

State, local leaders defend tax exempt “muni bonds” as Trump, U.S. Congress talk infrastructure plan

BY ELAINE S. POVICH
Stateline

Structures built with municipal bonds stand out in Columbia, Ohio. There is the Columbia Metropolitan Convention Center, and new parking garages for a revitalized restaurant and apartment district. Sleek, futuristic water towers loom on the edge of town and new modern pumps hum at the water plant where the oldest structures date to 1906.

Nationwide, the “muni bond” market has funded \$1.65 trillion worth of projects for cities and other governments over the past decade. The borrowed money has paid for schools, roads, water and sewer systems, airports, bridges and other vital infrastructure.

“These aren’t shiny baubles. These are essential infrastructure,” said Columbia Mayor Steve Benjamin. “This is a sacrosanct part of

our taxing policy that has been in existence since 1913.”

But some Republicans on Capitol Hill want to end the tax-exempt status of muni bonds as part of broader changes to the federal tax code. That has many state and local officials worried.

A city’s ability to borrow depends on investors’ willingness to lend it money by purchasing bonds. And the tax-exempt status of muni bonds is part of what makes them so attractive to investors, especially high-income taxpayers looking to reduce their tax bills.

But exempting the bonds from federal taxes is projected to cost the U.S. Department of the Treasury as much as \$617 billion in revenue over the next decade, according to the Tax Foundation, an independent tax analysis group. To many in Washington, recouping that mon-

See **MUNI BONDS** on Page 7

What happens to current WOTUS litigation with new executive order?

BY LISA SORONEN
*Executive Director
State & Local Legal Center*

The Waters of the United States Executive Order could impact a Supreme Court case on what court has jurisdiction to hear a challenge to WOTUS and on the Sixth Circuit’s decision to stay of the current regulations. It is too soon to know exactly what will happen but I speculate below.

President Trump’s executive order Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule calls for the “rescinding or revising” of the Waters of the United States (WOTUS) definitional rule published in the summer of 2015. Many state and local governments objected to the broad nature of these regulations, in particular to the expansive definition of ditches and the ambiguous definition of tributaries.

The executive order acknowledges that rewriting the WOTUS definitional regulations will require going through the lengthy and complicated process under the Administrative Procedures Act which the 2015 final regulations went through. This process involves proposing a new rule, receiving and responding to (likely thousands of) comments, and issuing a final rule.

The current WOTUS regulations are subject to complicated litigation. In October 2015 the Sixth Circuit issued a temporary stay of the regulations preventing them from going into effect nationally. In February 2016 the Sixth Circuit ruled that it, rather than a federal district court, has jurisdiction to rule on whether the WOTUS rule exceeded the Clean Water Act.

In January 2017 the Supreme Court agreed to review the Sixth Circuit ruling that an appellate court, not a district court, has jurisdiction to rule on WOTUS. This case, *National Association of Manufacturers v. Department of Defense*, will not be heard until next fall 2017—meaning the Supreme Court may not issue an opinion in this case until as late as June 2018.

What will be the fate of all this WOTUS litigation over the current rule in light of the executive order? We don’t know, but the executive order directs the Attorney General to “inform any court of such review and take such measures as he deems appropriate concerning any such litigation pending the completion of further administrative proceedings related to the rule.”

The Attorney General may ask the Sixth Circuit to voluntarily vacate its decision temporarily staying the regulations given that

See **WOTUS** on Page 3



New transportation funding is essential for meeting Tennessee’s future needs

Tennessee’s flat state gas tax of 21.4 cents per gallon hasn’t been updated since 1989. Due to inflation, increases in construction costs and the cost of land and better gas mileage, the state comptroller estimates that 21.4 cents in 1989 is now worth approximately 11 cents a gallon. The money goes half as far as it once did. Without additional funding, it would take the state 50 years to complete its current list of projects, and many cities and counties will be forced to raise property taxes to pay for transportation.

Good roads lead to good jobs. One of Tennessee’s most desirable attributes in recruiting jobs is our location on the map. If you want to distribute product around the country, there’s no better location. But it’s hard to sell job creators on Tennessee if we don’t have the roads and bridges to get product where it needs to go.

A poor transportation system also costs citizens in time and vehicle maintenance.

Key legislators to address city officials at TML Conference March 20-21 in Nashville

City officials will hear from top lawmakers during TML’s Legislative Conference, slated for March 20-21 in Nashville.

Among those scheduled to speak are: Senate Majority Leader Mark Norris; House Majority Leader Glen Casada; Sen. Ken Yager, chairman of the Senate State and Local Government Committee; Rep. Tim Wirgau, chairman of the House Local Government Committee; Sen. Bo Watson, chairman of the Senate Finance Committee; and Rep. Charles Sargent, chairman of the House Finance Committee.

Gov. Bill Haslam, and Lt. Gov. Randy McNally will help kick off the conference on Monday, March 20, beginning at 1 p.m. House Speaker Beth Harwell is scheduled to speak during the Tuesday morning breakfast.

Also on the agenda are Justin P. Wilson, Comptroller of the Treasury; Bob Rolfe, Department of Economic and Community Development Commissioner; and Laurie Lee, executive director, Department of Finance and Administration Benefits Administration.

Conference registration opens at 11 a.m. on Monday, March 20, followed by a buffet lunch at 12 noon. The conference will kick off at 1 p.m. and run through 4 p.m. on Monday afternoon.

City officials are encouraged to attend the Senate Floor Session beginning at 4 p.m. Monday afternoon, and the House Floor session beginning at 5 p.m.

On Tuesday, March 21, things will get underway at 7:30 a.m. with a breakfast served until 8 a.m. The conference program will begin at 8 a.m. and continue until 10 a.m.

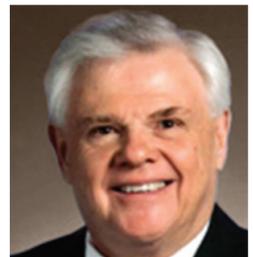
The two-day conference provides an excellent forum to network with other municipal officials and interact with your legislators. For information regarding registration and hotel reservations, visit www.TML1.org



Mark Norris
Senate Majority Leader



Glen Casada
House Majority Leader



Ken Yager
Senate Chair
State & Local Government



Tim Wirgau
House Chair
Local Government



Bo Watson
Senate Chair
Finance Ways & Means



Charles Sargent
House Chair
Finance Ways & Means

Monday, March 20		Tuesday, March 21	
11:00 am	Registration	7:30 am	Breakfast
12:00 pm	Buffet Lunch	8:00 am	Speaker Beth Harwell
1:00 pm	Lt. Gov. Randy McNally	8:15 am	Rep. Charles Sargent
1:30 pm	Gov. Bill Haslam	8:30 am	Laurie Lee
1:45 pm	Rep. Tim Wirgau	8:45 am	Benefits Administration
2:00 pm	Sen. Mark Norris	9:00 am	Bob Rolfe
2:30 pm	Sen. Bo Watson	9:15 am	ECD Commissioner
2:45 pm	Justin P. Wilson		Sen. Ken Yager
	State Comptroller		Rep. Glen Casada
3:00 pm	TML Staff Reports		
4:00 pm	Senate Floor Session		
5:00 pm	House Floor Session		



Tennessee cities work to recover from March tornadoes, severe storms

BY KATE COIL
TML Communications Specialist

Municipal crews across Tennessee are working to clean-up after damage resulting from tornadoes and heavy thunderstorms on March 1.

At least five tornadoes touched down across the state, according to officials with the National Weather Service.

The Cool Springs area of Franklin and Brentwood reported some of the most damage, the result of an EF-1 tornado that traveled from Hillsboro Road, north of the Cool Springs Galleria mall, to east Concord Road. The funnel cloud cut a path that stretched 10.25 miles long and 250 yards wide with an estimated speed of 100 to 105 miles per hour.

Damage reported by the city of Brentwood included warehouse doors being blown, roof and wall damages to businesses, and large amounts of downed trees. The city’s GIS department has worked to collect damage along with Brentwood Fire and Rescue and city building inspectors. The city’s public works crews have been working to remove downed trees and power lines.

A second EF-1 storm caused damage in the Antioch neighborhood of Nashville. The storm had winds of up to 90 miles per hour and struck between Cane Ridge and the Four Corners Marina.

Another EF-1 tornado caused damage in Watertown while two EF-1 tornadoes were recorded in Putnam County.

Severe storm damage was also reported in Cookeville while fallen trees and around 1,800



April Shore with Brentwood’s 911 Center handles calls during the March storm event. Dispatchers worked during the storm to aid police, fire, parks and public works crews as well as provide news updates and take calls from local residents being affected by the storms.

power outages were reported in Adams, Cedar Hill and other areas of Robertson County.

In East Tennessee, trees were downed and power outages were reported throughout the Chattanooga area with an estimated 5,500 people losing power for five minutes or more. The brunt of the damage was recorded in North

Chattanooga, Red Bank, Hixson and Signal Mountain. Golf ball and tennis ball-sized hail were reported in Hamilton and Marion counties.

March, April and May make up the peak period for tornadoes. At least 12 tornadoes left two Tennesseans dead and dozens injured in 2016, according to weather service data.

NEWS ACROSS TENNESSEE



CHATTANOOGA

Officials with the city of Chattanooga have broken ground on a \$1 million park in the Alton Park neighborhood. The five-acre park at the former site of the Charles A. Bell School. Construction by Chattanooga-based P&C Construction began on Jan. 21, and officials estimate the entire park project will be complete by June 2. The park will have parking at both ends, a pavilion, quarter-mile walking trail, benches, restrooms, water fountains, and a sports field. The Charles A. Bell School was closed in 1989 after the consolidation of the Chattanooga-Hamilton County School System and was demolished in 2011. Residents will decide the name of the park after a meeting with city and park officials.

CLARKSVILLE

LG Electronics Inc. will build a new home appliance manufacturing facility in Clarksville, investing \$250 million into the facility and creating 600 new jobs. The new Clarksville facility will be LG's first washing machine manufacturing operation in the United States. The global manufacturer, with headquarters in South Korea, is a leader in appliances, electronics and mobile devices. LG's new Tennessee facility is expected to be the world's most advanced production plant for washing machines. Construction on the 829,000-square-foot facility will begin later this year. Starting in 2019, the factory will initially produce front- and top-load washing machines. The 310-acre site offers the potential to expand for production of other home appliances.

COVINGTON

The Covington Police Department will have a new home within the next two years following a study of the department's needs. A study recently conducted by a representative from the Center of Public Safety recommended the department's relocation to provide adequate space for personnel as part of a predicted 20-year growth plan. City officials are considering new locations for the department at the South Industrial Park and at the former Tipton County Commission on Aging building. Estimated costs for the project are between \$3-4 million, which would be cheaper than renovating the department's current facility. Constructed in 1957 to serve as the Covington City Hall, the police department's current headquarters also housed a fire department and jail in the past. The department moved into the building in 1998.

