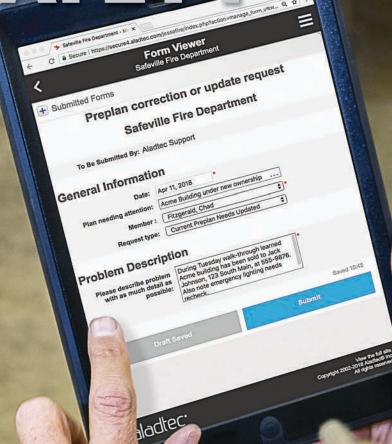
The Premier Magazine For America's Municipalities

April 2018

BUBLIC SALES FRE DEPARTMENT - M. X Sate-Wille Fre Department - M. X Sate-Will Fre Department - M. X Secure | Inter-Precious Absolute - configuration of the property of th



INSIDE:







Cloud app streamlined county's '#MeToo' compliance

Virtual reality in fire service for training

Gunshot detection sensors

PAID BOILD B





Enhance Your Safety & Service Teams Icom's Advanced Digital Communication Solution

Bluetooth™ - Vibration Alert - Voice Recorder - OTAP* Channel Voice Announcement - Waterproof - Type-D Trunking* Data Message - Safety Man-Down - Tactical Mode Compact Size: 2.2"w x 3.6"h x 1.1"d



www.icomamerica.com/landmobile

©2018 Icom America Inc. The Icom logo is a registered trademark of Icom Inc. 20852 'Available Option



M

Contents

April 2018

VOL. 9 No. 1

30

www.themunicipal.com





18 Focus On Public Safety: Bringing cost-savings to police fleets

20 Focus on Public Safety: Virtual reality becomes more of a reality for firefighters

24 Focus on Public Safety: Bolstering community safety with gunshot detection systems

28 Focus on Public Safety: Adapting to the era of alternative fuels

30 Focus on Public Safety: Helping themselves: Police officers put stress relief techniques and coping mechanisms into practice

34 Focus on Public Safety: Maybe it's friendly — Police officers and the paranormal

40 Building & Construction: Virginia municipality builds new fire station into a sustainability showplace

44 Streets, Highways & Bridges: Curbing a need for speed: How variable advisory speed limits can mean safer roads

48 Public Works: St. Augustine concentrates on resiliency in face of sea level rise

52 Fleet Service & Management: *Growing fleets for growing cities: Why some cities are opting out of in-house fleet management*

54 Maintenance & Operations: Live and in real time

56 Parks & Environmental Services: Creating a successful dog park



ON THE COVER

City of Norton, Ohio, firefighters designed a form in their Aladtec database that allows them to send changes like owner contact information or building changes right from the field, saving time and process steps. Tracking schedules, swapping shifts and supervisor-staff communication is made easy with the Aladtec workforce management system. Some customers say they pay for the annual subscription in just weeks with time saved by using scheduling function alone. Visit www.aladtec.com to learn more.





Are your Pedestrian Safety Barriers FALLING DOWN on the Job? You Need to Get ...







It's your choice!





Introducing a NEW, First-of-its-kind pedestrian safety barrier system. The only Full Height Rigid Top & Bottom Rail Safety Barrier System available today. Designed to attach to all 42" Delineator Posts.

- * Construction Sites
- * Public Works
- * Sporting Event
- * Festivals & more



- * Industrial
- * Crowd Control
- * Police / Fire Emergencies
- * Entertainment Venues

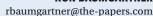
Sets up fast, transports and stores in a fraction of the space. Saves time, saves space, saves \$\$\$

OMEGA Industrial Products 795 Progress Drive, Saukville, WI, 53080 PH: 262-284-4184 PH: 800-521-8272

www.omegaindl.com marks@omegaindl.com contact@omegaindl.com

Check out our videos on YouTube

publisher **RON BAUMGARTNER**







editor-in-chief **IERI SEELY** jseely@the-papers.com

SARAH WRIGHT swright@the-papers.com





publication manager **CHRIS SMITH** chris@themunicipal.com

senior account executive **REES WOODCOCK** rees@themunicipal.com





inside sales representative **NANCY BUCHER** nancy@themunicipal.com

graphic designer MARY LESTER mlester@the-papers.com



director of marketing **KIP SCHUMM** kschumm@the-papers.com

mail manager

KHOEUN KHOEUTH

THE MUNICIPAL

PO Box 188 • 206 S. Main St., Milford, IN 46542 866-580-1138/Fax 800-886-3796 Editorial Ext. 2307; Advertising Ext. 2505, 2408, 2485 or 2489 **WWW.THEMUNICIPAL.COM**







The Municipal does not knowingly accept false or misleading advertising or editorial content, nor does The Municipal or its staff assume responsibility should such advertising or editorial content appear in any publication. The Municipal reserves the right to determine the suitability of all materials submitted for publication and to edit all submitted materials for clarity and space. The Municipal has not independently tested any services or products advertised herein and has verified no claims made by its advertisers regarding those services or products. The Municipal makes no warranties or representations and assumes no liability for any claims regarding those services or products or claims made by advertisers regarding such products or services. Readers are advised to consult with the advertiser regarding any such claims and regarding the suitability of an advertiser's products. No reproduction of The Municipal is allowed without express written permission. Copyright © 2018.

epartments



Murals, Virginia, Minn.

- **Editor's Note:** When the world goes awry
- **10** From the Cover: Concerned about '#MeToo' policy compliance? An Illinois county streamlined sign-offs with an e-solution
- **Unique Claims To Fame:** *Murals* Virginia, Minn.
- 14 City Seals: Forsyth, Ga.
- **38** Personailty Profile: Parsley carries many skills from her firefighting and skeleton racing days
- **Conference Calendar**
- **59** Product Spotlights
- **Company Profile:** Cooperative contract brings Christmas in June to Staples Fire Department
- **62** Classified Ads
- **64** Guest Column: In crisis, melding police, fire and procurement
- Top 10: America's 10 safest cities
- **Advertiser Index**



CALL TODAY TO GET YOURS 877.271.0444 or 440.387.9827 WWW.THEPOWERGRIPZ.COM

When the world goes awry





Sarah Wright | Editor

to the forefront of the public consciousness recently with shootings and natural disasters seemingly becoming constants. Cities and their various departments across the country are undoubtedly entering into self-reflection and inevitably asking themselves one question: What if it happens here?

From there, the question deluges into many: Do we have a plan for scenario X, Y and Z? When has that plan been updated? Is the plan detailed enough? Does it clearly list a chain of command? Are priorities listed, such as which departments should be prioritized when it comes to fuel? Is there a system in place to document all expenses during the disaster so after it there isn't a scuffle to pull everything together for the Federal Emergency Management Agency? And so on.

Even if all these questions can be easily answered, in the words of Scottish poet Robert Burns, "The best-laid schemes o' mice an' men, Gang aft agley" — or go awry, if you're unfamiliar with Scottish dialects.

Some northern Indiana cities local to The Municipal's office got a taste of this in February when a large of amount of snow melted and was followed by a deluge of rain. Since the ground was still frozen, the end result was massive flooding, particularly around rivers. Several states of emergencies were declared by local cities, and in the case of South Bend, Ind., raw sewage had to be pumped into the Saint Joseph River after its wastewater treatment plant was shut down due to flooding.

Flooding in February is seldom expected, but municipalities, other local agencies and first responders really stepped up, and — as I write this at the beginning of March — they are working with FEMA to assess damage and get paperwork in order so assistance can be provided.

Our guest columnist this month, Tammy Rimes, a procurement consultant and



executive director of the National Cooperative Procurement Partners, highly recommends keeping procurement departments in the loop during crises — they can be your best friends. Not only can the fine folks in procurement get needed supplies, but they can also manage donations and help streamline the documentation process needed for FEMA reimbursements.

In regards to gun violence, writer Catey Traylor has highlighted North Carolina's Goldsboro Police Department and its efforts to reduce gun violence in its community with the installation of real-time gunshot detection sensors. Since the sensors went into place, the department has seen an increase in positive identifications of suspects.

Other public safety related topics include cost-saving methods for police fleets; how technology is changing training in the fire service; how fire departments are adjusting to the increase of electric vehicles on the roadways; what police officers can do to develop positive stress release techniques; and we will be sharing out-there calls police departments have received — predominately paranormal calls.

Stay safe out there this April! And if you have any out-there calls, feel free to share them with The Municipal on Facebook or Twitter. M





It's a No-Brainer!



AT-IN-3002 \$582. 55 Gallon Aluminum

We Make And Repair Aluminum Fuel And Hydraulic Tanks Round, Square, Rectangular and "D" - All Openings to your specifications All Tanks FMCSA Approved

Made in the USA with Premium American Materials



\$720.86 GMC style 54 Gallon Tank

\$661.28 International style 50 Gallon Tank

As a factory-direct replacement and custom tank manufacturer, Alumitank can produce a wide variety of tanks in many configurations and quantities. Serving DOTs since 2001, Alumitank is the preferred choice of municipalities throughout the Midwest and across the nation.

ALUMITANK

THE FUEL TANK SPECIALISTS www.alumitank.com ORDER WHOLESALE FACTORY DIRECT! Call Us Toll-free At 1-800-652-6630





Aladtec's cloud-based workforce management software allows any member to easily access a work schedule, request shift trades or time-off, receive messages, update certifications and more from the field using a smartphone or tablet. (Photos provided)

Concerned about '#MeToo' policy compliance? An Illinois county streamlined sign-offs with an e-solution

Seasoned administrators sometimes use the snide term "adult day care" for the chore of informing staff to policy changes and documenting acknowledgments for the paper trail.

So when Illinois lawmakers responded to the recent #MeToo controversy with new legislation requiring all public employees acknowledge the new policy, leaders in DeWitt County, Ill., turned to their Aladtec workforce management system and called for employees to read and sign off on the sexual harassment policy.

"The state gave us a deadline, and although I see a lot of these people, the responses gave me the documentation immediately," said Dee Dee Rentmeister, DeWitt County administrator. "I love it!"

While some supervisors chaff at having to obtain and file such documents, Rentmeister didn't worry when a harassment case surfaced recently and the accused employee claimed he was unaware of such a policy.

Rentmeister dug into her files, pulled the signed acknowledgment and the worker was dismissed without further dispute.

The administrator also used Aladtec's Required Message function to remind 82 staffers to check their member profiles for accuracy to assure they receive their mailed W-2 forms.

Chief Deputy Bob Spickard recently used the program's smartphone access to submit his timesheet — while on vacation in California. The pay period ended midweek while he was out of town. His sheriff's deputies with take-home squads clock in via smartphone from the field if they're dispatched directly to an incident.

It took Spickard a while to master the nuances of the scheduling "but once you do it a few times, it's not that hard."

For Rentmeister, the system brings efficiency and time savings by putting everyone from the animal control officer to custodial staff, clerical and highway employees in touch across the 405-squaremile county.

Aladtec is a sophisticated online application that runs on secure and dedicated web servers. Users access it from any web browser on any internet-enabled device anytime, anywhere. Users can view schedules, forms, discussions and notifications. They can submit availability, trade shifts, submit time off requests, check certifications, create reports and weigh in on discussions.

The features save administrative time, reduce overtime costs, improve communication and increase overall efficiency. Some customers report the program pays for itself within the first few weeks from just overtime savings. Unlimited tech support is free to users.

RIGHT: Phil Nicolas, a 21-year-old paramedic with LifeLink III, is pictured near one of the flight service's six AgustaWestland 119Kx helicopters at his base in Anoka, Minn. LifeLink III has found tracking schedules, swapping shifts and supervisor-staff communication to be easier with the Aladtec workforce management system. (Photo provided)

Improved communication reduces employee turnover and burnout. The system tracks everything: trades, vacation time, PTO and approvals.

With nothing to install, customers don't worry about compatibility or system upgrades. It works equally well on Mac or Windows with a variety of web browsers.

"We now keep all our forms within our Aladtec system," said Jayde Quigley, the chief operating officer at Animal Emergency & Referral Center of Minnesota. "We use the Forms feature for incident reports, position changes, reimbursement submissions and IT requests. I estimate Aladtec will save us up to \$9,000 a year in scheduling associated labor costs."

Colorado River Fire Rescue provides fire, EMS, hazardous materials and rescue response for the city of Rifle, two townships and a surrounding region encompassing about 850 square miles. The service has six stations, utilizing volunteers as well as part-time and full-time staffing. The Aladtec system helps keep them all on the same page.

"The Forms feature is great, and we use it for many documents — such as time cards, vehicle maintenance, daily checks, award nominations and more. The staff loves not having to use paper forms anymore," said Landon Churchill, engineer/EMT with the service.

"As an organization, I estimate we're saving about 100 hours a month by using Aladtec," Churchill said. "This lets us dedicate more time to a variety of important civic duties, resulting in a positive impact on the communities we serve. It also saves us a lot of hassle, we find the system very user-friendly and the entire staff loves it."

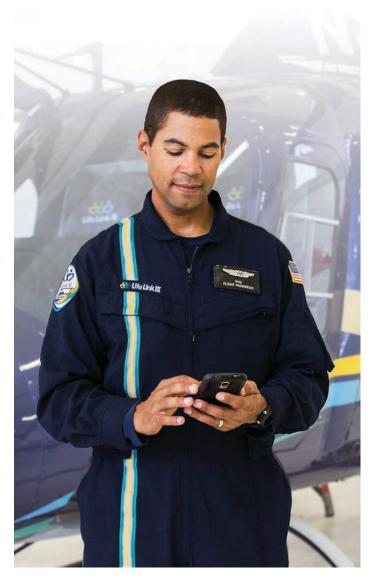
CRFR Chief of Operations Leif Sackett said they only began to tap the notifications function about eight months ago. He's used it to gather signed acknowledgments for a new policy manual and has created 16 forms — addressing issues from rig and radio maintenance to peer recognition nominations — all of which get directed to the proper person as soon as a service member hits "send."

"The mobile functionality makes it accessible to everyone all the time, which is perfect for our volunteer and part-time staff," Churchill said.

Chief Mike Schultz has a goal of banishing paper from his fire and ambulance service in Norton, a suburb of Akron located in central Ohio.

He recently added a form to his Aladtec system that enables staff to update pre-plan documents in the field by simply making electronic notes in the field on building updates, ownership changes, or special cautions and hitting "send." Office staff updates the respective record immediately.

When he learned of significant changes to traffic flow in a notoriously dangerous coverage area where they share auto-response to incidents with several neighboring departments, Schultz used the Required Message feature in Aladtec to push out a new standard operating guideline. Within a short time, all personnel had viewed and signed off on the message — no paper involved.



"We love it. It streamlines our processes of everything," Schultz said. From medication checklists to truck inventories, they use electronic forms. Even a clipboard that once hung in the truck bay noting only maintenance issues has disappeared. The maintenance tech receives details of mechanical problems within seconds via a notification crew members can send from the Forms area in the Aladtec platform.

Norton Fire & EMS, Norton Police, along with neighboring departments of Barberton and Copley Township, and their joint dispatch center — Southwest Summit Communications — all use Aladtec for scheduling. The respective leaders regular trade ideas on new ways to harness the system.

Once Schultz takes delivery on a new flat-panel TV for his squad room, he'll display the current duty schedule from the Aladtec program on the wall. The paper copies he's been posting for years will disappear.

For information, visit www.aladtec.com

Article provided by Aladtec.

Murals Virginia, Minn.

The Hartley and Wesley Koski mural honors the two brothers who bequeathed their entire estate worth \$1,050,000 to the Virginia





by RAY BALOGH | The Municipal

Some of the notable denizens of Virginia, Minn., are larger than life. Literally larger than life.

They are emblazoned up to 20 feet tall on the city's colorful and impressive murals, concentrated within a five-by-five block area downtown.

The eight murals are the creations of artists Kelly Meredith and Sue Martinsen, who have been involved in more than 40 murals throughout the Midwest.

The idea for the downtown's artistic beautification came a decade ago when Marieta Johnson, who was instrumental in establishing the Virginia Community Foundation, visited the murals in Ashland, Wis.

"The artistry in the Ashland murals was impressive, especially when I was able to see the murals in person," she said.

"After discussing the details of the overall project with the artists, it occurred to me that we can do this in Virginia, too."

Johnson shared her vision with Virginia community leaders and "it was apparent the idea of putting up murals would be well supported."

The foundation formed a mural committee and commenced planning for 12 murals in 12 years, raising funds and plotting locations on the walls of downtown buildings.

The first mural, completed in the summer of 2008, featured brothers Hartley and Wesley Koski, two longtime community stalwarts who bequeathed their \$1 million estate to the foundation.

Deciding the subject of the first mural was not difficult. "What better way is there to enhance the spirit of community and the



The mural depicting members of the Ojibwe tribe, the seventh mural in the series, is "rich in history and provides an opportunity to tell that story in a positive and artistic manner while representing diverse ethnic and cultural traditions through art," said Carol Sundquist, a mural committee member. (Photo provided)

quality of life in Virginia than to honor two people who believed in the future of Virginia while simultaneously adding beauty, art and attraction to Virginia and the downtown area?" asked foundation board member Brandon Seppala.

The space rental and artist fees for the mural were paid for through grants and donations, and Minneapolis-based Valspar Corp. donated the paint.

The second mural, completed the following year, honored Martin "Marty" Biondich, a legendary affable fixture who helped keep downtown clean and invariably greeted people with a smile and kind word on the street or at the local baseball diamond.



