Several other public safety organizations and the Department of Health participated as well as the TDCI's insurance, consumer affairs, contractor's board and fire prevention divisions. Several schools, families and other's visited each of the outreach booths.



The Guevara family spoke to the TECB's Amber McDonald about when and when not to call 9-1-1.

A special thank you to the TDCI for your commitment to public safety and our first responders!

## Upcoming Meetings and Information

### Financial Study Committee Meeting

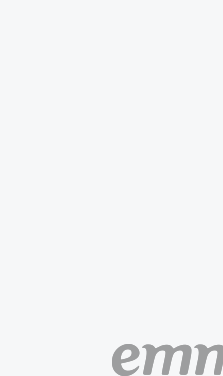
October 24, 2018 at 10:00 A.M.  
Conference Room 1B.

### TECB Board Meeting

November 7, 2018 at 9:30 A.M.  
Conference Room 1B.

**Note:** Official board and staff Pictures will be taken by the official Commerce and Insurance photographer immediately following the board meeting. If you are a board member or TECB staff please stay after the meeting.

**Both meetings will be located at:**  
Davy Crockett Tower  
500 James Robertson Parkway  
Nashville, TN 37243



## New Rule to Take Effect

On November 26, 2018 a new rule will take effect regarding the distribution of board funds. The TECB considered and approved new rules at a regularly scheduled meeting conducted on February 7, 2018. These rules set forth specific board meeting procedures to ensure transparency of board actions regarding special distributions of board funds. For questions, contact Benjamin.Glover@tn.gov.

New Rule Information

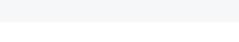
## Did You Miss September's Special Board Meeting?

The TECB held a special board meeting on September 27th to discuss 9-1-1 in Tennessee moving to the AT&T nationwide network and text to 9-1-1 solutions. Click below to view it in its entirety.

View Meeting

About the Tennessee Department of Commerce and Insurance: TDCI is charged with protecting the interests of consumers while providing fair, efficient oversight and a level field of competition for a broad array of industries and professionals doing business in Tennessee. Our divisions include the Athletic Commission, Consumer Affairs, Tennessee Corrections Institute, Emergency Communications Board, Fire Prevention, Insurance, Tennessee Law Enforcement Training Academy, Peace Officers Standards and Training, Regulatory Boards, Securities, and TennCare Oversight.

Share this email:



Manage your preferences | Opt out using TrueRemove®  
Got this as a forward? Sign up to receive our future emails.  
View this email online.

500 James Robertson Parkway 11th Floor  
Nashville, TN | 37243-0582 US

This email was sent to:  
To continue receiving our emails, add us to your address book.