GALLATIN

Sumner Regional Medical Center will open a \$5 million freestanding emergency room at Gallatin's Sumner Station in March, bringing 45 jobs to the area. The 10,000-square-foot ER will operate 24 hours a day, seven days a week with five rooms, a lab, pharmacy, and imaging services beginning on March 20. The facility will be able to provide the same services to patients already available at the hospital's 24-bed emergency room. Nearly \$40 million has been invested by the hospital into Sumner Station since the 103,000-square-foot facility was purchased in late 2013.

GERMANTOWN

Work will soon begin to design two new segments of greenways in Germantown. The town's Board of Mayor and Aldermen recently

approved two professional service agreements with Smith Seckman and Reid to begin design work on a 0.4 miles connecting the western end of the greenway to Neshoba Park and a segment of about three-quarters of a mile on the east from Cameron Brown Park to an east trailhead at Farmington Boulevard. When finished, the two segments will extend the currently 1.3-mile greenway running along the Wolf River to 2.4 miles total. The trail will stretch from the city's western edge to the new eastern trailhead at Farmington. The project will cost an estimated \$2.4 million, much of which is coming from federal and state sources through the Memphis Metropolitan Planning Organization. The city will be reimbursed 80 percent of the total. Town officials estimate construction on the new segments will begin in fiscal year 2018.

KINGSPORT

One of Kingsport's oldest city parks is getting a facelift as part of three phases of construction beginning this summer. Plans for the 18-acre Borden Park include a new walking trail, open space plaza near the recreation building, a resurfaced basketball court and improved parking. Improvements and new construction at the park are being paid for through a grant from the Tennessee Department of Health for Project Diabetes with the goal of improving wellness initiatives and reducing diabetes and obesity in communities. City officials are also consulting with the University of Tennessee Extension office on design ideas. The first phase of the park project is expected to be complete by June. The second phase will include installing playground equipment and the third a fitness playground for older members of the community.

MEMPHIS

Sedgwick Claims Management Services, Inc., will be expanding its corporate headquarters in Memphis, investing \$34 million and creating 150 new jobs in the area. The technology-enabled risk and benefits solutions management company is a global corporation focused on delivering services that include management of workers' compensation, disability, FMLA, property and specialty claims, as well as managed care, special and forensic investigation, Medicare and OSHA solutions and risk consulting. Nearly 15,000 colleagues in approximately 275 offices in the U.S., Canada, the U.K. and Ireland serve more than 2.6 million claimants each year. With this expansion, Sedgwick will consolidate its headquarters into a single campus in Memphis and locate R&D functions at the site. Sedgwick has made an investment in an innovation lab focused on developing technology for next-generation claims management models centered on the needs of the client and the claimant. By redesigning the claims management process, the company would not only improve the client and claimant experience, but also give its colleagues a more meaningful work experience.

MURFREESBORO

Cultural Arts Murfreesboro is launching the city's first artist laureate program, an honor for local artists that will give chosen recipients the opportunity to educate and engage the community in their field of expertise. Murfreesboro Parks and Recreation will launch the program later this year, and began accepting applications for the program on March 1. The Cultural Arts Program will appoint three laureates — a poet laureate, a painter laureate, and a photographer laureate. They will serve as the city's selected laureate for a one-year term and during that time will complete new work inspired by Murfreesboro, will exhibit their craft at city events, and will complete a number of community outreach arts related projects that will target non-traditional and under-served audiences. Each laureate will also receive a \$500 monetary award. The goals of beginning the Cultural Arts Laureate Program are to give experienced individual artists an opportunity to share their talents with their community, to give youth citizens and new artists role models within their

own community, and to encourage and nurture a growing arts culture in Murfreesboro.

LA VERGNE

Sewing machine manufacturer SVP Worldwide is relocating its La Vergne headquarters and distribution center to a larger 213,774-square-foot portion of the former Whirlpool Plant. The company, best known for producing Singer sewing machines, currently employs 140 people in the La Vergne area. Officials say the move will help the company accommodate a 20 percent growth in jobs from a new research and development team for the Singer brand. Up until now, research for the brand has been conducted at the company's home base in Sweden.

LEXINGTON

MIG Steel Fabrication, LLC, will expand its operations in Lexington, investing \$1.5 million and creating 20 new jobs. The steel fabrication company is a subsidiary to Lexington's Manufacturers Industrial Group, LLC, began in 2007 as a fabrication service to the larger family of MIG subsidiaries, which employ approximately 1,800 people at six Tennessee locations. MIG Steel Fabrication has since grown to become a leader in steel fabrication solutions in West Tennessee, employing 45 people and providing structural steel and other fabricated metals for the broader industrial, commercial and medical construction markets across the Southeast. MIG's Steel Fabrication's investment in its Lexington facility will go toward purchasing new machinery equipment to meet growing demand. The company will hire welders, pipe fitters and salaried support staff.

LOUDON

Tate & Lyle recently cut the ribbon for a \$60 million co-generation plant at its corn wet milling facility in Loudon. The specialty food ingredients manufacturer has reduced its carbon dioxide emissions by 10 percent and its greenhouse gas emissions by 50 percent as the result of recent upgrades to the facility, which can now generate electricity on-site and recover wasted heat. Tate & Lyle North America is headquartered in Decatur, Ill., and is a subsidiary of London-based Tate & Lyle. Founded as Henry Tate and Sons in 1852, the company is best known for producing sweeteners, stabilizers, emulsifiers, food starches, sugars, and paper starches.

PARIS

The city of Paris has seen a growth in retail sales for the third consecutive year. According to the city finance department, December 2016 sales showed an increase of 6.3 percent over December 2015, ending the 2016 calendar year with 3.1 percent overall retail sales growth. General revenues were over expenditures by more than \$13,000 and revenues were ahead of the fiscal-year-to-date by more than \$403,000. Six new business licenses were issued by the city in January as well.

Kingsport mayors past and present help kick off city's centennial celebrations



From left to right, former Kingsport mayors Dennis Phillips, Ruth Montgomery, Jeanette Blazier, Gardner Hammond, and current Mayor John Clark participate in the city's 100th birthday party. Kingsport kicked off its year-long centennial celebrations on March 2, the anniversary of the city being re-chartered in 1917. (Photo by Matthew Lane/Kingsport Times-News)

Elvis Presley's Memphis looks to revive Whitehaven neighborhood



Memphis' famed Graceland is now home to 200,000 square feet of exhibits, museums and performance space honoring the King of Rock 'n' Roll. Elvis Presley Enterprises opened the \$137 million, master-planned overhaul of the Graceland campus on March 3 as part of efforts to revitalize Presley's Whitehaven neighborhood in Memphis. Dubbed "Elvis Presley's Memphis," the open-air museum gives visitors the ability to tour various Elvis-related memorabilia and exhibits in an outdoor mall-like setting. The renovation project began last October with the opening of a \$92 million, 450-room resort hotel, The Guest House at Graceland. A strip mall built across from the Graceland mansion will also be torn down and turned into a park-like area featuring landscaping, trees and a gateway between the museum exhibits and the home.

Collierville works to restore railroad history



Painters have finished work on Collierville's famed caboose, part of a project to restore a trio of railcars located in the town's historic town square. The caboose is now located on tracks near the former train depot in the park. Alongside it are the 1351 Frisco steam engine and the 1940s executive railcar Savannah formerly used by the Seaboard Railway. The engine will also be undergoing renovations as part of the project.

Hendersonville cuts ribbon on first phase of new park



City officials, stakeholders and Hendersonville Area Chamber of Commerce members cut the ribbon on Hendersonville's Volunteer Park at Arrowhead. The \$1.5-million first phase of the project includes two full-size soccer fields. A second phase is scheduled to open next spring and will include a concession stand and restrooms funded through a \$500,000 state grant. The park will eventually be home to a playground, walking trail, soccer and lacrosse fields and a horse barn and training facility for the Hendersonville Police Department.

TENNESSEE TOWN & CITY
Tennessee Town & City (ISSN 00403415, USPS 539420) is published semi-monthly except in the months of June and December 19 times per year by Tennessee Municipal League, 226 Capitol Blvd, Suite 710, Nashville TN 37219-1894. Subscription rates: \$6 per year to members, \$15 to nonmembers, \$1 a copy. Periodicals Postage Paid at Nashville TN. POSTMASTER: Send address changes to Tennessee Town & City, 226 Capitol Blvd, Suite 710, Nashville TN 37219-1894.

Official publication of the Tennessee Municipal League. **Publisher:** Margaret Mahery (mmahery@TML1.org); **Editor:** Carole Graves (cgraves@TML1.org); **Phone:** 615-255-6416. **Advertising:** Publisher reserves the right to reject any advertising deemed unacceptable. Fax classified ads to **TT&C:** Attention Carole Graves at 615-255-4752, or e-mail cgraves@TML1.org. Fax advertising copy to **TT&C:** Attention Debbie Kluth at 615-255-4752, or e-mail to dkluth@TML1.org. Opinions expressed by non League officials or staff do not necessarily reflect policies of TML.

Utility box art adds splash of color to Mt. Juliet infrastructure

By KATE COIL

TML Communications Specialist

At best unnoticed and at worst an eyesore, utility boxes are a necessary – if unglamorous – part of municipal infrastructure. But one Tennessee city is looking to change that.

Mt. Juliet has been working to turn its downtown utility boxes into works of art. Charlie Daniels, the Music City Star, Davy Crockett, and the local police department are just a few of the subjects that have helped liven up utility boxes across the city.

Mt. Juliet City Manager Kenny Martin said the utility box wraps started out as a way to cover graffiti.

“We are always looking for bright ideas to add art into the city,” Martin said. “We had an issue with graffiti being put on some of our utility boxes. I thought maybe we could find an artist to paint over the boxes to cover it up. It was too expensive to do it that way, so I decided to reach out to a sign company to see if the boxes could be wrapped.”

Local businesses have stepped forward to sponsor each utility box for the \$400 price tag it takes to cover them in the wrap. As a result, the wraps are of no cost to the city. Martin said the city typically picks the artwork while the business gets their name on the box. Businesses can also submit ideas for the box.

“It’s not so much an ad as it is for the ambience and art,” Martin said. “Depending on the part of town, we try to pick out a theme like recreation, quality of life, and school spirit. It’s a neat way to add art to the community at no expense to the taxpayer.”

Martin said the boxes have helped turn a less-than-attractive aspect of city infrastructure into a source of community pride.

“They are industrial-looking, and there is one at every intersection where there is a traffic light,” Martin said. “Not only are they a blank canvases for graffiti, but they also look bad. Instead of having metal, galvanized boxes all over town we now have pieces of art that encourage walking, biking, health fitness, community and patriotism. If the artwork gets old or out of date, you can peel it off and start over.”