ABOVE: The mural titled, "Marching Blues: The Virginia Marching Band Through Time," contains the likenesses of high school band members through the years. (Photo provided)

His mural is embedded with actual baseballs purchased by locals. For \$50 they could have their names written on their baseball. Donations were used to finance subsequent murals, some of which also incorporated fundraising items, such as plaques and bricks.

"The committee wanted something everyone could afford to purchase to be part of the community effort," said Ronda "Rudy" Harvey, executive director of the Virginia Community Foundation.

Other murals include tributes to veterans, a 100-year-old downtown candy store, the local high school marching band, classic cars cruising against a backdrop of Virginia downtown store facades, the history and accomplishments of local Ojibwe people and notable local sports figures.

The foundation leases the wall space, owns the murals, keeps them insured and pays for their maintenance. The first murals were painted on the building's surface. "After the first few, it was decided the murals would be put on panels in case the locations needed to be changed," said Harvey.

Even with the panels, creating the murals is a mammoth task. The veteran's mural stretches just a few yards shy of the length of a football field, and the athletic mural, completed in 2015 and measuring 105 feet by 28 feet, contains 98 panels.

Upcoming murals will feature a downtown parade and a nod to the region's logging or mining industry, according to Harvey, who said the artwork attracts 100,000 visitors annually to the city of 8,712 residents, many of them during the city's annual Land of the Loon Festival.



ABOVE: Martin Biondich, known around town simply as "Marty," was an amiable downtown mainstay who swept the streets and greeted everyone with a smile. The baseballs embedded in the mural were purchased by residents for \$50 each to help raise funds for subsequent murals. (Photo provided)

Visitors have arrived from "all states in the U.S. and we have had visitors from Germany, France, Belgium, Canada and Finland," she said, "and those are just the ones I have personally met."

The city features the murals on its website, www.virginiamn.us. The foundation "promotes the murals and our board approves everything with the mural production and expenses," said Harvey.

She has fielded "many calls from communities who are looking to do the same thing in their own communities. We share the artists' information and talk about how they were created."

Harvey's advice to visitors is to "stop in and visit the foundation and we can give them a map of the murals." The foundation is also discussing "creating mural tours in the summer months as well as educational tours for schools."

For more information, contact the Virginia Community Foundation at 519 Chestnut St., or P.O.Box 559, Virginia, MN, 55792; (218) 749-8239; or www.virginiafoundation.com.

Forsyth, Ga.

Given the variegated productivity of Forsyth, Ga., it is hardly a wonder the municipality of 3,788 has one of the busiest city seals in the nation.

The seal contains a crowded collage of images, including railway cars, a church, factory, high school, city hall with an American flag, a grove of trees, several cattle lounging on a hillside and a semi truck hauling down a highway.

Front and center are a pair of hands clasped in a handshake, representing the logo also inscribed on the seal: "Proud Past Promising Future."

Edging the round seal are the city's name, its date of incorporation and two strings of forsythia flowers.

Forsyth, named for eminent political leader John Forsyth, who served as a U.S. representative, senator, secretary of state, ambassador to Spain and governor of Georgia, was incorporated and made the county seat of newly formed Monroe County in 1823.

The original plat consisted of 2-1/2 acre lots and was circumscribed by a circular boundary with a radius of a one-half mile from the courthouse square.

By 1827, the settlement consisted of 70 houses, a few stores, an academy, a Baptist worship house, a jail and an elegant log courthouse.

The Norfolk Southern railroad arrived in 1838, with Forsyth being home to the first passenger rail service in Georgia. Farming and cotton mills provided much of the economy of the day.

Tift College, the second oldest female college in the world, opened it doors in 1849.

Times have changed and the seal may need to be updated, according to Bo Gregory, president of the Development **Authority of Monroe County.**

"Two key industrial partners that have moved into the city are Encore Plastics and Perdue Farms," he said.

Encore manufactures plastic products from paint roller trays to rollable trash bins. Perdue established a feed mill and hatchery in Forsyth.

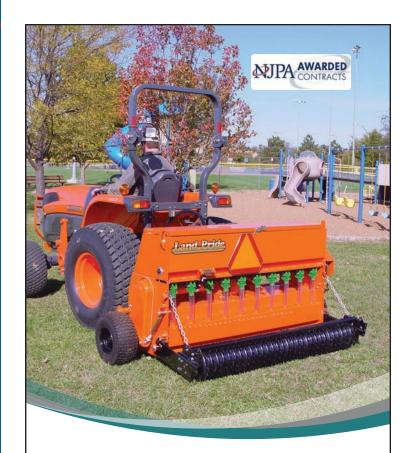
"We have four or five projects in the mix right now, fingers crossed," he said of prospective new industries anchoring their businesses in Forsyth.

Gregory also touted the unsung contributions of agriculture to the town and the surrounding area.

He noted Monroe County has 3,800 acres for beef cattle, which bring in \$3.3 million in revenue a year.

Further, he said, the county, one of 159 in the state, ranks sixth in growing strawberries, ninth in peach production, 17th in harvesting catfish, 46th in dairy and 101st in timber

For more information, call (478) 994-9239 or visit www. cityofforsyth.net. M



TASK. TASK. DONE!

You can trust Land Pride implements to complete task after task with the reliability and performance you demand. Whether your tasks are your hobby or your job, Land Pride will be your trusted companion.

Seeding tasks are covered by our line of Seeders in widths from 48" to 11' and are rated for tractors 25 to 110 HP or more. Whether you're restoring a pasture, planting a food plot, or employed to overseed lawns and community parks, we build a seeder that is just right for you.

Find your local dealer at landpride.com and ask for an NJPA quote.





CONSISTENTLY LEADING THE WAY...



PUBLIC WORKS EXPO

KANSAS CITY

KANSAS CITY CONVENTION CENTER **AUGUST 26-29, 2018**





Federation of Municipal FIIM Engineering

19th WORLD CONGRESS 2018

Make Plans To Be In Kansas City For APWA's **Annual Conference**

New Technologies

Exciting New Networking Opportunities

New Education Formats & Great New Ways to Learn

GET MORE INFORMATION http://pwx.apwa.net

BALLISTIC PROTECTION

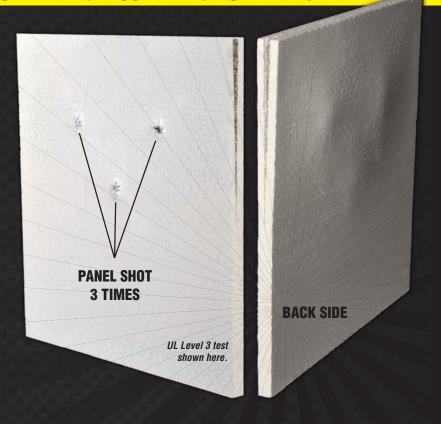
STRONGWELL HS ARMOR FIBERGLASS BALLISTIC PANELS

Strongwell's HS Armor fiberglass armor panels are designed for ballistics resistance. When struck by a bullet or other projectile, HS Armor panels delaminate in a way that absorbs the energy and stops the projectile. Thousands of these panels have been purchased by the military, law enforcement, and numerous private and public sector organizations to provide an extra layer of protection for its people.

| PANEL THICKNESS (IN.) | ARMOR TYPE | WEAPON | APPROX. WEIGHT (PSF) |
|-----------------------------|------------|-----------------------|----------------------------|
| .250 | UL Level 1 | 9mm Luger | 2.51 |
| .40 | UL Level 2 | .357 Magnum | 4.10 |
| .50 | UL Level 3 | .44 Magnum | 5.10 |
| 1.50² | UL Level 4 | .30 Caliber (.30-06) | 15.30 |
| 1.50² | UL Level 5 | 7.62mm (.308 Caliber) | 15.30 |
| .50 | UL Level 6 | 9mm Luger | 5.10 |
| 1.00 | UL Level 7 | 5.56mm (.223 Caliber) | 10.20 |
| 1.50 ² | UL Level 8 | 7.62mm (.308 Caliber) | 15.30 |

¹ This configuration consists of two 1/2" panels, which can be bonded together.

² This configuration consists of three 1/2" panels, which can be bonded together.









Check-in desk at courthouse

Undercover SWAT van

Public Defender's Office - used as drywall

Visit www.strongwell.com/ballistic to Learn More



The World Leader in Pultrusion and Pultruded Fiberglass Structures & Shapes

276-645-8000 • info@strongwell.com • www.strongwell.com

STRONGWELL PRODUCTS PROUDLY



All Strongwell Pultrusion Facilities are ISO-9001 Quality Certified Manufacturing Plants

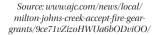
214,000

The Minnesota Department of Public Safety reported that more than 214,000 prescription pills were seized by drug and gang investigators from the state's Violent Crime Enforcement Teams in 2017. That's up from about 59,000 pills in 2016.

Source: www.kare11.com/article/news/mn-drug-seizures-significantly-upin-2017/89-524452337

\$19,152

Milton City Council in Georgia accepted a grant from the Firehouse Subs Public Safety Foundation for this amount, which will fund the purchase of 18 sets of fire-oriented, bullet-resistant helmets and vests for the Milton Fire Department.







8 out of 10

Nearly eight out of 10 times gunshots go unreported. With real-time gunshot detection and alert systems, however, police officers are able to respond and reduce gun violence within their communities.

Learn how Goldsboro, N.C.'s, police department has brought gunshot detection to its community on page 24.

65%

When Dr. Danny L. McGuire Jr. conducted a survey of police officers, he found that over 65 percent of respondents reported low morale. The major of the officers also didn't feel supported by their department administrators or their political leaders.

> Read more about the survey in addition to relief techniques and coping mechanisms on page 30.

3,000 gallons

The amount of water that could be required to put out an electric car fire versus the 500-_ 600 gallons of water needed for the typical vehicle fire.

Read more about how firefighters are adapting to the increase of EVs on the roadways on page 28.

tocus ou:



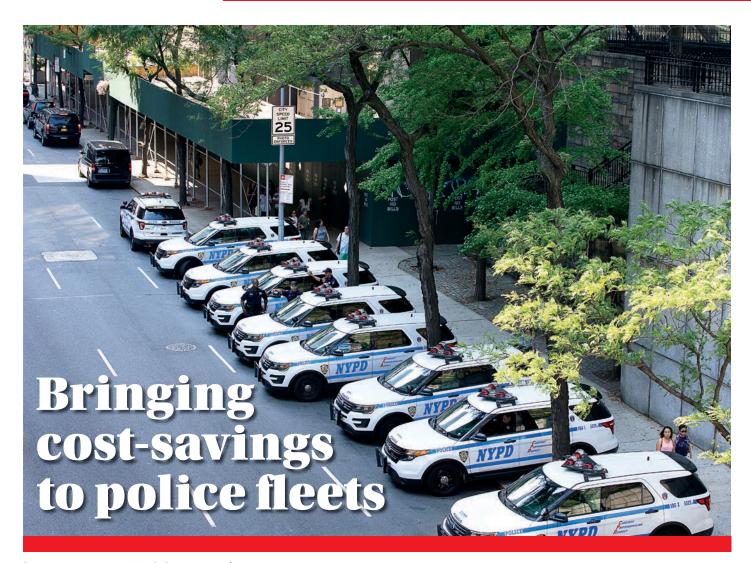
\$199-\$399

With virtual reality head-mounted sets becoming more affordable at about \$199-\$399 in range

- first responders will undoubtedly start adding them into their training programs.



Find out how technology is shaping the training experience of those in the fire service on page 20.



 $\textbf{by ANDREW MENTOCK} \,|\, \text{The Municipal}$

While the day-to-day responsibilities of a fleet manager may not be glamorous, their contributions can be incredibly valuable.



Kathy R. Wellik, CAFM, director of transportation services with Iowa State University

Take Kathy R. Wellik, CAFM, director of transportation services with Iowa State University and a board member for NAFA Fleet Management Association. Her job is to provide safe, economical transportation to university faculty and staff to help them get their job done. She is in charge of hundreds of vehicles, but, perhaps unfortunately for her, she's not given some lavish budget to outfit them with sleek designs or fancy gadgets. Instead, her objective is to save as much money as possible and, essentially, turn a profit.

"We are a self-funded unit," Wellik said. "So the university doesn't just drop a bunch of money in our hands and say 'here, run the fleet.' We generate our own income by renting vehicles out. We have about 618 vehicles. I do the buying, the

selling and the renting of the vehicles. We even have our own shops."

One department she works directly with is Iowa State's Police Force. In fact, she gave a talk on how to implement cost-saving initiatives for police fleets at the 2017 NAFA Institute and Expo last April. Her talk was juxtaposed with a fleet manager for the New York City Police Department, so those in attendance could compare and contrast the differences in managing the two fleets, which are quite different in size.

"It was different case studies on cost-saving initiatives for a police fleet," Wellik said. "The NYPD presented and then we presented. There you have a huge police force vs. our smaller, on-campus police force. The savings are different. With our presentation, we did an overview of how many police vehicles

LEFT: The New York City Police Department strips its vehicles before they go to auction as the department always needs spare parts on hand. (Shutterstock.com)

RIGHT: Fleet organizations like NAFA can be invaluable when hunting for cost-saving methods as they allow fleet managers to network and compare notes. Pictured is NAFA's booth at the 2017 NAFA Institute and Expo. (Photo by Sarah Wright)

we have. Then we talked about the different areas we can save."

Currently, the police department at Iowa State has three Explorer Interceptors, four Taurus Interceptors and a couple of undercover cars. Unlike the NYPD, Wellik intends to make a fair bit of money when it's time to resell her vehicles at auction.

The NYPD generally saves a majority of the equipment from its vehicles before selling them because it always needs to have enough spare parts on hand.

"So for them, when they go to sell their vehicles, there's not much left," Wellik said. "They take every part they can because they have so many vehicles and so many incidents that occur that they basically strip that vehicle before it goes to auction. Whereas we're trying to make it nice so it can be sold to a (different department)."

However, that doesn't mean Wellik and her team don't reuse parts to save money. She will reuse equipment in up to three different police vehicles, including cages, computers, lights, sirens, holding cases and more.

"We do not buy new for every one of them," she said. "We go to the upfitter and basically they are taking it off of the old and putting it on the new."

Another way Wellik has been able to improve the resale of her vehicles is by choosing an all-black paint scheme for her vehicles. For instance, at one point she used to purchase two-toned police vehicles; however, when it came time to put the vehicles up for auction, no one wanted to buy them.

"Instead (for the all-black vehicles), we just used vinyl wrap to get the logo and stuff on there," she said. "The new paint scheme really helped us bring in more money when we're reselling the vehicles."

What's more important for Wellik is that she establishes good relationships with her police department by helping it save money.



Iowa State University switched from two-tone police vehicles, right, to all-black vehicles, below, with decals. This change was made when it was noticed that two-tone vehicles didn't sell as well at auction. (Photo provided)





It has a fairly small budget as well, so it appreciates any money that it can save.

Something both large and small fleet managers can do is join organizations such as NAFA, which Wellik said is integral to her success.

"I think the networking is so important," Wellik said. "Being able to have those people who you can call and know that

somebody's out there to help you. With NAFA, you just build relationships and you can idea share, and it's targeted towards the same people who do what you do every single day."

It's also important to be a part of an organization like NAFA because the landscape of managing a fleet is changing rapidly.

"A lot is changing in the vehicle industry with autonomous vehicles and mobility management that being able to get from point A to point B might be drastically different than what it is today five years from now," she said. "(NAFA is) really working hard to align themselves to keep up with that technology."



By DENISE FEDOROW | The Municipal

Wearing head-mounted displays like those seen in virtual reality video games, today's firefighters are not playing; they're training.

Virtual reality 3-D simulators, augmented reality simulators and other digitally enhanced training tools are being developed, and new technology is making these tools more accessible to fire departments at all levels. These new training tools have several benefits over traditional controlled-burn trainings, which are getting more difficult to carry out.

Oculus Rift, a virtual reality system with HMD that Facebook founder Mark Zuckerberg acquired last year, is being credited with making the price range more practical for most consumers. With prices ranging from \$199 to \$399, Oculus Rift and other similar systems are likely to be more affordable than in the past.

At least two companies that The Municipal researched have virtual reality systems specifically designed for fire departments and emergency responders: Ludus VR Firefighter

training simulator and ETC Simulation's Advanced Disaster Management Systems.

The promotional information for Ludus states, "The recreation of realistic environments in 3-D (makes) it possible for individuals and incident command to experiment with risky situations in a completely safe way."

The trainee is immersed in a 360-degree experience with realistic effects and scenarios. The simulator has true-to-life behavior of smoke and fire. The Ludus system includes a weather system to change to different environmental conditions and challenges. Monitoring is available in real time, and monitors can interact to create new conflicts. Scenarios available with the Ludus system include a port area, airport, forest and customizable home buildings.

The ADMS by ETC Simulation is an augmented reality system that offers effective

training for "tactical firefighting and ventilation." It offers a head-up display that has sensor technology that replicates the user's actions in a simulated environment, such as head turning or kneeling.

Montgomery Fire Department

The city of Montgomery, Ala.'s, fire and rescue department has two different simulators, both purchased with grants.

Lt. Jason Cupps said the first is a driving simulator built like the cab of a fire truck. The system simulates changes in weather, road conditions, tire blow-outs, etc.

"It gives them a real apparatus experience," he said.

The simulator has basic driving courses in addition to programs that will test different responses to changing conditions. It has a rural and an urban setting. Although not wearing headsets, Cupps said the trainee is surrounded by six 40-inch monitors that go from extreme left to extreme right to cover peripheral vision. He added if it's not 360 degrees, it's pretty close.

Cupps said the simulator is so realistic that it mimics the dinging sound if the seatbelt is not clicked and seats can be adjusted. "It even has a cup holder!"

He noted, "We intentionally have things jump out in front of them—it's better for them to experience different things without risking the life of the firefighter or damage to property."

The department received the driving simulator last year, and it has been using it pretty heavily. He said the department conducts a warm-up session first to give trainees a chance to get used to the feel of the simulator and the controls.

A couple of months later the department received the ADMS incident command simulator. According to a press release from ETC Simulation, the simulator was delivered in the fall and purchased with the help of the Department of Homeland Security's Assistance to Firefighters Grant.

Cupps said the department has used it a few times, but it is still setting the system up and looking to implement it to train district chiefs coming out of the fire academy to help them make better decisions. The ADMS is an augmented reality system and different scenarios can be programmed into it.

As for potential scenarios, Cupps gave an example of a standard two-story structure fire. The candidate would see the scenario happening and have a 360-degree view around the building. They would then make an assessment to send in an engine company. The proctor would make that happen. Later, the candidate may decide to send in search and rescue, and he'd see that happening.

"The hope is that with the correct decisions the fire is out quickly, or if the decisions worsened the conditions, they would see the fire start to spread and grow," he explained.

While Montgomery Fire and Rescue Department is still customizing programs to suit its needs, it did receive two-day training from ETC Simulation trainers.

Cupps agreed that conducting controlled burns is becoming more difficult for fire departments. He said the availability of acquiring houses or buildings to burn is scarce, and stricter guidelines and regulations have been enacted.

"Obviously our top priority is safety," he said, adding that the department is fortunate to have nearby Maxwell Air Force Base, which has a practice burn building.

"That's where we take recruits from the fire academy. It's a threestory building, and we can set up fires, practice laddering and rescue scenarios," he said.

He believes having virtual reality systems offers departments "an extra tool in the toolbox. It shows them what to look out for on the streets and gives them a heads-up before putting them behind the wheel of a half-million dollar piece of equipment."

Cupps said he would love to have the VR headsets and thinks after the department gets comfortable with the equipment it already has the headsets might be a possibility for the future, especially as prices decrease.

"We're fortunate to have great support from our mayor and the city, and with the budget we have, our chief believes in having the best equipment to do our best job," he said.

Cupps said he would recommend virtual and augmented reality systems but cautions when buying to make sure it's not going to



The Montgomery, Ala., Fire and Rescue Department added this driving simulator to train its recruits and keep all members proficient with skills and challenges they might run across when driving an apparatus. The driving simulator offers the realistic sights and sounds of a fire apparatus while challenging those in the simulator with unexpected obstacles and environmental changes. (Photos provided)



become outdated too soon and that the vendor offers upgrades and support.

He said as fire services keep moving forward, and especially as young recruits join departments, he believes that these systems will become more relevant and prevalent.

Mobile training units

Gary Joice, president and founder of Cancode Safety Systems Inc., which is based out of Ontario, Canada, has a passion for assisting firefighters and first responders to better equip them to do their jobs safely. He has an extensive background in this area serving 18 years as a firefighter—11 years as a volunteer and seven as a full-time officer—in Canada and then 30 years as a private contractor in fire/rescue training worldwide. He has worked with numerous U.S. fire departments in large and small municipalities, as well as commercial industries and the federal government—U.S. Air Force, Navy, NASA and Federal Emergency Management Agency.

He founded his company in the mid-1980s, developing the "world's first mobile propane fired trailer" unit as a result of changing fire codes in the Province of Ontario.

"I realized that hands-on training was required and that, in turn, to be realistic and effective the training classroom structure would > need working sprinkler systems, working hose cabinets and hands-on extinguisher training of different types. To do so effectively, it required having 'real flames' generation," he said.

After trial and error, remote-controlled vapor propane was the key, and the company included an exhaust system to remove the fumes from the enclosed training area. Cancode Safety Systems used a stripped out 45-foot-long, 10-foot-wide mobile home and installed a 10-by-12 burn room, classrooms, etc. The mobile fire training unit traveled across Canada, and when word spread to the U.S., a "next generation," more compact unit was developed.

Joice is now developing a new mobile unit that will provide the hands-on training with digital simulation interface and emotional sensing. He's nicknamed the unit STMM, or Smarter Than Me Mobile. The STMM is being specially designed "with consideration for today's training needs."

Joice said the unit is designed with environmental and personal safety needs in mind. It has removed the trainee's exposure to open flame while greatly reducing injury by falls and claustrophobic reaction.

"Even though it provides real stress challenges, the chance of being injured during training is greatly reduced," he said.

It addresses the need for all-in-one methods that offer multiple types of training evolutions, which will meet training benchmarks in structure firefighting, fire tactics, multi-angle roof access, high level ladder tactics, etc.



Cancode Safety Services assisted with this mobile aircraft firefighting training device. Cancode Safety Services was founded by retired firefighter Gary Joice. (Photo provided by Gary Joice, Cancode Safety Services)

It also has the added benefit of being able to exactly repeat and fully record each trainee's actions and can be fine tuned as needed and safely altered during the training.

The STMM unit will have "emotional sensing to monitor and record an individual's status (that) could not only be lifesaving at a scene, it could be extremely valuable in determining a candidate's





weak points needing retraining or assist during hands-on training or disqualification for certain roles," Joice said.

Live flames have been removed and state-of-the-art movable digital flames are incorporated. The realistic heat is delivered from and around the digital flame sectors, and nontoxic smoke is also delivered when applicable. Joice has personally invested \$300,000, has received another \$300,000 in grants from Ontario and is seeking another \$300,000 in matching funds with profit shares for investors.

"In my opinion from experience, actually having the heat/air movement hit all (of) your body as the walls vibrate and the entry floor drops plus high intensity flame flares right in front and around you is vital to firmly reinforcing the what to do and not to do," Joice said.

He said with the reality of today's economy rather than having the high expense of upgrading and maintaining a fixed set facility and incorporating virtual reality, the mobile unit will be available to rent by the day or week, thus making it accessible for even volunteer fire departments.

"The bottom line is VR capabilities are an up-and-coming reality and will be beneficial to the capability and safety of first responders," Joice said, while cautioning that a blend of training is most appropriate.

Differences Between Virtual and Augmented Reality

So do you go with virtual reality or augmented reality? How about a head-mounted device or a head-up display? It depends on how you want to use it.

When comparing HMD and HUD, both are very similar, but the HUD has three primary components: a video generator computer, projector and combiner. The video generator stores information to be displayed and sends it to the projector unit, which projects to the glass screen—similar to the HMD. With HUD though, the combiner is responsible for combining the natural environment of the background display with the computer generated display, allowing the user to view each at the same time. So statistics could be displayed on the screen at the same time as the scenario, for example.

According to Techopedia, the difference between with VR and AR is that virtual reality replaces or eclipses the real senses — takes away the natural field of vision replacing it with an artificial one where as AR compliments those senses, adding an artificial component or superimposing an artificial component, but it doesn't replace the natural environment

LET US DO THE HEAVY LIFTING



Partnering with you to get the best ROI for your inventory



Monthly sales at: ADESA Atlanta | ADESA Jacksonville | ADESA Mercer

Contact Al Kelly at 980-254-4168 or visit ADESARIGS.com



M

Bolstering community safety with gunshot detection systems



by CATEY TRAYLOR | The Municipal

Nearly eight out of 10 times a gun is fired, the incident is not reported and, therefore, police don't respond. The implication of this lack of reporting and response is that gun violence becomes more prevalent, residents who reside in high gunfire locations feel unsafe and community trust in law enforcement weakens.

ABOVE: Goldsboro, N.C., installed ShotSpotter sensors in 2017 and has since seen an increase in positive identifications of suspects with officers also able to locate more spent shell casings thanks to the sensors' pinpoint locating. (Photo provided)



Pictured is one of Goldsboro's ShotSpotter sensors. The sensors provide instantaneous feedback when a gunshot goes off so police departments are aware of such instances even if they aren't reported by the public. (Photo provided)



The city had to get community members on board to get all the permissions needed to install gunshot detection sensors on buildings. Fewer than 100 sensors were installed by Goldsboro. (Photo provided)

In more than 90 cities across the United States, police departments are using technology to help them learn of and respond to gunfire in their jurisdiction, even if an incident goes unreported by the public. Gunshot detection sensors have grown in popularity in the last decade, and police departments credit the systems with quicker response times, fewer escaped suspects and the ability to piece together crimes in record time.

ShotSpotter, one of the industry leaders in gunshot detection system technology, is a real-time gunshot detection and alert system. According to the company website, the goal of the technology is to reduce gun violence by providing real-time access to gunshots across cities.

Goldsboro, N.C., installed the sensors in 2017 and the instantaneous feedback when a gunshot goes off has been an impressive, and appreciated, feature.

"Sensors are placed throughout the defined coverage area. Once a shot is fired within the coverage area, the closest sensors to where the shot was fired begin to communicate with each other to see if they heard the same thing. Then the information from the affected sensors is sent to the center in California where the gunshot is verified by a human," said Major Dwayne Dean of the Goldsboro Police Department, who served as project manager for the city's ShotSpotter implementation. "From the time the gun is fired, the sensors detect the information, it's verified and

the dispatch center is notified—all within approximately 45 seconds."

The technology itself is comprised of a series of microphones located throughout the city designed to detect the sound of a gunshot and pinpoint its location within 25 meters. The system also features a map element that provides directions to the location of the incident as well as access to a mobile app compatible with smartphones and tablets.

"The technology shows us a dot on a map where the shot was fired from and the officers are required to search 25 meters out from the dot on the map for evidence," Dean said. "With ShotSpotter, we now are able to locate spent shell casings that, prior to the implementation, we would not have because of the pinpoint location."

The system alerts to all noises over 500 decibels and is able to differentiate between gunshots and cars backfiring or fireworks. Dean credits the technology with an increase in positive identifications of suspects.

"This technology has allowed our officers to make more arrests and recover more spent shell casings," he said. "Officers arrive onscene and stop any person walking in the general area and often that is our suspect."

Dean said the process of getting the community on board leading up to the technology's implementation was exhaustive, but necessary.

"The first step was getting all the permissions signed by property owners in order to

place a sensor on their residence or building. Most owners welcomed the opportunity to have a sensor placed, while some did not want a sensor for one reason or another, but we were able to convince most people once they learned of the benefits," he said.

The process took four months from initial project planning to implementation.

In Goldsboro, there are less than 100 sensors in the police department's 3.6-mile coverage area. The locations of the sensors were determined following a live fire test conducted at three locations within the coverage area in order to calibrate all of the sensors. Once the sensors were ensured to be working properly, the system was up and running.

"Initially, there was no specific neighborhood selected for the ShotSpotter technology to be installed. We just looked at the areas of the city where we had the most shots fired calls and gun violence cases," Dean said. "We started there, which happened to include all of our Section 8 Housing communities."

Dean said the ShotSpotter technology has been embraced by Goldsboro residents—and for good reason.

"The public's reaction has been positive as they see it as a tool to help rid their community of unwanted gun violence," he said. "I would recommend this technology to any agency that experiences an excessive amount of shots fired calls as well as gun violence cases within their jurisdiction."













Adapting to the era of alternative fuels

by CATEY TRAYLOR | The Municipal

As technology rapidly evolves, firefighters are among those who have to stay on top of the ever-changing landscape, and in this day and age, that means becoming very educated on the ins and outs of electric vehicles.

As of November 2016, it was estimated that there are nearly 2 million electric cars on roads across the world, with more than 500,000 of those located in the United States alone, as well as millions of alternative fuel

vehicles and hybrids also populating the roadways.

The growing variety of cars on the road greatly impacts the way firefighters operate

when responding to vehicular accidents and fires.

"The protocol remains the same as far as personal protective equipment, air packs and breathing apparatuses, but other elements change when taking electric cars into consideration," said Chief Bob Herber of the Cecil, Ohio, Volunteer Fire Department. "On electric cars, since the batteries are usually encased in the middle of the car, it's tough to get to and takes a lot of water to handle."



During a training exercise, two firefighters practice putting out an electric vehicle fire. (Photo provided)

"You can't just follow standard procedures anymore."

Herber said while a typical vehicle fire calls for between 500-600 gallons of water, an electric car fire could require up to 3,000 gallons or more. This is for a variety of reasons.

"The science behind it is that an endothermic reaction is taking place, which builds up heat rapidly," he said. "If you don't dissipate the heat, it'll catch fire all over again. You might be putting water on the electric cars for a half hour or more, whereas a traditional car could be handled in five to 10 minutes. It takes more time and attention to detail to ensure electric car fires are extinguished."

Lt. Chris Womock of the Indianapolis Fire Department said the reason electric cars are so tough to cool down is the anatomy of the vehicle.

"In a lot of electric vehicles, the entire bottom of the car or trunk is the battery. That means the whole car is impacted by the heat and that entire casing needs to be cooled down before the car is extinguished," he said. "These cars have been known to catch on fire again after being extinguished or even after a standard accident because of the longterm heating elements in the casing."

In order to determine when the temperature of the car has fallen to a safe level, most fire departments use thermal imaging cameras.

"Thermal cameras are used to ensure the temperature of the car is decreasing and continues to decrease," Womock said. "It keeps our first responders safe and ensures we won't get called back out to the scene for a follow up fire."

The real key, Womock said, is to understand that each call involving an electric vehicle presents a unique situation.

"You can't just follow standard procedures anymore," he said. "There's no one plan for dealing with electric cars, hybrid or alternative



ABOVE and BELOW: EV batteries can take up the entire bottom



of the car or trunk, impacting the entire car with heat while also creating a challenge when trying to cool down the battery. (Photos provided)

fuel vehicles. You have to read the situation and use the tools and training provided to you to make the best call you can at the time."

Herber, who hosts trainings for his fire department, said he stresses this lesson while he teaches.

"I cover electric cars in depth in my classes," he said. "This is still a relatively new animal for us. Not just the electric cars, but the propane-fueled, hybrids and alternative fuels. There's a learning curve, but the information is out there — you just have to look for it."

Herber said he advises his students to look for clues on the car to determine what sort of vehicle it is.

"Some cars have a distinct look and you know it's electric without much investigation," he said. "Others, you need to look for wording on the car itself to know. Look for emblems, words like 'synergy' or 'hybrid,' and check under the hood for stickers. You can even check the gas cap for clues. When in doubt, if you're able, you can also ask the owner of the car."

Womock, who also teaches courses across the country, said the most important factor is to assume every car is an alternative vehicle until it's known for certain it's not.

"I tell people to treat every car like it's an electric, hybrid or alternative fuel vehicle until you can prove otherwise," he said. "Never assume anything. There are so many factors to take into consideration, so make sure to get some training and use the tools you gain through that — every situation will be different."



Peer support groups can be a highly effective way of assisting officers and promoting well-being. Fellow officers are able to discuss coping strategies and share similar experiences. Professional counseling can also be recommended, particularly with more advanced issues. (Shutterstock photo)



Reiki healing is gaining in popularity, and some police officers are taking part. This style of healing and therapy involves a healer realigning the body's chakras in order to promote balance. (Shutterstock photo)

Helping themselves: Police officers put stress relief techniques and coping mechanisms into practice

By DR. DANNY L. MCGUIRE JR. | Assistant Professor of Criminal Justice at National Louis University, Chicago, Ill.

In today's society, with ever-changing technological advancements and social media, law enforcement professionals must be aware of their surroundings and, more importantly, their physical and mental well-being. Officer self-awareness is paramount for the success of any law enforcement professional in our society today.



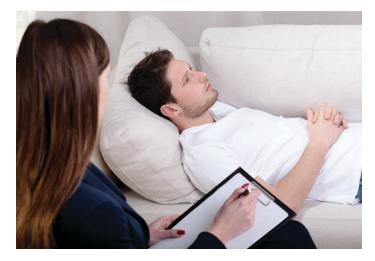
Dr. Danny L. McGuire Jr.

A few years back I was able to create a survey based on information gained while having conversations with officers regarding media coverage of police incidents that had occurred at a national level. These incidents brought policies and procedures into the forefront.

Many of these discussions illustrated the passion of these law enforcement professionals while they explained introspection through the eyes of the general public. Many felt that media accounts of these interactions viewed all police officers through lenses that painted police procedures and officers with a broad brush of negativity.

The survey responses were quite interesting:

- Over 65 percent of the police officers surveyed reported low morale.
- The majority of the officers reported they did not feel supported by their department administrators or their political leaders.



- Over 55 percent of the officers reported they felt low support from the citizens they serve.
- Over 95 percent of the officers responded that they worry more about their safety at that time more than ever.
- 50 percent of the officers reported they do not tell people they are police officers in social settings while 42 percent said "it depends."
- Over 50 percent of the respondents reported that they felt "low self-esteem" as it relates to their position as a law enforcement professional.
- Over 80 percent of the respondents reported they felt some concern for the safety of their family because of their position in law enforcement.
- 42 percent of the respondents reported they would leave their current position in law enforcement to "do something else."
- Over 80 percent of the respondents reported that they felt some worry about using force, even within depart-
- ment guidelines, during their tour of duty.

 Over 70 percent of the officers reported that
- Over 70 percent of the officers reported that they had second-guessed themselves within six months of the time of survey.

What are some positive coping mechanisms available?

After examining the officers' responses and inquiring with some follow-up conversations, investigation of positive coping strategies began. It was imperative that law enforcement professionals were aware of positive responses for their own physical and mental well-being.