While some of the boxes reflect Mt. Juliet and Tennessee culture, others honor important places in the local community. The box outside the library is made to look like a bookshelf while a runner decorates the box nearest Robinson Park, a favorite place for walkers, joggers, and pet owners to get out and about.

Martin said he has his own favorites among the box artwork.

“We have one a local school

New executive order affects WOTUS ruling

WOTUS from Page 1

the new administration intends to change them. The Sixth Circuit is more likely to agree to this if none of the parties object. A number of states and environmental groups have intervened in support of the current WOTUS regulations and may object.

If the Sixth Circuit vacates the stay, the practical effect is the current regulations would no longer be valid. Vacatur of the Sixth Circuit stay also would likely moot the Supreme Court challenge on jurisdiction. If the Sixth Circuit refuses (or isn’t asked) to vacate the Sixth Circuit decision regarding the stay, the Supreme Court jurisdiction litigation is likely to proceed indefinitely.

Given that defining WOTUS has been so difficult and contentious, almost no matter what new definition is proposed, it too will be subject to litigation.

The executive order instructs that Justice Scalia’s decision in *Rapanos v. United States* be “considered” in defining the term “navigable waters.” *Rapanos* is a 4-1-4 decision. Justice Scalia wrote the plurality opinion defining this term more narrowly than Justice Kennedy’s solo concurring opinion. The Sixth Circuit considered Justice Kennedy’s opinion controlling. If the new definition of WOTUS relies on Justice Scalia’s opinion—it will almost certainly be challenged on this ground, along with many others.



Above: A utility box outside the Mt. Juliet Public Library is bound with a vinyl wrap to resemble a bookshelf. Top Right: Local music legend Charlie Daniels is another subject of one of the smaller utility boxes in town. Other subjects include parks and recreation, local schools, and the Mt. Juliet Police Department. Martin said the goal for the project is to add a bit of art and community pride to the area.

is doing that has a little boy in a Superman cape on with a mask,” Martin said. “He is reaching for the sky, which is cute when you think of our kids and their future. Probably my favorite one is the box with all the school logos on it. I like that one because it is our way of saying everyone is welcome in our community. It takes everyone in Watertown, Lebanon and Wilson County to make Mt. Juliet what it is.”

The vinyl coverings also have a useful side-effect.

“My understanding is the covering on the outside keeps the components on the inside of the box a little cooler,” Martin said. “It works as a sort of deflective covering. It is just another protective barrier on those cabinets, which can get very hot in the sun. The vinyl covering

helps keep the components from wearing out as quickly.”

In a short time, the utility box project has proven so popular that Martin said all of the smaller boxes have been sponsored by businesses. The city is looking into wrapping some of the larger boxes, including those along the train lines, which can cost \$800 or more.

“The demand got so high for them the smaller boxes are all gone now,” he said. “We have some bigger boxes that are still available. We had two or three up, and people started noticing them. It was pretty quickly after that before they were all gone. It’s amazing that we’ve been able to take something that isn’t very appealing and, through these sponsorships, turn it into a work of art relatively cheaply. It’s a win-win for our city.”



Above: The Mt. Juliet Police Department is honored on one of the utility boxes located on Mt. Juliet Road.

Pick TN Conference highlights state products, helps farmers learn new marketing techniques

BY ASHLEY CABRERA

TDEC Office of Sustainable Practices

From “Storytelling Through Social Media for Your Specialty Crop Farm and Farmers Market” to “Bamboo – Not Just Another Pretty Face – Food, Building Material, and Environmental Services,” the 2017 Pick TN Conference provided farmers, farmers markets, and growers, with tools and resources to thrive in Tennessee through their craft.

Originally, the Tennessee Agriculture Expo encompassed all agricultural associations, and focused on what each were doing. In 2015, the conference was revamped to incorporate educational aspects to help farmers continuously expand their knowledge.

“Each association chooses their session topics and the speakers to lead the sessions. Each one knows the popular topics that farmers want to hear, so it is relatable,” said Amy Tavalin, director of the Pick TN Conference.

The various associations partnered with the Tennessee Department of Agriculture (TDA), and changed the name to Pick TN Conference. Along with the revamp, the Tennessee Organic Growers Association was also added.

“I believe it is an excellent resource for the farmers, to be able to partake in these educational sessions,” said Greer Gill, marketing specialist with the Tennessee Department of Agriculture.

Even though the conference stands alone in education to farmers, it coincides with the Pick TN Products program. Pick TN Products is a state program that provides Tennesseans information about hundreds of homegrown and homemade products, including a variety of foods, flowers, trees, and various artisan products. Through the support of the Tennessee Department of Agriculture, the program currently lists about 2,500

farmers with about 10,000 items.

Pick TN Products can also help you find events and attractions such as fairs, festivals, and wineries that you can enjoy while supporting local businesses at the same time. You can visit their website, picktnproducts.org and search for a particular farm or business by name, county, or other criteria, and even search through recipes, flowers, plants, trees, and local pet food. For producers, farmers, and other agricultural businesses, they can be listed on the Pick TN webpage and receive help from the Tennessee Department of Agriculture Market Development Programs.

To keep up with Tennessee agriculture and tourism, the education offered through this conference is viable to farmers’ success. Several of the sessions informed attendees of new FDA food safety laws for produce, EPA worker protection standards for using pesticides, and permits needed at farmers markets.

The Tennessee Agritourism Association conducted roundtables to discuss safe cash handling, training seasonal help, generating scholarships, and attracting customers with special events. Allie and Morgan Huber with Huber Orchard and Winery conducted several sessions to teach how to market and add value to specialty crops through events and food and beverage sales on the farm.

Panels were utilized to give farmers an opportunity to ask restaurant chefs what they look for in their produce, find out best practices from farmer market managers, and an “ask me anything” from a specialty crop grower.

Kia Jarmon, a public relations and brand strategist for MEPR Agency and Nashville Farmers Market board member, spoke on utilizing social media to engage with the community. She covered all of the social media platforms and how each can best be used to



Pick TN Conference provided farmers, farmers markets, and growers, with tools and resources to thrive in Tennessee through their craft.

boost your business.

Aside from the education provided for the farmers, this conference allows for farmers to come together and transfer knowledge and network with each other. One farmer may have a pumpkin patch, but wants to expand to growing strawberries, so they connect with a strawberry farmer and gain the knowledge to be able to move forward. This is an important concept in agriculture, just as it would be in any other field.

“It’s just as important for farmers to get together and share knowledge and friend-

ship within the same industry as it is for dignitaries and scholars in their respective fields,” said Allie Huber with Huber Orchard and Winery. “Farmers share a unique sense and perspective about how the world works.”

There is a lot of interest opening up in agriculture to open up farms to the community and share the experiences that come with it. At the same time, there are things evolving in the ways of agriculture and the regulations that surround it. An opportunity such as the Pick



TN Conference and the Pick TN Products program that allow farmers to keep up with all the changes that happen within agriculture and continue to make a living off their passions and lifestyle.

If you are a farmer, own a farmer’s market, or are just starting out in the world of agriculture, then mark your calendar for February 15-18, 2018, for next year’s Pick TN Conference in Chattanooga, Tennessee. It might just be the boost you need to succeed in the field.



PEOPLE

State Sen. Lee Harris, D-Memphis, has been selected to participate in the prestigious Aspen Institute-Rodel Fellowships in Public Leadership program. The Tennessee Senate Minority Leader is one of 24 individuals from across the country selected for the honor. The Rodel Fellowship program seeks Americans emerging political leaders with reputations for intellect, thoughtfulness and a commitment to civil dialogue. The fellowship is open by invitation only to individuals who are in elected office and who are ideally under the age of 50. The program lasts for 24 months and consists of three weekend-long seminars, generally held in Aspen, Colo. Lee Harris represents District 29 in Memphis.



State Sen. Lee Harris

Ashley Howell, a Tennessee native, has been selected as the new executive director of the Tennessee State Museum, beginning her work April 1. Selected by the Douglas Henry State Museum Commission, Howell will succeed long-serving director Lois Riggins Ezzell, who retired in 2016. Howell is presently employed as the deputy director of the Frist Center for the Visual Arts. A native of Nashville, Howell earned a bachelor's degree in art history and a master's degree in community from the University of Tennessee-Knoxville as well as a business administration degree from Boston University with a certificate in museum studies. Before joining the Frist Center in 2007, she served as a financial consultant for the Institute for Contemporary Art in Boston, director of development for the University of Tennessee College of Architecture, and public relations and marketing manager for the Knoxville Museum of Art.



Ashley Howell

Adam Price, a codes officer with the town of Farragut, has been named the Code Official of the Year by the Eastern Chapter of the Tennessee Building Officials Association (ETBOA). This is the second time Price has been given the honor, making him the first codes official to receive the title for two consecutive years. Price received the honor for 2016 at the organization's recent annual training and safety meeting in Sevierville. He served as president of ETBOA in 2016. The ETBOA award recognizes codes officers that are knowledgeable, hard-working and dedicated to their community and profession. The organization has approximately 200 members.



Adam Price

Seth Sumner has been selected as the new city manager for Athens, beginning his work with the city on Feb. 23. Sumner previously worked as the assistant city manager of Savannah for the past five years. Before that, he served as the city manager of Clifton for two years beginning in 2010 and was the youngest city manager in the state at the time. Sumner received a bachelor's degree in political science as well as a master's of public administration from the University of Tennessee. He also completed the University of Virginia's Senior Executive Institute in 2012. Sumner was selected following a six-month long search after the retirement of long-time Athens City Manager Mitch Moore. The Municipal Technical Advisory Service assisted the city's 13-member Selection Committee in the selection process.



Seth Sumner

Ted Townsend, chief operating officer for the Tennessee Department of Economic and Community Development (TNECD), has been selected to serve as vice chair of the Council of State Governments' Fiscal and Economic Development Public Policy Committee. Prior to becoming chief operating officer, Townsend was assistant commissioner of strategy where he oversaw all rural programs—including Select Tennessee, ThreeStar, Tennessee Main Street, Tennessee Downtowns and Retire Tennessee—along with federal grant programs that include Community Development Block Grants, the Delta Regional Authority and the Appalachian Regional Commission. Townsend has also served the department as TNECD regional director over the greater Memphis region.



Ted Townsend

Greg Wood has begun serving as the city manager for Crossville after being unanimously selected for the position by the Crossville City Council. Wood was selected from a pool of 40 applicants in a nationwide search. The search process was conducted with assistance from the Municipal Technical Advisory Service. Wood served as the county administrator for Harris County, Ga., from 2013 until 2016. Before that, he served as the county manager for Jasper County, Ga.; county administrator for Holmes County, Fla. He began working in government in 1984. An Air Force veteran, Wood earned a bachelor's degree in political science and government and a master's in public administration from the University of West Florida.



Greg Wood

Tennessee's longest serving legislator State Sen. Douglas Henry dies at age 90

Douglas Henry, the longest-serving legislator in the Tennessee General Assembly, has died at the age of 90.

Henry served for nearly 50 years in the state legislature, first elected to a single term in the State House 1954 and then 11 consecutive times representing west Nashville from 1971 until his retirement in 2014.

Born in Nashville and raised in Belle Meade, Henry was the son of former State Sen. Douglas Henry, Sr., and National Life Insurance Co., heiress Catherine Craig Henry. Henry graduated from Montgomery Bell Academy in 1941 and served in the U.S. Army during World War II. After returning from fighting in the Philippines, he attended Vanderbilt Law School.

After an unsuccessful run for a State House seat in 1952, he ran again in 1954 and was elected. During the 1960s, he served as an attorney for the National Life Insurance Co., which his grandfather had co-founded. Henry re-entered state politics in the 1970s when he ran for the State Senate.

During his tenure, Henry served as chair of the Senate Finance, Ways, and Means Committee as well as a member of the Senate Ethics Committee and the Fiscal Review Committee.

In an April 2014 interview with *Tennessee Town and City*, the outgoing senator reflected on his years of service to the state. Henry listed some of his proudest accomplishments in the legislature as the establishment of the state's Rainy Day Fund, the creation of some of the state's first child abuse laws, and issues dealing with education and child welfare.

He also warned lawmakers against allowing party politics to get in the way of the state's best interests.

"Tennessee has been drawn



Douglas Henry

into the national scheme of things," Henry said. "It's happened to a lot of other states, and it has to do with national politics. The Tennessee Democratic Party has to fit in with the national party and the Republican Party is the same way on the national level. Previously, we could chart our own course. I don't see a reversal any time soon, but I hope I'm wrong. I hate to see it happening. It's not good for the state."

Lawmakers from both sides of the aisle praised Henry as a model of decorum, kindness and public service. U.S. Sen. Lamar Alexander said Henry's legacy is an example to all lawmakers.

"There was no one in the Tennessee General Assembly who demonstrated integrity, courtesy and financial stability more than Douglas Henry," Alexander said. "To him, party politics were of no importance. The citizens he served were what mattered. His example will be important for years to come."

U.S. Sen. Bob Corker recalled working with Henry as commissioner of finance in the mid-1990s and said the pair had spoken on the phone the Friday before Henry's passing.

"He was a true gentleman and a true Tennessee statesman,"

Corker said. "No one focused more over a longer period on the fiscal issues facing our state than Senator Henry, and with a steady hand and wise guidance, he set a tremendous example of bipartisanship and integrity in public service."

Gov. Bill Haslam credited Henry and his role on the Senate Finance, Ways, and Means and Fiscal Review committees with making the state more financially sound.

"He served the state for nearly 50 years, and it is not an exaggeration to say that he is one of the primary reasons the state is on such solid financial footing today," Haslam said. "He was a powerhouse intellect, courteous, kind, genuine and a statesman and I will miss his wisdom and perspective."

Lt. Gov. Randy McNally described Henry as "an invaluable mentor and a trusted friend."

"To the state of Tennessee, he was far more. Douglas Henry was our state's financial guardian and protector. He always wanted what was best for his state, never for himself," McNally said. "A true gentleman, he was consistently kind and gracious to everyone. Whether you were a Republican or a Democrat, a prince or a parolee, Douglas Henry treated you with respect."

Nashville Mayor Megan Barry said Henry set "a high standard" for both lawmakers and the public.

"Sen. Douglas Henry's tremendous impact on the city of Nashville and the Tennessee General Assembly, where he served with unparalleled distinction, will undoubtedly last for generations to come," Barry said. "Nashville was proud to call him one of ours, and we miss him already. I know I am joined by many across the state of Tennessee, which Sen. Henry loved so dearly, in celebrating the life and legacy of a true statesman."

Former Nashville vice mayor and TML board member Jay West dies

Jay West, a former Nashville vice mayor and past Metro councilman, has died at the age of 65.

West served as an at-large councilman for Nashville from 1983 to 1995 before being elected vice-mayor that year. He later served as a member of the Tennessee Municipal League Board of Directors and as executive director of the County Officials Association of Tennessee (COAT).

Long before he was elected to the Nashville City Council, West was well-versed in municipal government. His father, Ben West, was served as a Tennessee state senator and then was elected mayor of Nashville in 1951, a mere two weeks after Jay West was born.

Jay West later discussed how he often found himself eating breakfast with various city department heads and officials before heading off to elementary school.

His brother, Ben West, Jr., represented Davidson County's 60th District in the State House of Representatives for 26 years before retiring in 2010.

Jay West attended Castle



Jay West

Heights Military Academy in Lebanon before graduating from Belmont University and Nashville School of Law.

After serving three terms as the city's vice mayor, West ran for mayor of Nashville in 1999, losing out to Bill Purcell. West would go on to represent a variety of trade associations and interests as a lobbyist at the state level, including in the areas of education, health care, land use zoning and workers' compensation.

West's dedication to local government and his warm personality was invaluable to those who

worked with him over the years.

TML Executive Director Margaret Mahery met West in 1990 when she became involved with the organization.

"He was on the Nashville City Council, and I was serving on the Athens City Council," Mahery said. "He became a great friend and was always serious about making our local governments efficient and user friendly. We will all miss Jay and his friendly personality and great sense of humor."

Tennessee Municipal Bond Fund President and CEO Charles "Bones" Seivers said West was always enjoyable to work with.

"Jay was a good friend and always very supportive of the bond fund," Seivers said. "I enjoyed working with Jay over the years. In fact, Jay was on the committee that voted to purchase the building that TML owns. It was a great move and vote on his part. I enjoyed greeting Jay in the mornings; he was always upbeat."

David Connor, executive director of the Tennessee County Services Association (TCSA), said West's presence will be missed.

"It's hard to think about local government associations over the last 30 years without thinking of Jay West," Connor said. "In addition to his years of leadership as the executive director at COAT, Jay himself was a former member of TCSA as a metro council member and vice mayor of Nashville/Davidson County and was active within the Tennessee County Commissioners Association and TCSA as well as the Tennessee Municipal League. While he was quick with a joke or humorous story, Jay took his work seriously and strove to be professional in every aspect of serving as an executive director."

Nashville Mayor Megan Barry said she was saddened to hear of West's death.

"Hailing from a family of public servants, Jay served our city with dignity and honor as a former council member at-large and vice mayor of Metro Nashville," Barry said. "As executive director of the County Officials Association of Tennessee, he served to empower local leaders and give a steady voice to the principles of local control."

WAUFORD

J. R. Wauford & Company, Consulting Engineers, Inc.

Home Office:
2835 Lebanon Pike
P.O. Box 140350
Nashville, TN 37214
615/883-3243

Branch Office (West):
Jackson
529 Old Hickory Blvd, Ste. A
Jackson, TN 38305
731/668-1953

Branch Office (East):
Maryville
908 W Broadway Ave.
Maryville, TN 37801
865/984-9638

www.jrwauford.com

Water and Wastewater Systems

STATE BRIEFS



Youth substance abuse is declining in Tennessee, according to a new report from the Substance Abuse Mental Health Services Administration (SAMSHA). According to the SAMSHA's recently released "National Survey on Drug Use and Health," the substance use declined among Tennessee youth from 2004-2006 to 2012-2014 with illicit drug use dropping to 3 percent, alcohol use declining to 10 percent, misuse of pain relievers dropping to 5 percent, and cigarette use declining 7 percent. Tennessee's youth substance use trends have been decreasing at a faster rate than the national average. Tennessee youth illicit drug use has declined and is now at or below the national average. Fewer Tennessee youth (6 percent) used marijuana in the past month than compared to the national average (7 percent). The full report outlines many positive trends in Tennessee related to youth substance use.

Several Tennessee cities have been ranked among the top 100 U.S. communities for dog owners, according to personal finance website ValuePenguin. Knoxville, Nashville, Chattanooga, Memphis, and Kingsport were all ranked among the 155 cities ranked by ValuePenguin and the American Pet Productions Association. Knoxville ranked eighth in the country and second in the southeast followed by Nashville at 25, Chattanooga at 36, Memphis at 55, and Kingsport at 95. The study ranked

cities across the nation based on six factors including cost of owning a pet, pet care, availability of pet suppliers and services, ability to take pets into non-pet related businesses, parks, walking areas, and population. According to the survey, \$10 billion was spent on pet care in the U.S. in 2014 with another \$9.5 billion on dog food alone. Americans list if a community is compatible with their dog among top factors for choosing where to live.

Tennessee's preliminary unemployment rate for January was 5.4 percent, increasing from the revised December rate of 5.1 percent, according to the Tennessee Department of Labor and Workforce Development. The U.S. preliminary rate for January is 4.8 percent, up one-tenth of a percentage point from the previous month. While experiencing a rate increase from 4.8 to 5.4 percent over the past year in Tennessee, the national rate has declined from 4.9 to 4.8 percent within the same time span. Total nonfarm employment increased with 1,200 additional jobs from December 2016 to January 2017. The largest employment increases were within trade/transportation/utilities, leisure/hospitality, and mining/logging/construction. Over the year, nonfarm employment increased by 58,800 jobs. The largest increases occurred in trade/transportation/utilities, leisure/hospitality, and professional/business services.

Governor's Rural Task Force website launches searchable online resource database

The Governor's Rural Task Force has launched a new website and resource database for Tennessee's rural communities, featuring comprehensive information about the task force and a searchable database that catalogs available programs and resources.

The website, a recommendation made by the task force in its October 2016 strategic plan, includes information from nine state departments and six task force community partners.

It is designed to provide Tennessee's rural community leaders and citizens with a single source for information about grants, loans, technical assistance and other community development programs.

The commissioners of the Department of Economic and Community Development, Agriculture and Tourist Development serve as co-chairs of the task force.

"The launch of the new website is the first of many initiatives to come from the Rural Task Force," Tourist Development Commissioner Kevin Triplett said. "It serves as a tool to enhance communication with rural communities regarding projects being developed by the task force and the opportunities available to those areas this program was designed to assist."

"The new website will be a great source of information for our communities," Agriculture Commissioner Jai Templeton said. "The new searchable grants and resources database will especially help our rural leaders find grants, technical assistance, training, and other resources from all depart-

ments of state government and task force partners in one central location."

"This one-stop shop for communities will make a big difference across the state and is just one of a number of task force projects already underway utilizing existing resources," Amy New, assistant commissioner for Rural Development in the Department of Economic and Community Development, said. "Gov. Bill Haslam's budget includes \$21 million for Rural Task Force initiatives and we look forward to implementing those programs that will address everything from agriculture and wellbeing to leadership development and job creation."

In October, the task force released its strategic plan to advance rural communities and promote economic development throughout Tennessee. The task force brought together stakeholders from all parts of the state in a grassroots effort to craft the recommendations presented in the comprehensive plan.