Some of the successful positive coping strategies that officers had reported and

RIGHT: Police officers are trained to handle high-intensity situations and make difficult decisions under a great deal of pressure. With advances in technology and social media, however, officers are more likely to undergo scrutiny from the media regarding their choices and policies. (Shutterstock photo)

While many officers will see a personal trainer or nutritionist, another popular coping mechanism is meditation or hypnosis. Hypnosis has been shown to be remarkably helpful regarding issues such as anxiety or post-traumatic stress disorder. (Shutterstock photo)

recommended were a peer support program, professional counseling or an employee assistance program, nutrition or a personal trainer, Reiki, hypnosis and mediation.

Peer support is a program that sees officers from within their police department or surrounding areas trained by professionals to assist their fellow officers when required. For example, on many occasions someone may have reported that an individual was going through some personal strife such as divorce or special needs family issues. A peer support team member may reach out to that individual to have a conversation or even meet up for a cup of coffee.

At times it is a powerful tool to have someone who may have experienced the same phenomena in your professional work environment, and sharing experiences, as well as positive coping mechanisms, may suffice in helping that individual. Please note that a peer support program does not replace professional counseling or need for advanced mental health treatment. This is simply peer-to-peer support and training is necessary for a team member to understand when a crisis demands professional help.

Professional counseling is another dynamic that is recommended when individuals may have more advanced concerns or peer support does not help. This can also include alcohol and drug rehabilitation as well as issues with anxiety, post-traumatic stress disorder, depression and/or other types of advanced mental health crises that require the help of a licensed professional. Many officers have reported that their department offered an "employee assistance program." This



program was free for department members to utilize when suffering from mental health crises.

Many officers reported that one of their positive coping strategies was working out at a health club or with a personal trainer. Some officers reported that, in conjunction with working out,

they utilize the services of a nutritionist who helps them balance their diet. This was a very popular response, and a few officers even reported that their department provided facilities and services.

Some officers reported that they had utilized meditation as part of a daily regiment whether it was religious-based or just part of a routine. Others had stated that the use of hypnosis from a certified professional had helped them with issues of anxiety and some post-traumatic stress related disorders. There were also officers who shared that they utilize the services of a Reiki healer on a regular basis to help them align their chakras.

People handle negativity and stress differently. In addition, resiliency and coping skills are different from person to person. Police officers and law enforcement professionals are no exception. As a department administrator or village leader, it is important to ensure that officers' physical and mental well-being are primary. Having systems in place such as a solid peer support program, employee

"Officer self-awareness is paramount for the success of any law enforcement professional in our society today." assistance program or other avenues for stress relief, such as a workout facility within department headquarters, will assist officers with stress release and anxiety prevention.

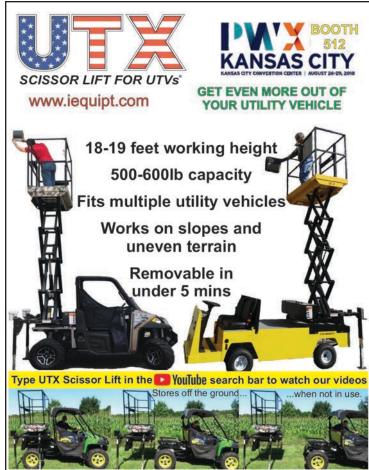
Professionalism is vital in the law enforcement community. We are held to higher standards

as we have sworn an oath to serve and protect our communities. Having healthy professionals is imperative to the success of your organization and the safety of your municipality and its citizenry.

Dr. Danny L. McGuire Jr. is currently an assistant professor of criminal justice at National Louis University, Chicago, Ill., with over 20 years of law enforcement experience. McGuire earned a bachelor of science and law enforcement management from Calumet College of St. Joseph, a masters of counseling psychology from the Adler School of Professional Psychology, a doctorate of education emphasis on ethical leadership from Olivet Nazarene University and, in May 2018, will complete a masters of public administration from Clemson University. McGuire has been trained by Chicago Police Department crisis intervention team and peer support team. McGuire can be reached at dmcguire3@nl.edu.













QUALITY AFFORDABLE PUBLIC FACILITIES

Varco Pruden Buildings offers a quality, affordable solution for a variety of public buildings:

- Police, Fire and Correctional Facilities
- School Bus & Public Transportation Terminals and Maintenance
- Libraries, Museums, Civic Centers, Recreational Support
- Educational Buildings (Elementary, Secondary & Collegiate)
- Energy-Efficient Materials to Comply With ASHRAE & IECC Codes

VP Buildings and their network of authorized builders work as a team to provide community leaders high-quality, affordable and long-lasting facilities, on time and on budget. All VP Buildings are designed, engineered and manufactured

to provide a public facility that meets your specifications today and gives you quality performance in the future. To request this free brochure, visit www.vp.com/ad/MUNI.







By ELISA WALKER | The Municipal

Police officers already have it tough when handling high stress situations on a regular basis, but what about unexplainable situations they aren't trained for? Are they really prepared for ghosts whose issues with authority run so deep that they'll haunt the police station? There's absolutely no way to be prepared to bust up a satanic ritual with a completed altar, deal with a whole town haunting or strange clown sightings.

Maybe these kinds of things get better with time.

Ghosts and hauntings

It's instinct to doubt a call about a haunting—in a professional manner, of course—but dispatched officers always approach the situation seriously. Officers realize that even if they don't personally believe or haven't experienced the paranormal firsthand, it doesn't make the caller's experience any less real—though every avenue should be considered, such

as a history of mental illness and drug or alcohol usage. Of course, sometimes a "haunting" has turned out to be a stranger sneaking into the attic or living in the walls.

When it comes to ghosts and hauntings, everybody jumps on the bandwagon to debate whether it's real or fake. Police officers, who are primarily pragmatic and rational individuals, have their share of unexplainable stories. Even those willing to tell their experiences still think of themselves as skeptics.

Shepherdstown, W.Va., is where everyone has a ghost story. Every day the police station receives phone calls from residents and from places across the world seeking advice. Shepherdstown is considered the most haunted town of America—so much so that they have paranormal investigators' numbers ready to give to those needing them.

"Anytime you get a 911 call for a ghost, that's going to be kind of wacky. I've been doing this job for 37 years and I've gotten a great amount of wacky calls," said Shepherdstown Police Chief Mike King. "A lot of people are looking for confirmation that there's something that's going on and that they're not crazy. Unfortunately, officers are taught their whole career that it's not what you believe, it's what you can prove.

"Our whole purpose is that we're public servants. Tell me what's going on and I'll try to find a reason. If you get repeated calls from the same place, there's an issue. RIGHT: Shepherdstown, W.Va., has attracted many paranormal enthusiasts who, with permission from Chief of Police Mike King, have visited places around the town. After receiving photos of their findings, King has learned that while most orbs are brushed off as specks of dust, those that are golden colored and perfectly round are said to mean something by paranormal investigators. (Photo provided)

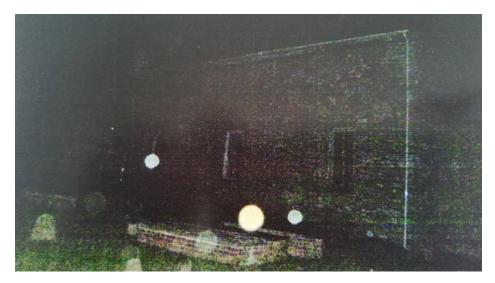
Everybody's going to say they don't believe in that stuff but I ask, 'Have you ever seen a million dollars?' Probably not, but you know it exists. Just because you don't believe it doesn't mean it can't be happening."

They've received many phone calls from someone thinking their house was broken into. The caller would say they heard footsteps, saw lights turning on, could see shadows moving under the door and hear someone talking, but officers arriving at the house would find it to be locked tight with no evidence of forced entry.

Considering himself a skeptic, King has recalled his own encounters when working with the K-9 unit. A large old school building was being investigated, each floor having been covered when King heard the distinct sound of someone—or something—running on the second floor. Looking to his dog, which was also following the sound with perked ears, he realized it wasn't in his head.

With the overwhelming unexplainable encounters and paranormal investigators coming in, Shepherdstown eventually had its own TV show to document ghostly reports. The show opened the doorway for other departments seeking help. King received many thanks for bringing awareness to what so many officers face but don't come forward to say.

Ghostly encounters don't end with residents. The old police station in Homestead, Pa., experienced its own strange happenings for several years. Officers who had paranormal experiences — such as a typewriter typing by itself, doors opening and closing, footsteps when officers were alone and things locking and unlocking on their own — brought in a paranormal society to investigate. The chief of police did his own investigation, discovering consistency and similarities between everyone's stories.



Urban Legends

Urban Legends are common in local communities and often attract visitors to a physical infrastructure linked to the legend, especially during times like Halloween when people or paranormal enthusiasts want to visit haunted places the most. In Fairfax County, Va., the Bunny Man legend prevails and brings in a lot of pedestrian traffic to the Colchester Overpass, commonly referred to as "Bunny Man Bridge." Local authorities have been controlling pedestrian traffic that increases around Halloween to avoid any accidents where non-locals can be unaware of the active railroad on the overpass.



After the old Air Force base hospital in Chicopee, Mass., was torn down, three new businesses were built in its place. They have not seen any satanic rituals return to their properties. (Photo provided)

Eventually the department moved to a new police station where officers wouldn't have to deal with feeling watched all the time, though the chief joked about spirits tagging along if they wanted since they weren't hurting anyone.

Why do people do that?

Sometimes the most abnormal encounters aren't with ghosts, but with other people just being weird. It can be laughed off with a cheeky comment at times, just as the Greenville Police Department in South Carolina did about not shooting bigfoot after a recent sighting as "you'll most likely be wounding a fun-loving and well-intentioned person sweating in a gorilla costume." Other times the situation becomes a little too weird to laugh at until years later.

About 30 years ago in Chicopee, Mass., an old condemned Air Force base hospital sat, minding its own business. Fresh on the job and a part-time officer at the time, CPD's Public Information Officer Michael Wilk recalled visiting the abandoned site.

"It was the spookiest place, like a horror movie. You walk in, see the decrepit walls, old furniture and operating tables and immediately think, 'I'm in a horror movie and I'm going to die." Wilk laughed. "The day I went in to check things out, there wasn't much to see. We got called (again), but when we went back, we realized things had been rearranged and doors were shut that had been open before.

"There was an altar set up and cut off heads of pigeons lined the windows and room. There were satanic drawings. It was freaky. At the time, experts were brought in to look it over to see if it was just

Here are some examples towns and cities have found effective when handling the paranormal:

- Bringing in a paranormal investigator
- Destroying the building
- Calling a priest
- Referring to basic training and local ordinances
- Never going back to that location
- Retiring



After the 2017, release of the movie "It," there was concern that another clown epidemic would follow, but it has yet to happen. Hopefully, the creepy clown sightings will be a thing of the past. (Shutterstock.com)

some kids messing around or if it was the real deal. They said it was legitimate satanic worship."

Wilk commented that his senses had become more heightened, even though it wasn't a particular situation he had been trained for. He reverted back to the basics of his training in maintaining awareness of his surroundings. Nobody was ever found. The city installed a fence and CPD heavily patrolled the area until it was demolished. Chicopee hasn't run into any other satanic situations since.

The clown epidemic in 2016, when there were calls of creepy clown lurking in woods, walking the streets late at night or sitting on other people's front porches, was a nationwide issue and showcased a collection of individuals' horrible senses of humor. It put multiple communities on edge, even causing an 11-year-old girl in Georgia to carry a knife out of fear of a petrifying clown chasing or screaming at her. Hardly any clowns were caught.

It was no laughing matter in Glasgow, Ky., where, like other police departments, its department was handling the complaints in accordance to city ordinances and states laws. Glasgow's ordinances specifically prohibit people older than 12 from dressing in identity-concealing costumes, and those doing so could be fined \$100. The clown sightings eventually stopped, but they are still remembered as a weird interlude of 2016.







Parsley carries many skills from her firefighting and skeleton racing days

By ANDREW MENTOCK | The Municipal

Just over a month ago, the 2018 Winter Olympics in Pyeongchang, South Korea, came to a close. In the United States, these games will be remembered for how Norway, a small European country, dominated, while American athletes and teams struggled. Yet, not that long ago in 2002, Americans were on top of the world when it came to winter sports like bobsledding and skeleton, and some of this success can be attributed to, of all things, firefighting.

That year, the U.S. Olympic team won three medals between men's and women's skeleton racing, with Lea Ann Parsley winning silver. The 33-year-old had only been a skeleton racer for about four years when she qualified for the Olympics. If it weren't for her experience as a firefighter, who knows if she would have been prepared physically for the rigorous training that comes with being an Olympic athlete. She would go to the firehouse on her days off, just to get an extra workout in.

"The nice thing is being a firefighter is a lot like being an athlete," Parsley said. "Obviously, it's a very physically demanding job. My background as an athlete really helped my firefighting, and my firefighting improved my physical fitness level. We had a really nice workout area at the firehouse."

While it may seem slightly odd for an Olympic athlete to also be a firefighter, the fact of the matter is that Parsley wanted to serve her community in fire services long before she ever thought about representing her country in the Winter Olympics.

Parsley first became a volunteer firefighter in 1985, between her junior and senior year of high school, in her hometown of Granville, Ohio. This is something she had wanted to do for years because it's what she saw her older brothers do.

"We lived just three blocks from the station so when the siren would blow (limited pagers back then) the guys would respond to the firehouse and wherever I was I would run or jump on my bike and try to beat them," Parsley said. "I was only about 10 or 11 years old at the time so I would wait for them back at the station and then help wash the truck and reload the hose when they got back. It just seemed



Lea Ann Parsley with her silver medal from the 2002 Salt Lake City Winter Olympics



While Parsley no longer competes or coaches in the sport of skeleton, she does serve as a jury member of the International Bobsleigh and Skeleton Federation, or IBSF. She works at the World Cup races around the world as a member of the international team of race officials. This photo was from a World Cup race in Whistler, Canada. (Photo provided)

natural to join as soon as I was old enough. I'm sure they weren't too thrilled to have a little sister hanging around but they never showed it."

She would remain a volunteer fighter with the Granville Township Department for 20 years. During that time, she was also a scholarship member of the women's basketball team at Marshall University, a professional firefighter with Plain Township Fire Department, part of the Ohio Interagency Wildfire Crew, was named the Ohio Firefighter of the year in 1999 and, of course, participated in the Olympics.

It was her experience as a volunteer firefighter that led to her desire to do it for a living.

"I decided I loved it so much that I would make it a job," she said. "I went to the Ohio Fire Academy, and took the professional course, and graduated top of my class and decided that I would do it as a paid career, and I was very blessed to have gotten a job over at Plain Township over in New Albany, Ohio."

Then in 1999, she was looking for a new challenge, and so she used a tool that not many people were using at the time, the internet.

"This was before Google or you could easily find anything on the internet," she said. "I was looking up women's sports, and a winter sports (website) came up and I started digging a little more. They were recruiting for women's bobsled."

Parsley reached out to a few contacts she had found from the website and went to a bobsled introduction, where men and women could try out sleds with wheels. She thought bobsledding looked interesting, but as soon as she saw a skeleton rider in action, she knew that's what she wanted to pursue.

Soon she was traveling to Lake Placid, N.Y.; Salt Lake City, Utah; and Calgary, Alberta, Canada, to practice on actual skeleton courses and then joined the World Cup Circuit.

"It's very similar to any kind of racing circuit, whether it's Nascar or downhill skiing," Parsley said. "A lot of people over here in the states don't know anything about it because it's not televised, so it's not a sport that people know about. But the good thing is that in Europe it's often on the news. It's on Eurosport, which is their equivalent to ESPN."

The circuit required her to travel outside of North America, with many of her events taking place in former Winter Olympic destinations such as Germany, Austria, France, Japan, Switzerland and Italy.

Her hectic schedule required her to cut down on how much time she could spend at the Plain Township Fire Department, which her fellow firefighters were very supportive of.

"There was a level of physical fitness that the job just demanded, so it was a kind of a nice mix in that I was blessed to have a chief who was very accommodating to my schedule," she said. "One of the main



reasons I was part time was so I could travel and do what I needed to do for my sport."

Of course, her hard work eventually paid off with a silver medal at the 2002 Winter Olympics, where she also helped carry the flag from the World Trade Centers at the Opening Ceremony.

"It was a privilege to represent both my fellow athletes in the sliding sports and my fellow firefighters that night," she said. "I also felt as though I was representing my sister-in-law and her family as she lost her nephew on 9/11. It was an amazing night, and in many ways, it was as special, if not more so, than my race day medal. It really helped set the tone for the rest of my Olympic experience."



Lea Ann Parsley takes off on her skeleton sled during a past sporting event. Her career as a firefighter helped improve her physical fitness level while her pursuits as

an athlete also benefited her firefighting. (Photo provided)

Unfortunately, at 33 years of age she was considered one of the older athletes in her sport and knew it would be difficult for her to have a long skeleton career.

She tried to make it to the 2006 Winter Olympics in Turin, Italy, and was primed to do so, but a freak accident prevented her from ever having the opportunity to qualify. She stayed on the team as a coach and shortly after decided to move on from both skeleton and firefighting.

Today she is a registered nurse working in school health at Granville Christian Academy in Granville, Ohio. A job she started in 2006 after coaching at the Olympics. She worked as an analyst for NBC at the 2010 Winter Games but ever since has been pretty far removed from racing. That is, except for when the Olympics were on TV.