Alongside the one-stop-shop resources website, the task force is working to implement other recommendations made in October, including asset-based planning and the Retail Academy.

Asset-based planning helps communities identify long-term goals to leverage local assets, while the Retail Academy provides communities an analysis of retail gaps and provides tools to grow retail opportunities.

More details about the Rural Task Force's work are available at tn.gov/ruraltaskforce.

Vets, state leaders discuss higher ed at first-ever Veterans Academy

More than 100 attendees from more than 40 Tennessee higher education campuses gathered at Middle Tennessee State University on March 8 as part of the state's first ever Veteran Education Academy.

Gov. Bill Haslam and Department of Veterans Services Commissioner Many-Bears Grinder hosted the event, which was designed to strengthen the network and information sharing among campuses committed to recruiting, retaining and supporting student veterans on their journey to graduation.

Other speakers and prominent attendees included retired Lt. Gen. Keith Huber, Dr. Hilary Miller of Middle Tennessee State University, Tennessee Higher Education Commission Director of External Relations Kate Derrick, Assistant

Executive Director for Adult Learner Initiatives Jessica Gibson, University of Memphis President Dr. David Rudd, Student Veterans of America Vice President of Outreach Darren Phelps, Tennessee Army National Guard Chief Warrant Officer Mary Deel, and TCAT Associate Vice Chancellor for Instruction and Special Projects Carol Puryear.

Topics of discussion included military tuition and STRONG Act details, data collection and outreach, a mental health facts presentation, a tour of MTSU's Charlie and Hazel Daniels Veterans and Military Family Center, and information about the state department of Veterans Services.

For more information on veterans education, visit www.tn.gov/the/topic/veterans-education.

Tennessee events sweep Kaleidoscope Awards



Centerville, Linden, Morristown, Oak Ridge, Union City, and Winchester were among the municipalities that hosted events honored at the annual Kaleidoscope Awards. The awards are given by the Southeast Festivals and Events Association. In total, 20 awards were given to events held in Tennessee.

Events held in municipalities across Tennessee took home 20 honors at the 2017 Kaleidoscope Awards.

Held annually by Southeast Festivals and Events Associations, the award ceremony honors volunteers, organizers, and events throughout the region with gold, silver and bronze accolades in a variety of categories.

A panel of experts in event planning, marketing, and tourism review entries from five participating states and recognize festivals and events that display originality, creativity, media impact, volunteer programs, and an overall impact to the community.

Linden's Remembering World War II event took home the gold for best digital media and for best creative idea, silver for best festival with a budget under \$75,000, and bronze for best event program.

Union City's Discovery Park of America also brought home

several awards. The park's Great American Airshow took home gold for best promotional poster and silver for best new event; its Cardboard Boat Regatta took home gold for best t-shirt; it's McDonald's Pumpkin Village won gold for best event within an event; and its Libation Station won bronze for best digital media and bronze for best creative idea.

Morristown's 2016 Mountain Makins Festival took home the gold for best festival with a budget under \$75,000 while

Martin's Soybean Festival won gold for the best children's program and bronze for the best promotional poster.

The re-enactment of the Battle of Normandy at Oak Ridge's Secret City Festival won silver for best event within an event while Winchester's International Dogwood Festival won silver for best event photograph.

Centerville's National Banana

Pudding Festival won silver for its digital media, took home bronze for best creative idea with its cookbook, and its cook-off took home bronze for the best event within an event. Moon Pie also took home the gold for best sponsor for its involvement with the Centerville event.

Awards were presented during the Southeast Festivals and Events Associations' annual conference, held in Lexington, Ky., on Feb. 19-22. Next year's conference will be held in Nashville.

SFEA was founded in 2009 to strengthen the festival and event industry throughout the southeast. The organization gives out its annual Kaleidoscope Awards during its conference each February.

The organization works to recognize events that take place in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, or West Virginia.

Annual spring bike ride brings cyclists to Henry Horton State Park



Tennessee State Parks, the Tennessee Department of Environment and Conservation, and Bike Walk Tennessee are encouraging cyclists to come out to Henry Horton State Park near Chapel Hill for the annual Horton 100 spring ride as part of Bicycle Ride Across Tennessee.

Henry Horton State Park is proud to host The Horton 100, the annual springtime Bicycle Ride Across Tennessee (BRAT) event on April 22-23.

Riders will begin and end each day at Henry Horton State Park in Chapel Hill. With a mix of beginner and more challenging stretches, this ride will show the best of what Middle Tennessee has to offer from the prime vantage point of a bike seat.

Participants can ride the full 100 miles in increments of 50 miles per day, or choose a new 25 mile per day option.

"Hundreds of riders come to Middle Tennessee from all over the country for this annual springtime ride," said Brock Hill, Tennessee Department of Environment and Conservation Deputy Commissioner of Parks and Conservation. "Henry Horton State Park is an ideal place for riders to begin and end their journeys, with plenty of activities for participants and their families to enjoy throughout the weekend."

In partnership with Bike Walk Tennessee, Henry Horton will be offering an additional feature this year for families – a youth bike clinic on Saturday, April 22.

The clinic will be open to children of all ages and include lessons on rules of the road, bike safety and

a ride of up to three miles. Youth participants will need to bring their own bike and helmet. More information and registration for the youth event can be found online.

"Biking is such an important part of the life of our state here in Tennessee," said Anthony Siracua, president of Bike Walk Tennessee. "We are proud to partner with TDEC and the Friends of Henry Horton Park to teach bicycle handling skills to the children of middle Tennessee. Teaching kids to bicycle at an early age is a great way to encourage bicycling as a life-long activity, and it allows us to show the youth how to operate their bicycles with awareness and poise."

Registration includes two days of rides, two nights of camping (Friday and Saturday) and three meals. The registration fee per person is \$125 for both days and \$65 for one day until March 31. On April 1, the fee increases to \$135

for two days and \$70 for one day.

Online registration will close on April 17. Riders can camp for free, stay in one of the park inn's 68 rooms or reserve an RV campsite for an additional fee.

The park is located on the shores of the historic and beautiful Duck River, one of the most diverse ecosystems in the world. Park rangers will offer interpretive programming, including crafts and games, for kids and families who are there for the weekend.

Most of the routes will be on two-lane highways. Riders are encouraged to wear appropriate safety gear, including reflective clothing and bicycle lights.

Helmets are required to participate. Rest stations with refreshments will be available at various points along the ride.

More details, including the routes for both days, can be viewed online at tnstateparks.com/events.

TML requests E-mail addresses

The quickest way to keep city officials apprised of legislative happenings is through email or fax. With so many recent municipal elections, TML has been working to update its elected officials and city staff contact information. Send your updates to Jackie Gupton, by fax at 615-255-4752, by email to jgupton@TML1.org, or call 615-255-6416.



CLASSIFIED ADS

Advertising: \$9.25 per column inch. No charge to TML members. Send advertising to: Carole Graves e-mail: cgraves@TML1.org.

ASSISTANT PLANNER

MT. JULIET. The city of Mt. Juliet is seeking a candidate for a full-time assistant planner in the Planning & Zoning Department. A detailed job description and requirements are available online. Applications must be filed electronically and are available at the city's website, www.mtjuliet-tn.gov. The city will accept electronic applications until positions are filled. The city of Mt. Juliet reserves the right to stop accepting applications at any time. For questions, regarding the electronic application process, please call (615) 754-2552. EOE/Drug-free Workplace

POLICE OFFICER

GREENFIELD. The Greenfield Police Department has an immediate opening for a full-time police officer. An application, job description and a list of benefits can be picked up at the Greenfield Police Department or the Greenfield City Hall during regular business hours. 222 N. Front Street, Greenfield, TN, 38230. Applications will be received until position is filled.

POLICE SERGEANT

FAIRVIEW. The city of Fairview is accepting applications for Police Sergeant with the Fairview Police Department. Applicants must be P.O.S.T. Certified to be considered for this position. A pre-employment physical and drug screen, as well as a psychological exam will be required. Full job details and applications may be obtained online at www.fairview-tn.org or at Fairview City Hall during normal business hours and are in two parts. It will include a background investigation waiver, as well as an application. Applications will be accepted until position is filled. Submit applications in person or mail to the attention of: City Manager, 7100 City Center Way, Fairview, TN 37062 or at cm@fairview-tn.org. The city of Fairview is an equal opportunity employer. Applications are subject to disclosure.

PROCUREMENT SPECIALIST

COLLIERVILLE. The purpose of this classification is to perform skilled technical work in the procurement of a variety of materials, equipment, and supplies in accordance with prescribed purchasing regulations and procedures for the Town of Collierville and to coordinate documentation covering contractual obligations between the Town of Collierville and various vendors, contractors, and services providers. Requires an Associate's Degree with major coursework in Business Administration, Public Administration or a closely related field; supplemented by four (4) years of job related experience; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. Proficiency in Microsoft Word and Excel are required. Requires a valid Motor Vehicle Operators License Salary: DOQ with Excellent Benefits Package. Open until filled. Full job descriptions are available upon request. Call 901-457-2296. Apply to Human Resources Office, 500 Poplar View Parkway, Collierville, TN Please submit a new application each time you apply for a town job. Pursuant to Tennessee open records law, applications and resumes are subject to disclosure. EOE/ Drug Free Workplace.

PROCUREMENT TECHNICIAN

COLLIERVILLE. The purpose of this classification is to perform entry level to intermediate technical work in procurement of a variety of materials, equipment, and supplies in

accordance with prescribed purchasing regulations and procedures for the town of Collierville. Requires a high school diploma or GED; supplemented by college level coursework in Business Administration, Public Administration or a closely related field; Associate's degree preferred; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. Requires a valid Motor Vehicle Operators License. Salary: DOQ with Excellent Benefits Package. Open until filled. Full job descriptions are available upon request. Call 901-457-2296. APPLY to Human Resources Office, 500 Poplar View Parkway, Collierville, TN Please submit a new application each time you apply for a town job. Pursuant to Tennessee open records law, applications and resumes are subject to disclosure. EOE/ Drug-Free Workplace.

TRANSPORTATION PROJECT MANAGER

MT. JULIET. The city of Mt. Juliet is seeking a candidate for a full-time transportation project manager in the Public Works Department. A detailed job description and requirements are available online. Applications must be filed electronically and are available at the city's website, www.mtjuliet-tn.gov. The city will accept electronic applications until positions are filled. The city of Mt. Juliet reserves the right to stop accepting applications at any time. For questions regarding the electronic application process, please call (615) 754-2552. EOE/Drug-free Workplace

WATER / UTILITIES MANAGER

WARTRACE. The town of Wartrace is looking for a Water and Utilities Manager to supervise the overall operations of Wartrace Waterworks and Sewer Systems and the Public Works Department. Responsible for proper operation, maintenance, reporting, collection, treatment, distribution and/or disposal of water and wastewater. Maintenance of city fleet, equipment, streets, storm water drains, city owned buildings, and parks. Supervises three employees. Prefer four or more years of experience and State of Tennessee Grade 1 Water Distribution, Grade 1 Wastewater Treatment and Grade 1 Wastewater Collection Certifications. Valid Tennessee Driver's License and valid Tennessee CDL License or ability to obtain within 6 months. All licenses will be verified. Experience with Telemetry and SCADA Systems, administrative and supervisory skills, experience with operation of heavy equipment: Backhoe, Skid Loader, etc. Knowledge of safety requirements and precautions. Finalist must pass a background check and drug test prior to employment. Work hours are Monday through Friday, 7:30 am. – 4:00 p.m. (subject to change). Some overtime required (on call hours), some weekends. Employment applications available online at www.townofwartrace.com or mail resume to Town of Wartrace, P.O. Box 158, Wartrace, TN 37183.