"I've been up late for the last two weeks, watching as much as I can," she said in the midst of the 2018 Winter Olympics. "It's kind of nice to have on the internet because I can watch any event."

While her days as a world-class skeleton racer and firefighter are behind her, she still carries many of the skills she learned with her.

"I think in any of those jobs, whether it's nursing, firefighting or being an athlete, there's that element of having to make split-second decisions," Parsley said. "It's really important to be confident in your ability to size up situations and make quick decisions, whether that's running into a burning building, working (with someone who's dealing with) cardiac arrest or sliding down the hill at 85 mph."

LEFT: Parsley poses with Ryan Davenport, her Olympic coach and partner for the past 20 years. Davenport was a two-time world champion in skeleton for Canada and a sled builder for the sport. He built the sled Parsley used in the Olympic Games. He is currently in Australia as part of the Target 550 crew, which is trying to set a new land speed record. See www.target550.com/ for more information. (Photo provided)



Virginia municipality builds new fire station into a sustainability showplace

"Daylight is a human right," said Seth Warren Rose, founding director of Eneref Institute. Our daytime alertness pattern is mediated by light exposure to our eyes. Melatonin is the hormone that induces sleep. Inhibited by light, and triggered by darkness, melatonin levels peak at night. In fact, all the cells in our body go through an activity rate cycle.

Therefore, not only does natural interior daylight save energy, it is necessary for our health. Architect Peter Edivan specified daylight to transform a 21st century firehouse into a showcase of sustainability with a traditional 19th century building design.

Sun tunnels, long tubular skylights, brought daylight from the rooftop of the Ashburn, Va., firehouse into the building's interior. Sun tunnels are designed to minimize light loss through the tube, resulting in brighter illumination into the interior space.

During daylight hours, the electric lights can be turned off in most areas of the second floor of the new firehouse, according to Mike Bromley, the contractor of Chamberlain Construction Corporation, which installed the skylights.

"Even at night, you can see the moonlight coming through them... like the lights are on," explained Bromley. Sun tunnels differ from traditional skylights in one significant way: They are long and can bend around objects that would otherwise interfere with — or totally prohibit — the installation of traditional skylights.

Because sun tunnels can be adjusted during installation, the light output lens does not have to be placed directly underneath the roof-top lens. For example, if an HVAC system sits directly over the point where light is needed, the skylight tubes can be configured, or bent, to transfer the light into the room — even horizontally. Up to 20 feet long, sun tunnels are relatively easy to incorporate in a building without the need for major structural considerations or changes.

"Actually, in daylight mode, the light coming out is quite intense. They're probably even a little bit brighter than the hallway lights alone," said Stan Murphy, the fire station project manager.

Maximizing daylight in the firehouse

To realize the benefits of natural interior daylight, 27 sun tunnels were secured to curbs on the fire station's EPDM flat roof of a synthetic rubber membrane. Contractor Bromley said he found no problems installing the sun tunnels according to the manufacturer's directions.

"Everything seemed to work out fine," said Bromley.

Using a highly reflective specular material, sun tunnels are specially designed to maximize the use of sunlight. When sunlight enters a rooftop lens, the light bounces back and forth down the tube. Multiple bounces can substantially reduce light output in a typical skylight with a diffuse surface. However, due to the specular nature of the reflective surface of sun tunnels, very little light loss occurs through the tube, even when the sun tunnels are angled.

Though sun tunnels do not offer a direct view of the sky, these skylights essentially squeeze every drop of light out of the system.

To achieve a completely glare-free room, sun tunnels use a prismatic pattern lens. The lens is optically designed to evenly distribute the sunlight exiting the skylight. This effectively creates the same level of visual comfort expected from a well-designed traditional electric lighting system.

Edivan specified 27 VELUX TCC-022 standard 22-inch diameter sun tunnels in rooms where there were no windows, including the corridor — which serves the perimeter rooms — and the center core area leading to the upstairs. He also specified skylights in the bedrooms, locker rooms, lounge area, break room, view room and bathrooms.

"The skylights provide plenty of illumination," said Lieutenant Kenny Fox.

The skylights drove sunlight from the rooftop into the room's 24-by-24 acoustical ceiling tile grid. In the bathroom, round lenses were set flush into the drywall celling.

Because sun tunnels are so adaptable, Edivan was able to specify the same model for all areas of the firehouse, despite differences in roof slope and ceiling type. With the help of skylight kit accessories, Bromley adjusted the direction—or shape—of the skylights in the field. With two 30-degree angled elbows per kit, the sun tunnel kits allow the skylights to fit nearly any structure.

Bromley said the VELUX instructions for the angling elbow system were helpful and well thought out.

"The instructions were clear. I was perfectly happy with the way it ended up," said Bromley.

Daylighting in the new firehouse facility

The old firehouse, which had been built in the 1940s, was grossly inadequate for the number of people and the equipment.

"It was not even close to code compliant," explained Murphy. "People who were volunteers back in those days weren't worried about electric code."

The new firehouse was primarily designed to meet the needs of a modern fire department, but the firehouse committee also wanted the building to replicate the classic appearance of an early-1900s fire station.

"We wanted to capture the tradition of the fire service to get the camaraderie and to really encourage that — which we think helps in recruiting and gives us a sense of mission and purpose," said Murphy.

A committee was involved throughout the design process, including the fire chief and assistant chiefs, giving the architect direction.

"We all just sat around the table and said, 'What do we want out of this? How big is it going to be? What type of features do we want?" said Murphy.

Edivan said his client liked the idea of skylights at first pass.

"I drew skylights on the drawings, made the presentation and said 'OK, here's the lighting plan.' It didn't take any convincing at all. They all said 'that sounds like a great idea," explained Edivan.

"Once everyone saw the skylights in the corridor, I think honestly they had forgotten I put them in the project," said Edivan. "And they were quite pleased to see how much illumination they brought into inner corridors for the building."

The lighting plan

The challenge for Edivan was to design the look of a traditional firehouse using modern, sustainable technologies while staying within budget. Edivan quickly decided on sun tunnels.

"I was thinking about how I wanted this space to function and in my mind, it just naturally cried out to have the sun tunnels," said Edivan.

Lieutenant Fox agreed.

"I'm looking at the long-term operation cost," said Fox. "I basically don't have to light those areas during the day."

Edivan chose VELUX because "I know they're a dependable product," he explained. "The details and the support that Velux provided made me feel warm and confident."

For aesthetic appeal, Edivan spaced the skylights 12 feet apart to create a repetitive, symmetrical pattern of ceiling tiles and skylights down the hallway.

"I didn't do a calculation. It was a gut call," he said. "But I didn't just throw them on there for the sake of throwing them on there. It was a functionality of what they can bring to the project."

Because perimeter rooms already had windows, skylights were not specified for those rooms. Edivan added blackout curtains to bunk room windows to help firefighters sleep during the daylight hours.

New facility location and design

Located about 20 miles outside of Washington, D.C., the Ashburn firehouse serves a heavily populated geographical area. The fire company built the entirely new, 35,000-square-foot two-story building next to its original 65-year-old, 13,000-square-foot station. Around 5,000 square feet of the original building was retrofitted to house a social hall.

The ground floor of the new fire station houses the trucks, offices, a kitchen, a dayroom, a gathering room and the watch room—the heartbeat of the fire station. The second floor includes the locker rooms, bedrooms, administrative services and training rooms, exercise rooms and lounge.

"A fire station should be treated — and I treated this one — like a frat house, because it takes a lot of abuse," said Edivan. "The upper floor is used primarily at night, for rolling out of bed, going down the fire pole and then hitting the trucks."

And, according to Murphy, the skylight system has already proven itself to perform under harsh conditions. "We had a big blizzard back in January — close to 36 inches of snow in one day — and we had no leaks."

The design process for the new facility took six months, and construction required an additional 18 months to complete. The total

cost for the project was \$8 million. Most of the cost for building the new facility was financed with fundraising savings, along with some additional money from a volunteer small businesses alliance. About 20 percent came from Loudoun County.

More than skylights

According to Fox, once the building was completed, the occupants were not even aware of the sun tunnels. But what they did immediately notice, he said, was the quality of the interior light and overall atmosphere.

"Firefighters would hit the light switch and say, 'Oh, the lights are already off,' because of all the daylight coming through," said Fox.

Beyond the improved lighting and cost savings, the sun tunnels have become a source of pride, Murphy noted.

"When I take people on tours in the station, it's one of the things I point out," said Murphy.

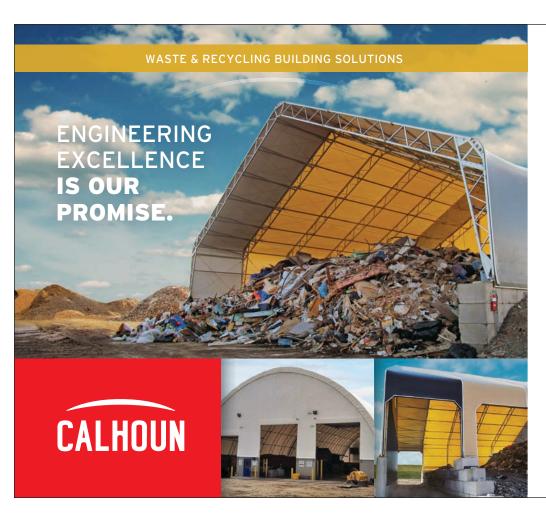
Edivan, meanwhile, summarized the success of the natural interior daylight this way: "The client is happy. So, all I can do is smile."

Article provided by the Eneref Institute.

RIGHT: Sun tunnels are long and can bend around objects that would otherwise interfere with — or totally prohibit — the installation of traditional skylights. (Photo provided)







Whether you seek storage, shed, or plant facility, the site of your operation is unique. That's why we custom-engineer your structure using our unique site-specific analysis, providing you with prescriptive recommendations for a highly reliable facility. By deeply analysing wind and snow loads, our method maintains the highest level of sophistication. Critical to the performance of your building. Essential to the longevity of your investment.

OUR STRENGTH IS IN OUR STRUCTURE

calhounsuperstructure.com 1-800-265-3994





By LAUREN CAGGIANO | The Municipal

A variable advisory speed limit could be an effective tool in reducing the number of collisions and accidents on the road, according to two experts.

A VASL is a variation on posted speed limit in which regulatory posted speed limits can be changed. Speed limits are changed to reflect a safer driving speed along a particular road section, based on the expected or real-time conditions, such as traffic, road surface and weather conditions.

Lee Perkins, transportation operations manager with the city of Lethbridge, Alberta, Canada, said VASLs have worked in his community. In his research he found that VASLs have been used to improve traffic safety by restricting speeds during adverse conditions such as a winter storm resulting in poor driving surface conditions.

Case in point: Perkins and his team selected Whoop-Up Drive as a test site. It

was a 3.5-kilometer — or 2.2-mile — roadway stretch of divided two or three lanes in each direction. Volume averages between 45,000 and 50,000 vehicles per day. He said it's the only roadway within the city of Lethbridge with the current speed limit of 90 kilometers per hour, or 55 mph.

Why this location? Past incidents suggested it was problematic. According to data collected from 2008-2012, there were over 500 collisions and almost half of these incidents occurred during winter weather. There were as many as 10 incidents in a day. Collisions resulted in 37 injuries in that same period.

The idea is that with lower speeds comes a potentially better outcome for drivers and

ABOVE: The city of Lethbridge, Alberta, Canada, has utilized variable advisory speed limit on its Whoop-Up Drive to hopefully reduce collisions, particularly during winter when driving conditions are less than ideal. (Photo provided)

passengers. "Documented evidence shows that a variable speed limit can result in a reduction of 45 percent in all collisions and a 20 percent reduction in injury collisions," Perkins said.

Despite these statistics, he said that adopting a VASL is not a sure bet when it comes to compliance. When dealing with human nature and tendencies, there is no flawless system.

"During the main part of the storm, people obey the limit," he said. "They begin speeding up as soon as conditions improve."

According to Perkins, there were some technical glitches that entered into the equation, too. Issues from speed display units and problems with



While VASL has been documented to reduce collisions by 45 percent and injury collisions by 20 percent, human nature can decrease its effectiveness as a driver might ignore the speed limit if they think roadway conditions are improved. (Photo provided)



Other challenges with VASL signs include technical glitches and problems with visibility, particularly on sunny days. (Photo provided)



Praveen Edara, Associate Professor University of Missouri

visibility of the signs during sunny days were reported. Capital costs were \$120,000, and annual maintenance costs amounted to \$4,000.

The bottom line, Perkins said, is that VASLs are one tool for traffic engineers and operations departments to lean on — as a means to an end.

"Unfortunately, during major winter events perfect driving conditions cannot always be attained; by reducing the speed limit, it provides a safer environment for the motoring public," he said.

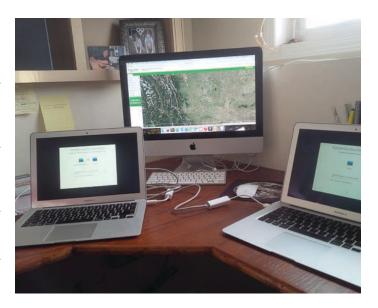
University of Missouri Associate Professor Praveen Edara had similar findings. Edara was the lead author on a paper titled "Evaluation of

variable advisory speed limits in congested work zones" recently published in the "Journal of Transportation Safety and Security."

Edara set out to find out if a VASL system might lessen congestion and reduce rear-end and lane-changing accidents on Interstate 270, a major four-lane highway in St. Louis.

"Even without any incidents (of construction or accidents), there are several recurring congestion problems on the I-270 corridor," Edara said in a May 2017 statement. "Where there is queueing, if upstream approaching drivers are not aware of the queue downstream, there's not enough time to hit the brakes to slow down or stop, thus, increasing the likelihood of a crash."

Edara's work uncovered a few key pieces of data, according to the statement. First, the use of VASL systems is effective in gradually slowing down drivers as they enter a work zone. VASL use resulted in a 39 to 53 percent decrease in average queue length, a 7



City of Lethbridge employees are able to adjust all message boards from the office by using management software. (Photo provided)

to 11 percent throughput reduction and just a 4 to 8 percent increase in travel time.

His data also suggests a boon when it comes to safety. For example, maximum speed differences decreased by as much as 10 mph, and rear-end collision conflicts dropped by 30 percent along with a 20 percent decrease in lane changing conflicts. Essentially, travel time was slightly longer, but lines were shorter and collisions less frequent.

The takeaway? VASLs may be a viable option for municipalities with the resources to implement and track such a system.

"You can get both safety benefits and mobility benefits by deploying variable advisory speed limit systems," Edara said. "It helps lower the rush-hour congestion in urban areas."











Superior Classic Smoke

Inexpensive • Easy to use • Disposable

The most realistic Smoke for Fire Training & Disaster Simulation, Produces from 40,000 to 500,000 cu. ft. of dense white smoke.





ST-10 Smoke Machine

Rugged • Dependable • Affordable

Creates large volumes of non-irritating smoke for both indoor or outdoor training exercises. Quality at a great value!

ST-10 Fluid

Dense Non-Irritating Odorless Smoke Proprietary, high-quality formula 100% Virgin USP Pharmaceutical Grade ingredients



ST-10 XP FluidPremium XP Fluid maximizes

density and hang time.

Get more smoke with less fluid!

Can be used in most Competitive Machines. Available in 1 Gallon, 5 Gallon and 55 Gallon

www.SuperiorSignal.com/TM



The Safer Stump Grinder

No High Speed Debris • No High Speed Cutting Wheel • No Carbide Tools to Break or Remove • Work Near Buildings & Streetsand it's EXTREMELY PRODUCTIVE!

The long lasting low maintenance auger bit turns just 7 - 17 RPM, grinding hardwood stumps up to 28" in as little as three minutes. The low speed auger bit keeps most chips in the hole, making clean-up quick and easy. Visit fecon.com or call us for more information!

fecon.com 800.528.3113



Syntex Portable Water tanks

All Syntex liners come with three (3) handles inside the liner, quick snap latch on the

discharge chute, and all frames have safety hinges!





Syntex also manufactures hosebed covers, crosslay covers, staging mats, and much more!

CALL US TODAY TO DISCUSS YOUR NEEDS!

ESYNTEX Industries

Humboldt, IA 50548 ~ Phone: 515-332-3265 Website: www.syntexindustries.com Email: info@syntexindustries.com Also, check us out on Facebook and Twitter!





Visit us at Booth 3961 at Waste Expo 2018

The National Refuse Seat is the seat for your fleet!

The modular construction reduces vehicle maintenance costs and the tubular frame design provides superior strength and ultra-comfort.

- Water and stain resistant cloth
- Air adjustable lumbar support for improved comfort



Fits most popular vehicle models Call Today! 1-800-459-7328



50 Nances Creek Boulevard (PO Box 566) Piedmont. AL 36272 1-800-459-7328 | www.nationalseating.com

Another quality brand of Commercial Vehicle Group



By BARB SIEMINSKI | The Municipal

With all the topsy-turvy weather and disasters Mother Nature has generously endowed her nations with over the past year, many cities are adapting and, in cases of major flooding, turning their attention to the mostly unseen world of infrastructure.

Hurricane Matthew—a Category 3 storm of Oct. 7, 2016—left St. Augustine, Fla., with tremendous flooding in which water consequently flowed over a seawall and filled the streets.

St. Augustine has since put more than a quarter-million dollars forward to kick off a project that focuses on the flooding around Lake Maria Sanchez. It is an endeavor that has also attracted major support from the Federal Emergency Management Agency because of Hurricane Matthew.

This pilot study area for the Florida Department of Economic Opportunity was titled the "Community Resiliency: Planning for Sea Rise" project and is actually divided in half, according to Reuben Franklin Jr., professional engineer and mobility manager employed by the city of St. Augustine.

"The project was split into two phases," said Franklin. "Phase one began in April 2016 and was completed in June 2016. This phase consisted of a sea level rise vulnerability analysis for the city. Phase

two began in June 2016 and was completed in May 2017. This phase consisted of an adaption plan based on the vulnerability analysis."

Because many Florida communities like St. Augustine have been experiencing the undesirable impacts of elevated sea levels, harsher storms and more intense downpours, the DEO community resiliency initiative aids them in assessing vulnerabilities to projected increases in coastal flooding and in creating strategies to make their areas better able to recover quickly.

The objective — and probably the most intensive hazard mitigation project — is to make the area able to defend itself from a Category 1 hurricane, which is something St. Augustine's seawall is capable of holding back.

"The project has been approved for the HMGP (Hazard Mitigation Grant Program) grant funding at 75 percent of the entire \$11.5 million cost," said Franklin. "The design will be funded first, and once approved, the construction monies will be allocated. So, currently the design is approved and funded."

LEFT: A "sunny day flood" in October 2017 filled some St. Augustine streets with water. The "Community Resiliency: Planning for Sea Rise" project seeks to mitigate such flooding. (Photo provided)

RIGHT: Pictured is a table showcasing the vulnerability of St. Augustine's wastewater treatment plant to each flood type and sea level rise scenario. With 1 percent annual chance flood, the plant would be most affected. (Graph provided)

| | | MHHW | Nuisance | 1% | |
|-----------------------------|-----|------|----------|-------|--------------------------------------|
| SLR Flood Elevation in Feet | 0 | None | None | Some | |
| | 0.5 | | | Some | |
| | 1.0 | | | Major | |
| | 1.5 | | | Total | |
| | 2.0 | | Some | | No flood impact |
| | 2.5 | | | | · |
| | 3.0 | | | | Impact to some structures (<=3) |
| | 3.5 | Some | | | |
| | 4.0 | | | | Impact to the majority of structures |
| | 4.5 | | Major | | Total encroachment |
| | 5.0 | | Total | | |

The city's share of the total project will be around \$2,875,000, including the design phase.

Included in the project are the installation of stormwater backflow prevention valves; the creation of a larger stormwater collection system on Cordova, Bridge and Granada streets; excavating the lake; the placement a stormwater pumping station at lake control gates; and the design of a system to protect properties along the marsh south of South Street from flooding.

When asked what projects the city was working on to protect historical/cultural resources and low-lying critical infrastructure, Franklin mentioned the installation of tide check valves on stormwater outfalls to prevent tidal waters from backing up through the stormwater system and causing flooding.

"The city is also in the beginning stages of designing a pump station and flood protection barrier for the Lake Maria Sanchez Basin," said Franklin, whose title during the study was stormwater engineer. Jessica Beach, professional engineer, is the city's new stormwater engineer.

While the city is taking proactive measures to address sea level rise, Beach noted that this was not the only project to address the matter.

"It's multiple projects that are in various stages: some are completed; some are nearing completion; some are in the design and permitting stages; and others are future/planned projects," said Beach.

How many people were involved in the pilot study?

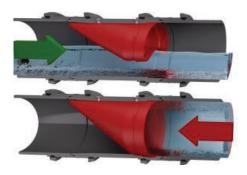
"There were three local governments involved—the city of St. Augustine, city of Clearwater and Escambia County. All were in Florida and our own team consisted of about 12 staff," said Franklin. "The single biggest challenge was coming to terms with the complexity of the idea of sea level rise and how much it impacts our city."

The city also plans to secure disaster relief funds from the U.S. Department of Housing and Urban Development, which had been awarded to St. Johns County of which St. Augustine is the county seat.

According to the "Final Report of St. Augustine — Analysis & Appendix," three types of coastal flooding were identified for analysis in the pilot program:

- Mean Higher High Water, or MHHW—defined as the highest daily high tide, representing the limit of where land is "wetted" on a daily basis and has very limited use.
- Nuisance flooding defined as a minor flood event that occurs monthly, often resulting in the flooding of roads. This type of flooding has the largest potential for increase with SLR.
- The 1 percent annual chance flood, also known as the 100-year recurrence interval flood defined as the Special Flood Hazard area depicted on FEMA Flood Insurance Rate Maps. Such an event has a 1 percent chance of occurring in any given year, and a 26 percent chance of occurring over a 30-year timeframe.

Of the three types evaluated, nuisance flooding has the largest potential to impact



This diagram shows a tidal backflow prevention insert from the "Coastal Vulnerability Assessment." (Graphic provided)

St. Augustine in the near term. An additional 500 acres of land are vulnerable to nuisance flooding with 1 foot of sea level rise.

Because the study assessed the vulnerability of the city to these existing flood conditions with an incremental approach, this involved gradually increasing sea level at half-foot increments to identify "tipping points" in vulnerability. The vulnerability assessment—or how vulnerability to flooding will change with SLR—objective items included:

- Infrastructure percent of network affected by scenario and days inundated for road segments
- Historic resources bridges, water/ wastewater
- Archaeological resources percent of archaeological zone or cemetery affected by scenario

- Groundwater impacts local and regional response to SLR Ultimately, the project aims to achieve five goals in vulnerable coastal communities:
 - Make infrastructure and the built environment robust to expected changes.
 - Make systems physical or organizational that are vulnerable to SLR more flexible by altering and/or moving their components.
 - Enhance the ability of natural systems to reduce vulnerabilities.
 - Identify maladaptions and begin undoing them.
 - Inform the public about the short- and long-term risks that SLR will create.

Various policy tools are available to localities seeking to adapt to SLR. Some of these tools include transferable development rights; incentives; setbacks and buffers; rebuilding restrictions; stormwater utility; special assessments; building codes and design; floodplain regulations; zoning and overlay zones; hard- and soft-armoring permits; conditional development; impact fees; conservation easements; real estate disclosures; coastal land acquisition programs; and land trusts.

Two intensive reports that have been made on this project were recently released a few months ago—the "Coastal Vulnerability Assessment" and the "Strategic Adaption Plan." Both can be viewed at www.citystaug.com/government/public_works/ResiliencySustainability/CoastalVulnerability.php. M



As sea level rise becomes more prevalent, flooding will become more visible in coastal cities. St. Augustine, Fla., has already taken steps to reduce the felt effects of SLR by installing stormwater backflow prevention valves; creating a larger stormwater collection system on Cordova, Bridge and Granada streets; excavating the lake; putting a stormwater pumping station at lake control gates; and designing a system to protect properties along the marsh south of South Street from flooding. (Photo provided)





AccuBrine® automated brine maker NXT-Gen

- New valve and sensor for improved brine accuracy and efficiency
- Able to expand as your liquids program needs change
- More brine in less time, up to 6,000 aph
- Conveniently monitor system remotely from your desktop or mobile device
- Make custom brine blends to prepare for any winter weather event with optional AccuBrine® blend truck loading & blending system
- Safe, automatic cleaning process to save valuable time and labor



AccuBrine® blend truck loading & blending system

- Flexible system that works with any brine maker
- Make custom brine recipes to prepare for any winter weather event
- Enjoy touch-of-a-button technology that is easy and convenient
- Expand and grow your liquids program
- Eliminate brine storage needs with real-time blending
- Save time and money with accurate, efficient brine making
- Fill trucks faster with better brine



BETTER BRINE, EVERY TIME.

The next generation of brine makers is here. The AccuBrine® automated brine maker NXT-Gen and AccuBrine® blend truck loading & blending system from Cargill Deicing Technology now brings snowfighters even more advanced brine-making technology, greater accuracy and precision automation.

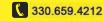
Learn more. Contact 1-866-900-7258 or visit www.cargilldeicing.com.



A Caraill Deicina Technology Product

Providing Customers with Deicing Solutions that Save Lives, Enhance Commerce and Reduce Environmental Impact.





330.659.2144

ORGANIZE YOUR RIG THE SENSIBLE WAY

Organize your rigs with our products and services







Add our Chanl Panl mounting system and complete line of mounting brackets to a new or existing apparatus.

Organize your rig today!

Fire Apparatus

Law Enforcement Vehicles

Trailers

Landscape Trucks

ATVs

Snow Removal Vehicles

Visit www.SenPro.net to view all of our products and services



for Maximum Safety, Security and Better Gas Mileage

• Fit: 2" trailer hitch receivers

Towing capacity: 10k-24k lbsTongue weight capacity: 2,000 lbs

Iongue weight capacity: 2,000 lbs
 Adjustability: 4" Rise 6" Drop

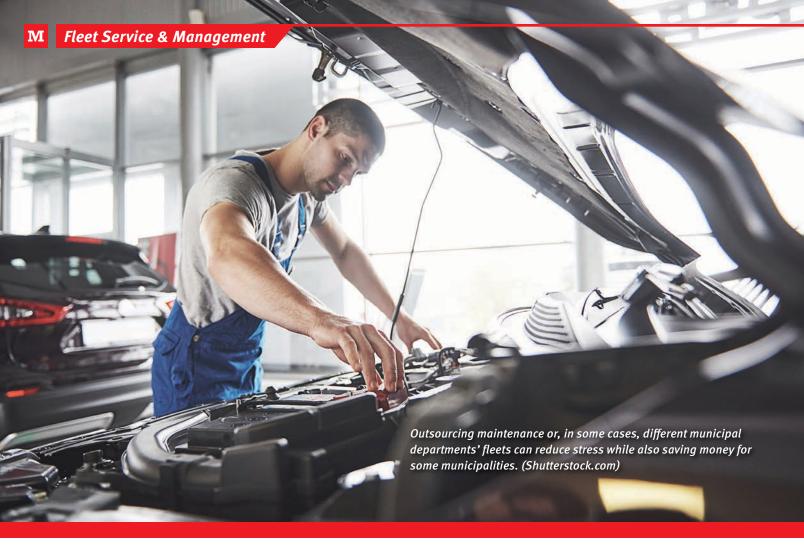
• Limited Life-time warranty





(517) 617-7858 gladiatorhitch.com





Growing fleets for growing cities: Why some cities are opting out of in-house fleet management

By ABBEY MCLAUGHLIN | The Municipal

When keeping up with all of the tasks required for public works, organizing and managing fleets of vehicles can be difficult. Some local governments have opted to outsource their fleets while many others are still undecided on the matter or have opted to keep everything in-house.

Last November, the Allentown City Council in Pennsylvania made the decision — in a 5-1 vote — to outsource fleet maintenance services for all city departments by entering into a three-year contract with a company called Centerra Integrated Services for \$7 million. The vote came after the city rejected a counter proposal by the Service Employees International Union, which claimed it could save the city \$420,000 over the life of the contract. Craig Messinger, the director of

public works for Allentown, had calculated a loss of \$300,000 each year with SEIU's contract.

Allentown is not alone when it comes to outsourcing as other larger regions are switching to privatized fleet management in order to avoid the complicated aspects of owning many vehicles.

Perhaps the most obvious benefit of outsourcing is that municipalities can save both money and stress in an extended fiscal period by

not having to worry about the employment of drivers in some cases, vehicle repairs and upkeep.

When a separate company takes care of the drivers and vehicles needed for city jobs, municipalities are reassured that the personnel and vehicles are best of the line. While the primary service that these companies provide is the machinery needed, the human resources aspect of the decision is also beneficial. With less employees to manage, less wages to allocate and less time spent managing these workers, the municipalities can return to the higher priority items. Decreased risk for injury is another advantage that governments and municipalities consider.

Vehicles and technology change rapidly, and when governments and municipalities hire in-house employees, the resources provided are sometimes out of date or inefficient. Gas prices, parts repair and the expected upkeeps—like oil changes, tire rotations, cleaning, etc. — add up. Other factors, like federal and local laws and regulations, are also handled by the fleet management service. Governments and municipalities can focus on the task at hand rather than making sure their vehicles and drivers are compliant with Insurance Services Office, Environmental Protection Agency and Occupational Safety and Health Administration.

Some public institutions stick with their inhouse vehicles and staff for the sake of saving money. In Fort Mill, S.C., where the population only reaches 16,000 residents, operating vehicles owned by the municipality is easier. The Southeastern Governmental Fleet Managers Association regional director and Fort Mill director of public works, Davy Broom, explained that all vehicles in the municipality are maintained, repaired and operated by in-house workers. The city has two mechanics at its disposal in addition to the fuel, oil and parts that maintenance required.

"The only thing we outsource is our diesel vehicles," Broom said. "In this area, finding diesel workers is difficult. We find that it's much easier to use a company's diesel vehicles where we don't have to find mechanics and resources from a long distance."

Fort Mill is a small town, and when a vehicle is down, the drivers must use older, less safe vehicles while their normal one is being repaired. For this reason, Broom said, "Our drivers really have to go above and beyond the normal expectations. They really take care of their vehicles to minimize days with tight schedules and a smaller fleet."



Fort Mill, S.C., outsources its diesel vehicles to save money. Additionally, it has found finding diesel workers to be challenging in its area. (Photo provided)

Other potential problems inform these decisions as well.

Clemson University in Pickens, S.C., operates closely with the local government to provide services for nearby property and research locations. William Smoak, the regional director and board member for SGFMA and the farm manager in dairy research farm services for the university, discussed the unique reasons why its fleet management system is in-house.

"Since the university discontinued the old fleet system, each department is now responsible for its fleets separately. My department, research farm services, has our own mechanic, and we have one certified mechanic that works at one station in particular. Some of the other departments outsource any problems they have."

The experiences explained by Broom and Smoak clarify that the decision is truly based on the size, needs and location of the municipality. For smaller cities with limited resources and a small range of work, caring for vehicles in-house makes more sense.

While having less people to manage is simpler for those cities that choose to outsource fleet services, the forfeited control is certainly not. Choosing a company that holds its drivers to high standards and trusted integrity is imperative. The dialogue between the municipality, the company and the drivers requires more energy and strategic communication. Establishing the accountability between drivers and directors takes work and commitment. Even Fort Mill, which only outsources

a handful of vehicles, takes the time to communicate effectively.

"We respect our diesel partners' time and appreciate their help in minimizing costs," Broom said. "They have jobs to do, too, and we understand that we aren't their only customers and try to work as a team."

Through their roles at SGFMA, Broom and Smoak likes to take advantage of the opportunities the association offers, such as training sessions. These sessions offer valuable insight on fleet management for free to those who are members of the organization.

"We try to go to as many as possible," Broom said. "We save money in the future by learning about our vehicles and management in the training."

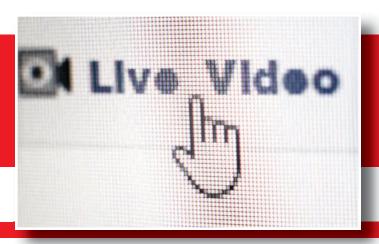
SGFMA training sessions range from information on engine repairs and diagnostics to emission control and purchase strategies. Smoak agreed that Clemson University fleet managers are participating in the training sessions as much as possible. The training sessions are primarily focused on newer technology, which is sometimes difficult to apply to the vehicles in Pickens.

"Our fleets are a little older," Smoak said. "I've been trying to get more guys to go, especially when they're nearby and relevant to our fleet. When it does benefit us, we definitely take advantage of the training sessions."

Through training sessions, city fleets personnel can learn how to save money in the long run and get the resources necessary to tackle any challenge. M

Live and in real time

By JULIE YOUNG | The Municipal



Community leaders are always on the lookout for ways in which they can take their social media platform to the next level. While they most likely have accounts on all of the major sites in addition to a central webpage, many municipalities are making the leap and going live. Experts say that live broadcasts are a great way to connect with your community and get critical information to masses — especially when there may be no other way to do so.

In times of trouble

Courtney King, community relations manager for the city of Dunedin, Fla., said the Pinellas County community of 36,000 was an early adopter of social media and has maintained a Facebook page since 2010. While some eschewed the idea of constantly updating an account, she knew social media was the wave of the future rather than a passing fad, and she has made a point of staying up to date on the latest features and applications.

In addition to its Facebook page, Dunedin added a Twitter feed and a YouTube channel to its platform — all of which help it bring news, updates and developments to the public; however, when Hurricane Irma hit the state last October, Facebook Live became a critical communication tool.

"We used Facebook Live for smaller things in the past, like parades, but when the hurricane hit, it was the way in which we got urgent information out to the community," she said. "We would broadcast messages from the mayor, fire chief and other departments at the emergency operations center to people who may be without power, but still had access to the internet through their cellphones."

It was an effective strategy, and when the storm subsided, the public thanked the city for keeping them in the loop with its live updates, and since then, Dunedin has looked for opportunities to go live more often.

"Luckily, the city manager is very supportive of technology, innovation and, of course, citizen engagement. That's what really helped our live efforts take off," King said.



Dunedin, Fla., went live during its 2018 Mardi Gras festivities. The city of about 36,000 has found Facebook Live to be valuable when it comes to distributing information to the community. (Photo provided)

Products for production

According to Smarsh, a leading provider of archiving and compliance solutions for companies in regulated and litigious industries, adding live stream content to a community's social media platform can optimize the communications plan for a variety of departments.

While it isn't too hard to get started, creating a trusted resource for municipal information does take a certain amount of strategizing and planning in order to launch it properly.