WATER/WASTEWATER OPERATOR

WARTRACE. The town of Wartrace is looking for a Water/Wastewater Operator. Experience required, wastewater distribution license helpful. Must be able to lift up to 70 pounds. Valid driver's license required, CDL helpful. All licenses verified prior to employment. Must pass drug screening prior to employment. Work hours are Monday through Friday, 7:30 am. – 4:00 p.m. (subject to change). Some overtime required (on call hours), some weekends. Employment applications available online at www.townofwartrace.com or mail resume to Town of Wartrace, P.O. Box 158, Wartrace, TN 37183

BOOK REVIEW

Celebrating Failure: The Power of Taking Risks, Making Mistakes, and Thinking Big

BY RALPH HEATH
Reviewed by Margaret Norris
MTAS Management Consultant

Have you ever made a mistake? Have you ever learned from your mistake? Has the act of making a mistake made you a better person, friend, employee, or supervisor? Has fear of making a mistake (atychiphobia) kept you from trying something new? If so, then you will want to read *Celebrating Failure: The Power of Taking Risks, Making Mistakes, and Thinking Big* by Ralph Heath.

Heath owned an advertising company and he drew from his experiences in the private sector. However, the lessons offered are applicable to any industry, business or government. When we share what we learn, we are collectively stronger and better educated. Gone should be the days of penalties and punishments for trying something new and not being perfect the first time. Heath promotes an organizational culture where supervisors and colleagues celebrate and share new ideas and learning mishaps for the benefit of everyone.

Heath states: "To support failure as a tool, job one is to let your associates know that they are empowered to try new things that will not always work, and that is okay. They will be richly rewarded if they succeed, and will be allowed to survive if they fail."

Granted, taxpayers are typically not too keen on creative uses with their tax dollars. However, what small improvement or tweak can you make to a system that may just have a huge impact? Don't you owe it to your community to try? Try it and if it doesn't work, learn what went wrong, revamp, and try again.

The book is an easy read, less than 200 pages, arranged into 30 chapters, and each chapter has one "Failure Factor" highlighted. Here are a few:

Maintain a positive attitude. Learning from failure experiences provides growth opportunities. Keep a positive attitude and believe that you will create a new outcome with the next challenge (p. 63).

Make more mistakes. If you're not making mistakes, you're going for the sure win, working below your potential, and avoiding risks (p. 73).

Know your limits. Negotiating or taking a calculated risk requires advance knowledge and planning. Do your homework so you can recognize the signs leading to dead ends (p. 89).

Help others embrace failure. We're not alone in this world. Lending a helping hand goes without saying. We're not talking about suffering here; we're talking about learning. What actions might you take to compassionately support other people when they fail, help them carry on, and encourage them to achieve even greater failures – and successes (p. 114)?

Learn from others. If others have tried and failed – and learned to succeed – understand the lessons they have to teach. It may not be as memorable as living through the failure yourself, but it isn't as painful or expensive either (p. 124).

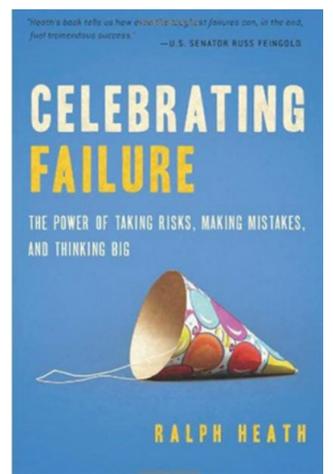
Set an example by being positive. Even when a failure occurs or

an outcome seems less than ideal, look for the positive elements within it and encourage others to do the same (p. 138).

Fail smarter. Failure does not equate to a lack of intelligence. People of all intellects and skill levels fail. Be willing to learn from it and fail smarter next time (p. 142).

Know when to start fresh. Not everything can be, or should be, fixed. Persistent "patching" of a failing project can temporarily support inefficiency and make success impossible. Sometimes a fresh start is what it takes to succeed (p. 160).

The book encourages risk taking. Again, most government environments are risk averse and understandably so. However, in the words of Will Rogers, "You've got to go out on a limb sometimes because that is where the fruit is." So, try something new. Stretch yourself and your comfort level. If it fails, acknowledge it with as much zest as you did when you tried, explain what went wrong and



move on. Be inspired to fail.
Editor's note: This book can be borrowed from the MTAS Watson Information and Research Center by emailing Dawn McMillen, MTAS Senior Library Associate, at dawn.mcmillen@tennessee.edu or calling at 865-974-8970.

NATIONAL BRIEFS



Manufacturers are cutting costs and creating new products in 2017, according to the LBM National Manufacturing and Distribution Outlook Survey. Seven in 10 U.S. manufacturers expect revenue growth of at least 3 percent this year, but labor issues — including the lack of qualified workers — are seen as a significant challenge to expansion. The survey found that 30 percent of small manufacturers expect revenue growth in 2017 of between 3 percent and 9 percent, while 31 percent expect 10 percent to 20 percent growth, and 13 percent expect 20 percent or greater improvement. Among large manufacturers, 50 percent expect 3 percent to 9 percent growth, while 13 percent expect 10 percent to 20 percent growth, and 6 percent expect 20 percent or more.

More than 700 of the 4,000 native bee species in North America are believed to be inching toward extinction. The Center for Biological Diversity's report concluded that of the 1,437 native bee species for which there was sufficient data to evaluate, about 749 of them were declining. Some 347 of the species, which play a vital role in plant pollination, are imperiled and at risk of

extinction, the study found. Habitat loss, along with heavy pesticide use, climate change and increasing urbanization are the main causes for declining bee populations. Last month, the rusty patched bumble bee was listed by federal authorities as endangered, becoming the first wild bee in the continental U.S. to gain such protection. The services provided by pollinators, such as bees, has been valued at an estimated \$3 billion each year.

A new study has found that 84 percent of wildfires that occur in the U.S. are man-made. According to the study from the University of Colorado, human intervention adds an additional three months and 40,000 fires to the national wildfire season on average. The study looked at 1.5 million wildfires from 1992 to 2012. The most common day for wildfires to begin is July 4 with the most common reasons for human-started wildfires being the debris burning, arson, equipment use, campfires, and children. The remaining 16 percent of wildfires were started naturally by lightning. Fighting wildfires in the U.S. has exceeded \$2 billion in recent years, the study said.

TML Board to meet March 20

Notice is hereby given that the Board of Directors of the Tennessee Municipal League will meet in regular public session on Monday, March 20, 2017, at 10 a.m. in the Nashville Meeting Room of the Doubletree Hotel, 315 4th Avenue North, Nashville, TN., for the purpose of considering and transacting all business that may properly come before said board. If reasonably possible, an agenda will be available on Friday, March 17, at the offices of the Tennessee Municipal League, 226 Capitol Blvd., Suite 710, Nashville. Additional information may be obtained from Jackie Gupton 615-255-6416.

Bond Fund Board to meet March 20

Notice is hereby given that the Tennessee Municipal Bond Fund Board of Directors will meet in regular public session on Monday, March 20, 2017, at 8:30 a.m., local time, in the Vanderbilt Room on the lobby level of the Doubletree Hotel at 315 Fourth Avenue North, Nashville, Tenn., for the purpose of considering and transacting all business that may properly come before said board. Some members of the board may participate in such meeting by telephonic means, which will be audible to any member of the public attending such meeting. If reasonably possible, an agenda will be available on Friday, March 17, at the offices of TMBF, 226 Capitol Boulevard, Suite 502, in Nashville. Additional information may be obtained at 615-255-1561.

MEMBER FOCUSED



THE
TML
POOL
Tennessee's Leader in Risk Management Services

www.thepool-tn.org • 800-624-9698

Tennessee Municipal League
 2016-2017 Officers and Directors
PRESIDENT

John Holden

Mayor, Dyersburg

VICE PRESIDENTS**Bo Perkinson**

Councilmember, Athens

Wallace Cartwright

Mayor, Shelbyville

Jill Holland

Mayor, McKenzie

DIRECTORS**Jimmy Alexander**

Mayor, Nolensville

Megan Barry

Mayor, Metro Nashville

Andy Berke

Mayor, Chattanooga

Daniel Brown

City Council, Knoxville (District 2)

Vance Coleman

Mayor, Medina

Betsy Crossley

Commissioner, Brentwood (District 6)

Richard Driver

Mayor, Lafayette (District 5)

Bill Graham

Councilman, Dayton (District 3)

Hoyt Jones

Alderman, Sparta (District 4)

Christa Martin

Vice Mayor, Columbia

Lonnie Norman

Mayor, Manchester

Pete Peterson

City Manager, Johnson City (District 1)

Madeline Rogero

Mayor, Knoxville

Paula Sedgwick

Alderman, Bartlett (District 8)

Charles "Bones" Seivers

President-CEO, TN Municipal Bond Fund

Barrett Stevens

Mayor, Bolivar

Jim Strickland

Mayor, Memphis

Mary Ann Tremblay

Vice Mayor, Three Way

Garry Welch

City Manager, Savannah (District 7)

Mike Werner

Mayor, Gatlinburg

PAST PRESIDENTS**Curtis Hayes** (2016) Mayor, Livingston**Tom Rowland** (2015) Mayor, Cleveland**Dale Kelley** (2014) Mayor, Huntingdon**Ken Wilber** (2013) Mayor, Portland**Kay Senter** (2012) Morristown Vice Mayor**Sam Tharpe** (2011) Commissioner, Paris**Tommy Pedigo** (2010) Council, Morristown**Tommy Green** (2007) Mayor, Alamo**Bob Kirk** (2004) Alderman, Dyersburg**AFFILIATE DIRECTORS****Chris Anderson**, Council, Chattanooga (NLC)**Karen Johnson**, Councilwoman, Nashville (NLC)**Rob Lyons**, Murfreesboro (TCMA)**TML AFFILIATED ORGANIZATIONS**

(Ex-Officio Directors)

Tennessee Assn. of Air Carrier Airports

Tennessee Building Officials Assn.