King said her initial Live sessions involved nothing more than a cellphone, which naturally resulted in poor-quality audio and a lot of shaky footage. Later, she incorporated a plug-in microphone from Dunedin's television studio, which improved the quality of the audio, and most recently, the city has invested in a Padcaster, which mounts an iPad onto a tripod and increases video stability.

"There are a lot of things that you can hook up to an iPad or iPhone, such as wide angle lenses and microphones, that can help you create a professional mobile setup and improve the quality of your live broadcasts and create engaging videos," she said. "It's really amazing what all you can do."

Smarsh said when you make the leap into live content, it is important to let your audience know when you will be broadcasting so that they can tune in. Also, you'll want to train your representative or spokesperson to use consistent messaging during all Live sessions so that you can reinforce the individual as a knowledgeable and trustworthy source of information. Additionally, use everyday language as opposed to formal terminology. Repeat important information several times during a broadcast such as phone numbers, websites, names and dates as well as locations, and do not forget to update all social media accounts with pertinent facts so that the public can refer back to them if necessary. Above all, encourage your audience to share the session with others so that you can spread your message to as many people as possible.

It is also important to stay up to date on any of the new social media applications in addition to any tips and trends that other communities are using to get the word out. The Government Social Media Organization is the first national network for U.S. local, state and regional government social media managers. The goal of the GSMO is to facilitate an environment where government entities can network, collaborate and share best practices for using social media.

Members offer tips and tricks for getting the best video content and what programs can be used to spice up footage without breaking the budget. Another topic explored by GSMO members is ways to increase your viewership, "likes" and "followers." The organization also spreads awareness of how communities not using video could be left behind.

"There is a lot to learn where social media is concerned, but the good news is that anyone can learn it and any community can implement it," King said. "It helps to have the support from your



During Hurricane Irma, Dunedin broadcasted messages from the mayor, fire chief and other departments at the emergency operations center. While many people were without power, the messages could still be accessed by people who had internet through their smartphones. (Photo provided)



By going "live," cities can engage residents in a new way while getting news, updates and developments out. (Photo provided)

leadership, but by adopting these new communication tools and techniques, you will be better prepared when an emergency arises and will be able to get your message to the public as quickly as possible. The future is now and social media is where it's at."

Is your community social savvy?

Want to stay on the cusp of what's hot in social media trends for 2018? Here are some things your community can do to stay up to date in the social sphere.

- Facebook: From its Live feature to its upcoming launch of a Sound Collection of free audio tracks, this platform will help you incorporate engaging video messages in all that you do.
- Twitter: While brevity is still beautiful, Twitter has increased its character limit from 140 to 280 giving you more room to get your message and video content across.
- **Instagram:** If you want to go to "hashtag heaven," Instagram is the way to go. Trending topics are timely for those who use this social platform, especially those who use it to help brand their agencies.



By BARB SIEMINSKI | The Municipal

One of the fun activities of working in a city's parks and recreation department is planning, creating and maintaining a successful playground for its citizens' furry four-legged family members.

Pet parks are growing in popularity all over the nation as humans love seeing their offleash dogs romp freely and socialize with other canine friends in their very own dog recreational area — and some of them even have envious amenities leading to a five "Woof" dog recreational area.

According to the American Kennel Club's website, other advantages of a dog park include allowing dogs to exercise and socialize safely; promoting responsible dog ownership; providing an outlet for dog owners to socialize; and boosting the community by promoting public health and safely.

Building a dog park takes tremendous planning. Start with a group of committed dog park enthusiasts; hold a public meeting; educate dog owners on the need to be responsible; choose a site; create a budget; and finally determine how to generate revenue for the budget. Create a proposal and seek the approval and input of important organizations in your community. A good way of demonstrating support is to place petition folks at groceries, pet-supply stores and other high-traffic areas.

According to Niky Roberts, director of marketing/public relations for Purina, the company sponsored what was to be the first of six Beneful Dream Dog Park renovations in 2010. The top \$500,000 winner of that first year's makeover was Johns Creek, Ga.'s, Newtown Dream Dog Park

"In 2015 and 2016 Beneful took the program in a different direction supporting

dog park projects through crowdsourcing website GoFundMe, along with a handful of smaller scale makeovers to existing dog parks, versus building new ones from the ground up as we did with the original four," said Roberts.

Edie Damann, external communications manager for Johns Creek, noted that the dog park was already a popular feature in place prior to its becoming a city park.

"When the city incorporated in 2006, it took over control of the parks within its borders from Fulton County. In 2010, the Johns Creek dog park was selected by Purina Beneful as the winner of its nationwide Dream Dog Park competition," said Damann.

"On Sept. 8, 2010, Beneful unveiled a plan designed by the Beneful WagWorld Dream Team. Designer and television host Jason Cameron and best-selling author Arden Moore crafted the park plans, which include surfacing the fenced acre-sized



Dogs socialize at Newtown Dream Dog Park in Johns Creek, Ga. (Photo provided)



Water features can be an added bonus during summer months, cooling down canines at play. Pictured is Johns Creek's dog park. (Photo provided)

dog park with artificial turf, a pond, tunnels and obstacles, and drinking fountains for pets and people. The plans were approved by the city's public works department. Resident Pat McNeely submitted the application to Beneful."

The city, said Damann, used the \$500,000 from Beneful for the revitalization and redesign of the Newtown Dream Dog Park. That amount was spent on the renovations. Maintenance of the park is included in the service contract with Precision Landscape Management, and — weather permitting — the dog park is open year-round.

What are some standouts of the Johns Creek dog park so far?

"The park contains water features, agility equipment, a bridge and places to sit for pet owners," said Damann, "and depending on the weather, we have found the water fountains are quite popular in the summer."

What was the biggest challenge in creating the area?

"No real challenges," admitted Damann. "The contractor for the project was well known — he had three different television shows on the HGTV network at the time, and Beneful was paying the bills. Pat McNelly came up with a great concept, inspired by his Siberian husky, Koda."

Other dog park features could include separate areas for small and large dogs, benches, shelter, a walking trail and dog waste bags.

Parks such as these are especially welcomed by travelers who may have to crate their dogs during long drives and thus welcome the chance to exercise their canines during pit stops. Additionally, if a pond is present, travelers can also wash their dog before resuming travel.

Those municipalities considering building a dog park should have policies in place for the safety and comfort of humans and pets. And these policies should be posted at the park, along with the hours that the park is open from. Common policies adopted by cities are that dogs must wear a collar with a valid license and have current vaccinations; handlers must pick up after their dog(s) and dispose of the bagged waste in the containers provided; dogs must at all times be under the control and supervision of their handlers; children under 12 must be accompanied by an adult; food and glass

containers are not permitted for either human or canine; cats are prohibited; and puppies and female dogs in heat are not allowed in the park.

A good playground for dogs should have parking close to the site, shade, water and cleaning supplies, including covered garbage cans, waste bags and pooper-scooper stations.

Lowell Dog Park at Stoney Lakeside Park of Lowell, Mich., was begun in 2007, according to James Carey, chairperson of the Lowell Dog Park Committee.

"We opened because of the love of dogs and the desire to give like-minded people a safe place to let their dogs off-leash and to socialize," said Carey. "This was the idea of one local dog owner."

Funds were raised from local dog owners, local grants and a local veterinarian, who received naming rights for 10 years because of his \$10,000 donation.

"The most popular attraction is our free park, lights for extended hours in the winter and a drinking fountain for dogs and humans in the warmer months," said Carey. "Also, our open-sided weather shelter is popular on hot sunny days. In winter people bring their dogs, but they stay for shorter periods."

The approximate cost for the startup was the earlier-mentioned \$10,000, but Carey said once the fence was up, "you have the dog park, and soon after we added benches, which were sponsored by local businesses."

Because a dog park was not in the city's master plan, they did not assume any financial responsibility, "but they did give us the city-owned land in which to put the park," said Carey.

He added, "Some challenges came with understanding all that comes with constructing and maintaining public property in the city. For example, from being a grassroots organization, we had to learn all the legal requirements — ordinances, building requirements and grant writing for capital projects — and the ongoing challenge of raising funds to keep the park open."

As for the park's future, Carey said, "We currently have a request turned into Meijer Corporation requesting them to assume long-term naming rights and financial responsibility."

For a complete list of all upcoming events, visit themunicipal.com/events.

To list your upcoming conference or seminar in The Municipal at no charge, call (800) 733-4111, ext. 2307, or email the information to swright@the-papers.com.

APRIL

April 5-6 Labor-Management Alliance Conference

Denver, Colo. *iafc.org/events*

April 11-12 New England Parking Council Annual Conference and Trade Show

Providence, R.I.

newenglandparkingcouncil.org

April 18-19 National Fire and Emergency Services **Symposium and Dinner**

Washington Hilton and Towers, Washington, D.C. cfsi.org/2018-dinner/

April 22-24 Fire Department Training Network Spring Live-Fire Training Camp

Indianapolis, Ind. fdtraining.com

April 23-26 WasteExpo

Las Vegas Convention Center, Central Halls, Las Vegas, Nev. wasteexpo.com

April 23-28 FDIC International

Indiana Convention Center and Lucas Oil Stadium, Indianapolis, Ind.

fdic.com

April 24-26 Navigator 2018

Las Vegas, Nev. navigator.emergencydispatch. org

April 24-27 NAFA Institute and Expo

Anaheim, Calif. nafainstitute.org

April 25-27 2018 Parking Association of Georgia Conference

Marriott and Convention Center. Augusta, Ga.

parkingassociationofgeorgia.com

April 26-28 The "Summit" Conference

Coeur D'Alene, Idaho emsassociates.com

April 27-28 Minnesota Mayors Association 2018 Annual Conference

Perham Lakeside Golf Club. Perham, Minn.

lmc.org/page/1/2018MMA. *jsp?ssl=true*

April 30-May 3 Advanced Clean Transportation Expo

Long Beach Convention Center, Long Beach, Calif. actexpo.com

MAY

May 3-5 VOCS Symposium in the West

Phoenix, Ariz. *iafc.org/events*

May 6-8 NYCOM Annual **Meeting and Training School**

Gideon Putnam Hotel, Saratoga Springs, N.Y. nycom.org

May 6-9 North American Snow **Conference**

Indianapolis, Ind. apwa.net

May 7-10 AWEA WindPower

Chicago, Ill.

windpowerexpo.org

MAY

May 18-20 Lancaster County Firemen's Association Annual

Pennsylvania Farm Show & Expo Center, Harrisburg, Pa. lcfa.com

IUNE

lune 3-6 EUFMC 2018

Williamsburg Lodge and Conference Center, Williamsburg, Va. eufmc.com

June 3-6 International Parking **Institute Conference and Expo** Orlando, Fla.

parking.org

lune 3-6 Prima 18 Conference

Indiana Convention Center, Indianapolis, Ind.

conference.primacentral.org

June 3-6 Safety 2018

San Antonio, Texas safety.asse.org

June 4-7 Governement Feet **Expo & Conference**

San Diego Convention Center, San Diego, Calif.

governmentfleetexpo.com

lune 7-10 International **Hazardous Materials Response Teams Conference**

Baltimore, Md. iafc.org/events

lune 9-12 Tennessee **Municipal League Annual** Conference

Knoxville, Tenn. tml1.org/2018-annualconferece

IUNE

June 10-14 Community **Transportation Expo**

David L. Lawrence Convention Center, Pittsburgh, Pa. web1.ctaa.org

lune 11-13 Fire-Rescue Med

Henderson, Nev.

iafc.org/events

lune 11-14 NFPA 2018 **Conference and Expo**

Mandalay Bay Convention Center, Las Vegas, Nev. nfpa.org

lune 13-16 NYSAFC 112th **Annual Conference & FIRE 2018 Expo**

Turning Stone Resort, Verona, N.Y.

nysfirechief.com

June 20-22 League of Minnesota Cities 2018 Annual Conference

St. Cloud, Minn. lmc.org/page/1/AC2018.jsp

June 22-26 Georgia Municipal **Association Annual** Convention

Savannah International Convention Center, Savannah,

gmanet.com/Training-Events/ Annual-Convention.aspx

June 26-27 Police Security

Expo 2018

Atlantic City Convention Center, Atlantic City, N.J. police-security.com

lune 26-29 SIMA 21st Snow &

Ice Symposium

Cleveland, Ohio sima.org







FIRE SUPPRESSION PRODUCTS

3400 Central Blvd, Hudsonville, MI 49426 ph- 866.313.1467 email: info@firecapplus.com www.firecapplus.com



BETTER THAN FOAM!

For Use on - "A", "A/B", "B", "D", "K" fires

- Extinguishes fires 8x faster than plain water
- Reduces heat, smoke and vapors
- Promotes fire fighter safety
- Helps prevent re-ignition
- Non-corrosive, non-toxic and non-hazardous
- Effective with all foam systems including CAFS

Available in 5 gallon pails and 55 gallon drums





HOME OF THE CLEANEST SINGLE-AXLE TRUCKS

WWW.imelsales.com

Call Brent 260-437-4577

Phone: (260) 565-3177
Fax: (260) 565-4177
Email: brent@imelmotorsales.com

Call for References





Financing Available! DELIVERY SERVICE

www.imelmotorsales.com

Live Videos for snow plow equipment



Cooperative contract brings Christmas in June to Staples Fire Department

It's mid-June 2017, and the Staples Fire Station in Minnesota is awash with excitement.

"This is like Christmas," said Donald Brusewitz, volunteer firefighter. Christmas? In June?

Firefighters and their families, the mayor and members of the community have been swinging by just to catch a glimpse, maybe even climb aboard.

Climb aboard what? What's the attraction? The Staples Fire Department's shiny new pumper truck. A brand-new, custom-built Rosenbauer two-door commercial top control FX pumper truck.

Fire Chief Scott Braith said the department has been working on getting the new truck for two years. The first year included lots of research and conceptualizing, with the actual order being placed last May. It took a year - and lots of collaboration with the manufacturer — to build the truck. After all that, it's no wonder the department's fired up.

"This is just a huge benefit to the community to have three good, usable and dependable trucks," Braith said. "We'd been down to just two pumper trucks for about a year. Our old truck (from 1980) was taken out of service a year ago because nobody wanted to go into a house, or anything burning, with it. You just couldn't trust it."

Possible through cooperative contract

The city of Staples purchased the new truck for the fire department through a cooperative contract from Heiman Fire Equipment, a Rosenbauer dealership based in Sioux Falls, S.D. With the cooperative purchasing process, the city was able to efficiently purchase its firetruck without having to go out for bid. This means it got what it wanted quickly and in a more cost-effective manner.

Using the contract saved the city at least \$10,000 on the purchase, plus thousands more in the time, energy and resources it would've taken to go through the traditional bid process. The cooperative had already conducted the competitive solicitation process on behalf of all its members and awarded Rosenbauer as a contracted vendor.



Fire Chief Scott Braith shows a volunteer firefighter around the cab of the new truck. (Photo provided)

Focus on customization

Because the purchasing process was so easy, the city was able to focus its efforts on building the truck. The city ended up with a custom-designed truck with enhanced safety and efficiency features, setting the department up to more effectively carry out its mission of serving the central-Minnesota city and its surrounding townships.

"First and foremost is always safety," Braith said of the initial planning stages. "For example, on our other pumper, the ladders are up on top in a compartment. You have to crawl up there and pull them out. The big one up there probably weighs a couple hundred pounds, and you're pulling that out over your head."

Ladders on the new truck are also housed up top, but raise, lower and adjust with the push of a button. All the lights are LED, making the truck more visible when heading out to a call and giving firefighters better lighting once on-site.

The new truck includes more spotlights and lighting options, including an automated and fully adjustable center-mounted spotlight.

Mixing familiar with new

Braith said the committee had the manufacturer configure the pump hookup sites to

match its former main pumper, a Rosenbauer from 1997. This will make for a smoother transition.

There are a few custom upgrades between the pump system on the older truck and the new, however. On the 1997, the pump controls are at ground level and on one side of the truck, making communication and operation a challenge. On the new truck, the control panel is up on a platform between the cab and tank of the truck, giving operators an elevated 360-degree view.

The entire pump system—hose nozzles, hookup sites, levers and gauges - is color coordinated. "This way when someone's got the hose and they tell you to shut down the green nozzle — there, that's the one," Braith said, pointing to a green lever.

Braith said the purchasing part of the project was straightforward. The fire department got the exact brand and model of truck it needed, complete with the desired customizations.