Tennessee Association of Chiefs of Police

TN Assn. Municipal Clerks & Records

TN Government Finance Officers Assn.

Tennessee Fire Chiefs Assn.

Tennessee Fire Safety Inspectors

Tennessee Association of Floodplain

Management

Tenn. Assn. Housing & Redevel. Auth.

Tennessee Municipal Attorneys Assn.

Tennessee Municipal Judges Conference

Tenn. Chapter, American Public Works

Tennessee Recreation and Parks Assn.

Tennessee Chapter, American Planning

Tennessee Personnel Management Assn.

Tennessee Assn. of Public Purchasing

TN Section, Institute of Transport

Tennessee Public Transportation Assoc.

Assn. of Independent and Municipal

Schools

Tennessee Renewable Energy & Economic

Development Council

Tennessee Urban Forestry Council

Tennessee Stormwater Association

TML SPONSORS**3 STAR SPONSOR**

Bank of America

Bank of New York Mellon, Co.

Civil & Environmental Consultants

First Tennessee Bank

2 STAR SPONSOR

Alliance Water Resources

Ameresco, Inc.

Barge Waggoner Sumner & Cannon, Inc.

Carr, Riggs & Ingram LLC

VC3

Voya Financial Advisors

Waste Management Inc. of Tennessee

1 STAR SPONSOR

A2H

Employee Benefit Specialists, Inc.

J.R. Wauford & Co. Consulting Engineers

Local Govt. Corporation

McGill Associates, P.A.

Pavement Restorations, Inc.

Smith Seckman Reid

Tennessee 811

TLM Associates, Inc.

Utility Service Co., Inc.

Vaughn & Melton

Waste Connections of Tennessee Inc.

Waste Industries USA, Inc.

TML STAFF

Margaret Mahery, Executive Director

Chad Jenkins, Deputy Director

Mark Barrett, Legislative Research Analyst

Kate Coil, Communications Specialist

Jackie Gupton, Administrative Assistant

Carole Graves, Communications Director

& Editor, *Tennessee Town & City*

Sylvia Harris, Conference Planning Director

John Holloway, Government Relations

Debbie Kluth, Marketing Director /

Member Services

Kevin Krushenski, Legislative Research

Analyst

Denise Paige, Government Relations

State, local leaders defend tax exempt "muni bonds" as Trump, U.S. Congress talk infrastructure improvement plan

MUNI BONDS from Page 1
 ey makes the tax exemption a tempting target.

U.S. House Ways and Means Committee Chairman Kevin Brady, a Texas Republican, said at a Heritage Foundation event in December that he thinks there's "merit" to eliminating the deduction as part of a broader tax policy makeover that would lower rates. "The added benefit here is that the federal tax code will no longer subsidize higher taxes at the local level," Brady said.

House Republicans released a tax policy blueprint last year that proposed eliminating most itemized deductions, including those taken for interest earned on municipal bonds. The proposal would keep intact deductions for mortgage interest and charitable giving. They are now drafting a new version of the plan.

A Meeting With Trump

Even though they are called "municipal" bonds, states and other entities such as school districts and water authorities also rely on them. In 2016, there were \$423.8 billion in new municipal bond sales, which include bonds issued by state authorities, water and sewer districts, local authorities, municipalities, counties, and colleges and universities.

The tax-free bonds come in three varieties. Most municipal bonds used to finance infrastructure projects are "general obligation" bonds, which means the governmental body that issues them puts its "full faith and credit" behind them. In other words, the city or county issuing the bonds pledges that its taxpayers will pay them off, no matter what happens. Cities and counties also issue "revenue bonds," which they pay back using fees, such as tolls or public utility fees. Then there are "private activity" bonds, which are used mostly for

housing and are secured by mortgages.

Shortly before President Donald Trump's inauguration, Benjamin and other mayors of cities large and small met with the incoming president, who assured them that he opposed taxing any of the types of bonds. "He said he understood and would be fully supportive" of the tax-free bonds, said Larry Jones, assistant executive director of the nonpartisan U.S. Conference of Mayors. "However, we have yet to see how he would treat tax-exempt bonds in any budget proposal or tax reform proposal. We've been making our case on the Hill."

Governors also have expressed support for keeping the bonds tax-exempt. "Municipal bonds remain a critical tool to financing the construction or improvement of schools, streets, highways, hospitals, bridges, water and sewer systems, ports, airports and other public works," the National Governors Association said in a statement earlier this month.

Despite Trump's assurances, muni-bond supporters have reason to be wary. During the presidential campaign, Trump's economic advisers Peter Navarro and Wilbur Ross (since confirmed as secretary of commerce) questioned the wisdom of relying on tax-exempt bonds to rebuild the nation's infrastructure, as Trump has pledged to do.

Instead, they suggested awarding federal tax credits to private firms to do the work. The tax credits might not replace municipal bonds, but they could crowd the market for infrastructure investing.

A Traditional Target

Muni bonds also came under fire during the last major revision of the federal tax code, in 1986.

Frank Shafroth, director of the State and Local Government Leadership Center at George Mason University, was the National League of Cities' director of federal relations

during that debate. In a recent interview, he recalled the mad scramble to keep muni bonds tax-exempt as President Ronald Reagan and Republicans in Congress sought to eliminate or scale back the exemption.

Shafroth said awarding tax credits to private firms, as Trump's economic advisers have proposed, "would not help with the vast number of projects" because, he said, those tax credits would most likely go to big, new projects, where they would be worth the most to private companies, not smaller efforts like road repair or school reconstruction.

Elizabeth Kautz, the mayor of Burnsville, Minn., just south of Minneapolis, emphasized that her city relies on municipal bonds to pay for street repaving and other basic maintenance, not to build shiny new stuff.

"It's not like you do it once and it's done," Kautz said. "There are always improvements and maintenance you have to do." She said the city has a fiduciary responsibility to citizens to make these improvements and to issue the bonds to finance them.

But critics of muni bonds argue that they make borrowing money for infrastructure projects so easy that some cities and towns unnecessarily construct things. If the cities had to pay outright, there would be more discretion on what projects to fund, the theory goes.

Scott Greenberg, an analyst at the Tax Foundation, said muni bonds may encourage cities to "overinvest in infrastructure, particularly if states and localities are also able to shift their tax burdens onto nonresidents." That shift occurs when nonresidents buy the municipal bonds.

"The subsidy goes to fund both projects that would have been funded no matter what, and projects that would not have been funded without the subsidy," Greenberg said. "It's the second category we should be at least a little wary of."


March 27- April 2: Columbia Mule Day

An annual celebration of all things related to mules and held in Columbia, the "Mule Capital" of the world. What began in 1840 as "Breeder's Day," a meeting for mule breeders, it now attracts more than 200,000 people and takes place over four days. In addition to mules, traditional Appalachian food, music, dancing, and crafts are featured. For more information go to <http://muleday.org/about/>.

March 31 - April 1: Savannah Blues Hog BBQ & Music Fest

The Kansas City Barbeque Society sanctioned cook-off Blues Hog BBQ & Music Fest is back for its third year. The event will take place at Wayne Jerrolds Park in Savannah. Friday night activities will include a Kids Que and cooking classes by professional BBQ cooks. Saturday brings a classic car show as well as other activities. Attendees will have the opportunity to taste BBQ cooked by the professional cooks. More information on the event can be found at www.blueshogbbqandmusicfest.com or by calling Mary Beth Hopper at 731-616-7474 or emailing mbhopper@epl.us.net.

April 1: Union City

Southern Nights Concert at Discovery Park of America
 Enjoy live music, good company and delicious food as the concert series on the Great Lawn kicks off for the season. Tickets are \$10 and are available to purchase at the gate. Don't forget to bring your picnic blankets and lawn chairs. Gates open at 5:30 p.m. For more information email: kjarvis@discoveryparkofamerica.com; or phone 1-877-885-5455

April 8: Pulaski

Hayride Easter Egg Hunt
 Spend a fun filled afternoon at Milky Way Farm in Pulaski searching for candy treasures. Bring your baskets and camera for photo opportunities with the Easter Bunny. A \$12 fee for adults and children includes participation in all activities and snacks. For more information go to http://milkywayfarm.org/event/milky-way-farms-spring-easter-egg-hunt/?instance_id=3308, or call 931-808-2281.

April 7-9: Knoxville

Rhythm N' Blooms Music Festival
 Knoxville's largest music festival returns to Knoxville's Historic Old City along Jackson Ave. and other Old City venues. Purchase week-end passes, get information about the Old City, Downtown Knoxville and the full festival experience at rhythmbloomsfest.com.

UT-MTAS MARCH / APRIL MAP CLASSES

DRINKING FROM A FIRE HYDRANT: OVERVIEW OF MUNICIPAL WATER SYSTEMS

This course covers key topics concerning the municipal water system including TDEC fire hydrant rules and regulations; protection of water systems from physical damage by fire department personnel; non-revenue water use, water loss, and theft; and others.

**Dates/Locations/Times****March 28: Memphis**

8:30 a.m. – 12:30 p.m. CDT

March 29: Jackson

8:30 a.m. – 12:30 p.m. CDT

April 4: Kingsport

8:30 a.m. – 12:30 p.m. EDT

April 5: Knoxville

8:30 a.m. – 12:30 p.m. EDT

April 6: Collegedale

8:30 a.m. – 12:30 p.m. EDT

April 7: Nashville

8:30 a.m. – 12:30 p.m. CDT

Credits: 4 CPE/CMFO (Other) (PA)

To register for a course, go to www.mtas.tennessee.edu, or fax to 865-974-0423. Credit card payments must register online with the Solution Point System: <http://www.solutionpoint.tennessee.edu/MTAS> or by invoice. For registration assistance, call 865-974-0413. Or for more information, contact Kurt Frederick, training consultant, at 615-253-6385.

No loan is too large or too small



The town of Livingston recently closed a \$3 million fixed rate loan with the Tennessee Municipal Bond Fund to finance water and sewer system improvements. Pictured are Livingston Town Clerk Phyllis Looper, TMBF representative Linda Mooningham, Livingston Mayor Curtis Hayes, and Vice Mayor Bill Winningham.



The city of Humboldt recently closed a \$3,825,000 fixed rate loan with the Tennessee Municipal Bond Fund to finance renovations and improvements to city schools. Pictured are Humboldt Mayor Marvin Sikes, TMBF representative Tommy Green, and Humboldt Treasurer Kim Hadley.



See us for your special projects needs.
 (615) 255-1561

Drone network to aid in natural disaster response

BY KATE COIL

TML Communications Specialist

Using eyes in the sky, a Memphis-based organization is working to ensure that Tennessee and several other neighboring states are prepared for major disaster events.

A non-profit organization, the Central United States Earthquake Consortium (CUSEC) was established in 1983 to represent the states most impacted in the Central U.S., particularly those along the New Madrid Fault Line. Tennessee is one of those eight states along with Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, and Missouri. Emergency managers from each state serves on the CUSEC's board of directors. The goal of the CUSEC is to help states develop earthquake management programs and helping the states work together as a region in case of a major earthquake event.

As part of the organization's work to help states prepare for and recover from earthquake events, CUSEC Executive Director Jim Wilkinson said the consortium is piloting a new aerial drone program with help from volunteer operators across the eight-state region.

"We want to help our state emergency management agencies be better prepared for an earthquake," Wilkinson said. "Drone technology is rapidly emerging, and the applications are endless. As we started looking into it, there wasn't any structure the emergency management community could tie into to use these drones. We know the information drones provide is a huge resource and indispensable for helping us figure out what has happened."

Often times, emergency personnel cannot begin making assessments about a natural disaster until after they have been on the scene. Wilkinson said the use of drones could give emergency management officials an earlier look into disaster areas and help speed up the decision-making process, potentially saving lives and infrastructure.

"An earthquake is a no-notice event, and can take emergency management operations a while to get up and running. That time delay means lives could be lost, and infrastructure could be lost," he said. "If we create this network of volunteer operators throughout the central United States and have worked them into our emergency plan, those people know when this happens to get that drone up in a predetermined radius to look at that area. They can then start sending back photos to the decision makers, drastically reducing the time it will take to send what are often limited resources."

Drones can also help determine what areas have the most damage and help identify if infrastructure like bridges, streets or tunnels are destroyed so emergency officials can find the quickest route to providing help.

Wilkinson said massive natural disasters can sometimes overwhelm local emergency management agencies, even putting recovery into a holding pattern before state officials can arrive. If a disaster has damaged fire departments, police departments, EMS services, and other emergency management facilities or equipment, local officials may not have the ability to respond.

"In an earthquake situation, it is very easy for local officials to be affected themselves," he said. "You also sometimes have a situation where pockets are unscathed and others are devastated, so emergency responders could be cut off from each other. In that situation, you have officials on the state and even federal level taking over making the decisions, and they often find themselves in the dark for quite a while before the local officials can get in a position to say what they need. We saw that back during Hurricane Katrina when entire areas of New Orleans were gone. There were areas where the town hall, fire



After a major earthquake struck Nepal in 2015, unmaned aerial vehicles, or drones, were used to help in rescue and recovery efforts. The Memphis-based Central United States Earthquake Conservatory is hoping to develop a similar program, creating a network of drone operators along the New Madrid Seismic Zone. Intended to help identify areas of major infrastructure destruction and help in rescue efforts in the event of a major earthquake, CUSEC officials said emergency management operations could also eventually tap into this network to track missing persons or for other natural disasters like tornadoes, wildfires, and ice storms.

station and other facilities were destroyed."

One of the reasons the drone network is being developed is because of how devastating a major earthquake could be to the central region of the country and Tennessee in particular. The last major series of earthquakes occurred on the New Madrid fault between 1812 and 1811, estimated to have ranged between a 7.4 and a 7.9 on the Richter scale. By comparison, the famed 1906 earthquake in San Francisco peaked a 7.8.

"Every earthquake that occurs each day is a roll of the dice," he said. "If that right number comes up, it is going to be damaging. In this country, we have been very lucky if you look at earthquakes globally. Whether it is the San Andreas or New Madrid, the U.S. is overdue."

Wilkinson said the longer an area has gone without an earthquake the more likely it is an earthquake will occur. A report released by the Federal Emergency Management Agency in 2008 said a serious earthquake on the New Madrid fault could create "the highest economic losses due to a natural disaster in the United States," and Tennessee specifically could lose "tens of thousands of structures affecting water distribution, transportation systems, and other vital infrastructure," if the quake were a 7.7 or higher. The report also estimated that such an earthquake would cause "many thousands" of fatalities with an expected 4,000 deaths in Memphis alone.

"I would say the level of preparedness in Tennessee has increased significantly, but the level of awareness that an earthquake is a central U.S. problem is not where it needs to be," Wilkinson said. "That lack of awareness can contribute the number of people who could be hurt or killed. People don't know there is a process or a drill we promote to

protect yourself. You are supposed to take measures as soon as the ground shakes, but we aren't accustomed to that shaking. Those seconds when you are trying to figure out what is causing that shaking is usually that same period when people are hurt or killed."

One of Tennessee's main issues is that infrastructure is not prepared for a disaster of this kind.

"The challenge for the emergency management community – which is charged with saving lives and property – sometimes faces challenges when it comes to the economic growth and vitality aspect of a community," Wilkinson said. "We need to build our communities to be safer, more resilient communities so the time they are down because of a disaster is minimized. A lot of times our most important structures, such as our town halls and local businesses, don't always have the preparation or infrastructure to survive these disasters."

Relationship building is also essential to disaster preparedness.

"Officials need to work together ahead of time so that when they need to implement an emergency management plan, it isn't the first time they are building those relationships or plans," Wilkinson said. "Natural disasters have a way of finding your shortcomings and exposing them. Emergency management needs to be on the priority list as an integral part of the overall vitality of a community."

While the western part of the state has the biggest risk being around the New Madrid fault, Wilkinson said the state's other two grand divisions are not without risk themselves.

"We have a seismic risk on the eastern and western side of the state," he said. "The Appalachian Mountain Chain is part of the East Tennessee Seismic Zone, and has the

Tennessee Earthquake Quick Facts

The series of New Madrid earthquakes in 1811-12 created Reelfoot Lake.

The largest single earthquake event recorded in the state was the Aug. 17, 1865, quake in Memphis.

The U.S. Geological Survey reported an estimated 226 minor earthquakes or seismic events in Tennessee in 2016.

Ridgely was the municipality with the most recorded earthquakes or seismic events in Tennessee last year. The town recorded some 103 events in its vicinity in 2016.

According to USGS data, the biggest earthquake recorded in Tennessee last year was a 3.4 magnitude event about 5.6 miles northwest of Tiptonville.

potential to produce a 6.5 earthquake. That could be devastating depending on the right combination. Unfortunately, it seems that the further east you go in this state the less prepared people are for earthquakes. Our awareness of our earthquake risk is also fairly new. They only began studying them in the 1960s. As we saw in Mineral, Va., these east coast earthquakes can be dangerous. We had schools closed down and the Washington Monument was damaged."

CUSEC works with communities to prepare for these events through geological, transportation, public information officer, GIS work groups established to address hazards related to earthquakes.

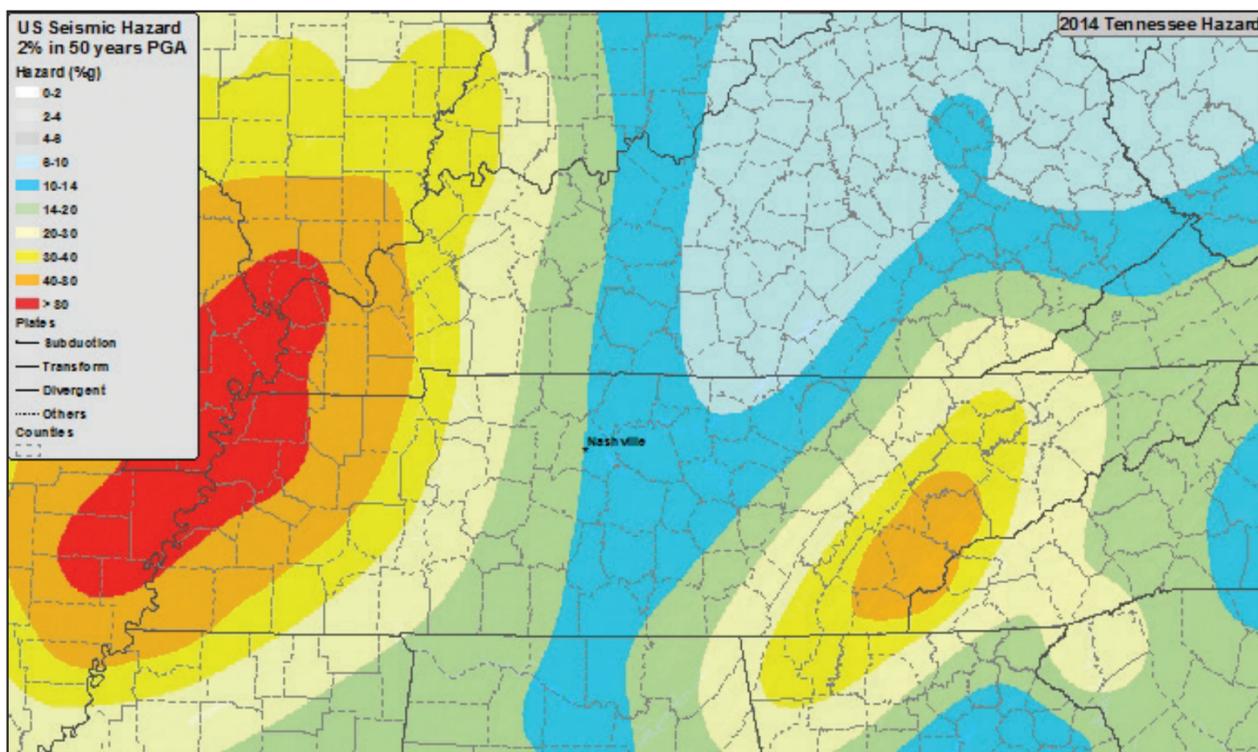
While the drone network is being put together for earthquake response, Wilkinson said the hope is state emergency management officials will be able to tap into the network for other issues.

"An earthquake in the central U.S. is our worst-case scenario, but we feel the work and plans we do here have applications to other natural disasters, whether it is a flood, tornado or ice storm," Wilkinson said. "The drone piece of this is being built around the earthquake threat, it can be tapped to be used for anything from search and rescue for a lost child or a HazMat situation. You can call on these guys for any response where you need better situational awareness."

A former city planner himself, Wilkinson said his best advice to community leaders is to plan ahead and make sure they have the right decision makers working to ensure their community is prepared for any disaster event.

"I encourage people to get familiar with us and what we do," he said. "We have some pretty exciting things we are working on. We are developing a whole regional common operating picture. It is at the state level at this point, but we are making it available to everyone. We have a power outage application that shows you where power outages are in all eight of our states, which is a way to track storms on their way through. We want to help our emergency management community make decisions."

For more information on Tennessee's earthquake risk and what communities can do to prepare themselves, visit www.cusec.org.



This 2014 map showcases the earthquake risks for various areas of Tennessee and the surrounding states. Tennessee is located on two fault lines: the New Madrid Seismic Zone that follows along the Mississippi River and the East Tennessee Seismic Zone or Southern Appalachian Seismic Zone that runs along the Appalachian Mountains. The 2014 study of seismic zones across the country conducted by the U.S. Geologic Survey found East Tennessee is more at risk than previously thought for an earthquake and ranked Tennessee 16th on a list of states most likely to experience a major earthquake event.