"We knew we wanted a Rosenbauer truck, and we knew they were on (the cooperative) contract," Braith said. "I asked our salesman what we needed to do, and he told us all we had to do was be a member of the cooperative. From there, it was very simple." M

www.njpacoop.org



Beck's Trailer Store

Over 1200 trailers on 45 acres. Nations Largest Trailer Dealer financing available. Over 300 dump trailers in stock. Prices subject to change. 8' \$3.350 10' \$2,990 - 12' \$4,890 - 14' \$5,700

BECK'S TRAILER STORE • ST JOHNS, MI

1-888-902-0048 • BECKSTRAILERSTORE.COM



(2) 2005 International 4300

DT466, Allison A/T, AM/FM, Petersen TL3 Lightning Loader with full rotating grapple and extendable boom. 138K and 148K miles. Excellent southern municipal

> NASHVILLE, TN • 615-200-4265 CAPITALCITYTRUCK@COMCAST.NET



2007 Isuzu NOR

5.2 Liter diesel, A/T. AM/FM, A/C, P/W, PDL. tilt, cruise, exc. tires, 6 yard Heil Satellite packer with dual cart tippers. Super nice southern

> NASHVILLE. TN • 615-200-4265 CAPITALCITYTRUCK@COMCAST.NET



2008 Ford F350

6.4 Powerstroke, A/T, AM/FM, A/C, tilt, PW, PDL, exc. tires, equipped with Omaha Standard service bed with power inverter and

> NASHVILLE, TN • 615-200-4265 CAPITALCITYTRUCK@COMCAST.NET



2010 Mack MRU613

Mack engine, A/T, AM/FM, A/C, excellent tires, equipped with a 28 yard Heil FEL body. 120K miles 11K hours. Excellent municipal truck!......\$119,000

> NASHVILLE, TN • 615-200-4265 CAPITALCITYTRUCK@COMCAST.NET



2011 Freightliner M2

Detroit DD13 engine, Allison 6 speed A/T, AM/ FM. A/C. 18K front 46K rears, 60K Wastequip hoist with front mount PTO, Pioneer Tarper and only 174K miles!.....Only **\$119.900**

> NASHVILLE, TN • 615-200-4265 CAPITALCITYTRUCK@COMCAST.NET



Case Backhoes

Many to choose from, w/lots of different opts. 580s & 590s. SLs & SMs, all cab, 4WD, EXT. Call for availability. Many 2005-2011 Case Backhoes to choose from. We buy Case backhoes.

DALEVILLE AGGREGATES • DALEVILLE, IN DALEVILLEEQUIPMENT.COM • DALEVILLEAGG@YAHOO.COM • 765-208-0551



How To Get a Fair Price

Get a Fair Price For Your Department's Used Fire Truck. 1-Minute Video: www.voutube.com/user/FiretecFireTrucks

> FIRETEC USED APPARATUS SALES 800-FIRETEC (347-3832) WWW.USEDFIRETRUCKS.COM



Move Cars with vour Forklift!

The Forklift Wrecker is an attachment that allows anyone with a forklift to move cars quick and easy, no hydraulics. See it in action at forkliftwrecker.com Made in the USA. . . . \$2,145 + freight

PHONE: 877-593-6959 FORKLIFTWRECKER.COM



2007 Peterbilt 357 Vac Truck

CAT C13, AT, 74,000 mi., Vac-Con bed with 400 hours, double frame, southern truck, no

> MIERS EXCAVATING . NEW CASTLE, IN 765-524-0633, 765-524-9556



2004 Ford F450

4x4, low miles, excellent condition \$10.900 Buy, sell, trade.....

PARRISHITRUCKS & EQUIPMENT LLC • WASHINGTON COURT HOUSE, OH 740-335-9966 • PARRISHTRUCKSANDEQUIPMENT.COM



2011 Dodge 4500 Reg. Cab

ST Contractors Dump, Nice Air Flow 11Ft. pro class dump bed, electric over hydralic with remote, 6.7 Cummins diesel with exhaust brake, 6 speed, tilt, cruise, air, CD-MP3......**\$34,900**

LARRY STIGERS EQUIPMENT TRAILERS & TRUCKS • FRANKFORT, KY 502-229-7186 NO TEXTS PLEASE • STIGERSTRUCKS.COM



STORAGE CONTAINERS

20' and 40' ground storage containers. New and Used. Delivery available. Serving IL. IN. IA, GA, KY, MI, MO, OH, PA, TN, WV, WI.

> **TSS STORAGE LLC** 800-608-1185 • sales@TSSstorage.com



2006 FORD E350 AMBULANCE

6.0L Diesel, AT, 113,000 miles, New genuine Fomoco high performance oil pump, newer batteries, has ambulance bed. Runs and drives good. Call for more details......**\$9,995**

VAN'S AUTO • WAUPON, WI







ANDY MOHR FORD COMMERCIAL DEPT.

PLAINFIELD, IN (317) 279-7140 www.AndyMohrFord.com

We are a Stalker Radar Distributor STALKER®

CONTACT KENT GOLDMAN fleet9000@aol.com

TOM DATZMAN TomHdatzman@aol.com





2017 EXPEDITION SSV 4X4 Special service vehicle, Eco Boost, AT, AC bucket seats, vinyl floor, no console, no third row, loaded tow pkg, sync, running boards \$36.500



UTILITY AWD, Titanium Gray, V6, Eco Boost,

detective package, cloth seats **CALL FOR GOV'T PRICING**



2017 FORD POLICE INTERCEPTOR AWD, 3.7 L, flex fuel, road ready **CALL FOR GOV'T PRICING**



2018 FORD POLICE UTILITY CALL FOR GOV'T PRICING



2017 FORD POLICE INTERCEPTOR All red factory lights (can be switched to red & blue) **CALL FOR GOV'T PRICING**

COMMERCIAL VEHICLES



2012 DODGE CHARGER V6, Police pkg., lights, console, 79K \$9,995



2014 FORD POLICE UTILITY AWD, Police pkg., 71K \$16,900



2015 FORD POLICE UTILITY AWD, Police pkg., 70K \$18,900



2013 FORD POLICE UTILITY \$14,900



2012 DODGE CHARGER Police pkg., lights, console, 121K \$5,900

Contact Kent Goldman of Andy Mohr Ford for All Your Security Transport Needs! (317) 279-7140 • fleet9000@aol.com

www.AndyMohrFord.com





Tammy Rimes | Guest columnist Procurement Consultant and Executive Director of the National Cooperative Procurement Partners

spheric Administration, which tracks billion-dollar disasters, "2017 was the costliest year on record for natural disasters in the United States, with a price tag of at least \$306 billion." Whether its natural disasters such as hurricanes in Florida and Texas; fires in California; or train derailments in Washington, emergencies come in all forms. And when one typically thinks of first response by police, fire, health or utility professionals, they may not be aware of another crucial member of the team — procurement. Putting necessary contracts in place; purchasing equipment, vehicles, and safety gear; setting up evacuation centers and debris cleanup; and handling donations is often done by procurement professionals.

Two priorities for procurement

Public procurement operates under a set of best practices and public procurement policies to encourage competition, transparency and best value solution for the organization. However, under a state of emergency, procurement may operate under an expedited process to address the issue at hand. During an emergency, procurement has two key priorities — assisting to meet the needs of the emergency and complying with any procurement rules for future budget reconciliation, vendor payments and possible Federal Emergency Management Agency reimbursements. If you think that one is more important than the other, then think again.

According to Mike Martinet, from the Martinet Group LLC, who specializes in FEMA requirements, "In January 2017, the Department of Homeland Security issued an audit of a Southern California special district's pipeline project, with a finding of \$31,700,000, largely for its alleged multiple failures to follow the district's own procurement regulations and those of the federal government after receiving a FEMA Public Assistance grant award of \$41,300,000. This could result in nearly 77 percent take-back."

Martinet explained further, "During the actual crisis, government agencies can make non-competitive (sole source) purchases or use 'time and materials' contracts when there is an imminent threat to life safety, public health or improved property. However, these options are only available for a very limited duration as the crisis unfolds. Once the imminent threat no longer exists, the procurement process



Kubota stepped up in the aftermath of Hurricane Harvey, donating \$1 million in relief funds and equipment to several national and local charitable organizations. Pictured is a Kubota tractor removing debris from Hurricane Harvey. (Photo provided)

must revert to following its own local rules and Title 2 of the Code of Federal Regulations, Part 200. The necessity of following both sets of regulations, whichever is more stringent, almost always applies to all permanent disaster related work."

Relationships with suppliers and contract knowledge

Understanding policies is only one of procurement's skill sets. Procurement professionals' knowledge of the supplier community is just as crucial. Whether it's having the right vendor contact information, fully understanding that company's product line or being aware of the available cooperative contracts on which to "piggyback" upon, procurement has knowledge of the supplier network and contracts. During an emergency, agencies may attempt to purchase from local sources. But what happens when the disaster affects those local businesses, which no longer have the capacity or ability to respond?

Sometimes a larger company, with a national footprint, can help save the day by bringing in resources from other regions. After receiving a call from the state of Florida, Fastenal immediately sent the Tallahassee store manager and government specialist to help. With a government contract already in place, a product sourcing team was mobilized, and the Atlanta distribution center was put on notice to arrange logistics for shipping supplies to shelters across Florida. Fastenal's wide breadth of suppliers made it possible to distribute necessary items such as batteries, cots, hand sanitizers, boots, bleach,

hygiene kits, etc. However, access to inventory means nothing without the ability to distribute.

While some carriers stopped shipping into the state just days prior to the landfall of Irma, Fastenal's Atlanta distribution center manager was able to reallocate drivers, continuing to ship supplies until the storm made landfall. Due to the weekend storm, most large manufacturers and suppliers do not typically process orders on Saturday and Sunday. As a larger company, Fastenal's connections made it easier to contact high-level executives who, in turn, sent in special teams to work specifically on hurricane orders.

Cooperative contracting may come into play. The idea is simple — an already solicited and established contract made available for use by municipalities. A key benefit of a ready-to-use contract is the lengthy procurement process has already been done. By leveraging purchasing power across a larger number of entities, the pricing can be advantageous. Costly spikes in pricing for items such as generators and emergency supplies, which can occur during an emergency, can be avoided since the contract pricing is already set.

Ken Heckman, senior vice president over strategic partner development for National IPA, a nationally recognized cooperative organization, stated, "Leveraging cooperative purchasing immediately following a disaster is often the most expedient path to ensuring critical supplies are expedited to assist with disaster preparation and recovery efforts."

Good news

As horrific as emergencies might be, there is often good news to tell—of neighbor helping neighbor, first responders saving lives and companies stepping up with donations and offers of assistance. For instance, Kubota Tractor Corporation, based in the company's North American headquarters in Grapevine, Texas, donated \$1 million in relief funds and equipment to several national and local charitable organizations to aid in the Hurricane Harvey relief efforts.

Masato Yoshikawa, president and CEO, stated, "As a newly relocated Texas company, and with a large group of Kubota dealers and employees working and living in this area, we stand ready to help our South Texas and Louisiana neighbors clean up and rebuild the region."

Donations are helpful for programs to also prevent or minimize the impact of emergencies. For example, W.W. Grainger donated 70,000 smoke alarms through the Red Cross' Home Fire Campaign, resulting in 285 saved lives in vulnerable communities since the program's inception in 2014.

Gail McGovern, president and CEO of the American Red Cross, recognized Grainger by saying "We could not have done much of our work without this type of financial and in-kind support."

Coordinating donations and tracking new assets is often a role that Procurement may assume during an emergency.

One final thought and lesson learned from my own experience during the 2007 Witch Creek Fires in San Diego. As soon as the 911 call comes in and the first responders are dispatched, there is one more important call to make... to the agency's accountant. Tracking emergency spending is important. Because at some point in the future, procurement needs to report and reconcile — for management reports, for FEMA, for vendor payments and even media requests. And the best way to keep track is to start at the beginning!



While agencies might seek out local sources, disasters might render local businesses unable to fulfill needs. In such cases, larger companies, with a national footprints, could bring in resources from other regions. Pictured are stores in Miami boarding up in preparation for Hurricane Irma. (Shutterstock.com)



Fastenal's Atlanta distribution center was put on notice to arrange logistics for shipping supplies to shelters across Florida in response to Hurricane Irma. Due to its wide breadth of suppliers, Fastenal was able to distribute necessary items such as batteries, cots, hand sanitizers, boots, bleach, hygiene kits and more. (Photo provided)

Tammy Rimes, MPA, is a procurement consultant and executive director of the National Cooperative Procurement Partners, or NCPP. She was the former purchasing agent for the city of San Diego, serving in that position during the 2007 Witch Creek Fires in Southern California, which raged for 17 days, with an ultimate cost of \$18 million, and burned an area of 200,000 acres, including over 2,000 homes and structures. More information on emergency preparedness, including a first-aid kit and free webinar series, is available at www.nationalcooperativeprocurementpartners.com.







MOORE INDUSTRIAL HARDWARE

ATLANTA CINCINNATI

888-666-7344 • 800-543-1677



The Premier magazine for america's municipalities

Would your company like to be featured on The Municipal cover?

Call today to find out how!

Upcoming Editorial Calendar

MAY 2018

Building & Construction

Deadline Monday, April 2

JUNE 2018

Water & Energy

Deadline Monday, April 30

JULY 2018

Public Works

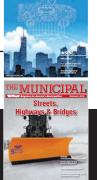
Deadline Monday, June 4

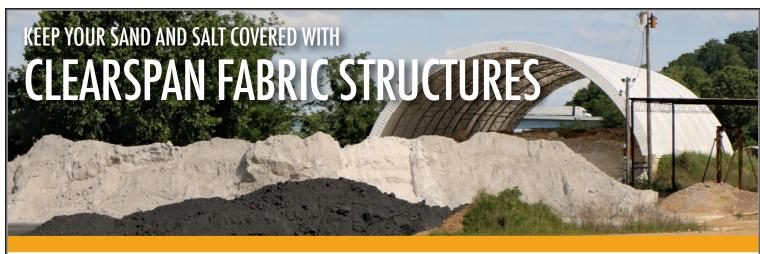
WWW.THEMUNICIPAL.COM

(866) 580-1138

Ask for Municipal Sales







FOR NEARLY 40 YEARS CLEARSPAN FABRIC STRUCTURES has been covering sand and salt with structural solutions that protect and provide easy access.

INDUSTRY-LEADING WARRANTIES - ClearSpan structures are built to last. With triple-galvanized steel frames and durable covers, they can withstand corrosive environments and will compliment your business for decades to come.

COST-EFFECTIVE BUILDING SOLUTIONS - Drastically reduce construction costs, monthly utilities and maintenance requirements, while getting a structure that is superior in quality and functionality.

In-House Financing Is Back - As low as 4.99%.



VISIT WWW.CLEARSPAN.COM OR CALL 1.866.643.1010
TO FIND OUT HOW WE CAN HELP WITH YOUR STRUCTURE NEEDS





TOP 10

America's 10 safest cities

Safe Home compiled a list of the U.S.'s top 101 safest cities, which includes cities with a population of over 50,000. To create the list, Safe Home analyzed data from the FBI "to statistically find out which cities are the safest in the nation." Its website further states, "The FBI data is compiled from information provided

by 13,366 law enforcement agencies." In addition to FBI data, Safe Home used the Chapman University Survey of American Fears to highlight the crime rates of what Americans fear most, between violent crime and property crime rates.

Greenwich, Conn., topped the list with a safety score of 92.71. Safe Home noted Greenwich had only had 11 violent crimes and 403 property crimes. The city also has a citizen-to-officer ratio of 351. The rest of the cities in the top 10 are listed below.



Greenwich, Conn.

Safety Score

92.71

















| <i>K</i> |
|--|
| Kimtech Research |
| |
| L |
| Land Pride |
| Lane Light |
| |
| <u> </u> |
| Mile-X Equipment, Incorporated |
| Monroe Truck Equipment |
| Moore Industrial Hardware |
| moore maastiat naramateri in the same and th |
| <i>N</i> |
| National Construction Rentals |
| National Joint Powers Alliance |
| |
| Norstar Industries |
| 0 |
| Omega Industrial Products5 |
| |
| <i>P</i> |
| Post Guard |
| Power Gripz, The |
| 1 ower dripz, rife |
| $oldsymbol{S}$ |
| Schaeffer's Specialized Lubricants |
| Sensible Products |
| Strongwell |
| |
| Superior Signal Company |
| Syntex Industries |
| $oldsymbol{T}$ |
| |
| Trail King Industries |
| Trinity Highway Products, LLC |
| $oldsymbol{V}$ |
| |
| Varco Pruden Buildings |
| Ventrac |
| $oldsymbol{W}$ |
| |
| |







Contact a Sales Represenative at: 314.865.4100

schaefferoil.com

APPROVED BUYBOARD MEMBER





122 ROAD MAINTAINER

The 122 Road Maintainer answers the call for the farmer, park ranger, and/or township supervisor looking to easily maintain their lanes, paths, and secondary roadways. This smaller drag can be towed by a 1/2 ton pick-up or small utility tractor, and is designed to be very maneuverable. It has over 18' of cutting edges which are made of C1080 high carbon steel.

This drag is equipped with a power unit and wireless controller!

NEW 122 FOR \$ 6,995.00

Coupon must be shown to receive \$700.00 off. The pice below does not include tax, shipping or handling fees. Offer acceptable between 3/1/2018 to 6/1/2018

SPRING SPECIAL

\$700.00 OFF A NEW BONNELL 122 ROAD MAINTAINER

NOW \$6,295.00



SALES. SERVICE. INSTALL.

312 ROAD MAINTAINER
The Bonnell 312 Road Maintainer comes standard as a

MBONNELL BIZ

replacement option for grader use in repairing gravel, sand, and dirt roads. Bonnell Road Maintainers ensure that only one pass is needed during maintenance, so as to save fuel, time, and strain on the tow vehicle. The cutting width is 10' - adjustable to 8' wide, and 5/8" x 8" high carbon steel cutting edges.

Ask us about upgrading to a 312 HRLS!

NEW 312 FOR \$ 14,750

Coupon must be shown to receive \$1,000.00 off. The pice below does not include tax, shipping or handling fees. Offer acceptable between 3/1/2018 to 6/1/2018

SPRING SPECIAL

\$1,000.00 OFF A NEW BONNELL 312 ROAD MAINTAINER

Now \$13,750

Phone: (800) 851-9664 Fax: (815) 284-8815

Website: www.bonnell.com Address: 1385 Franklin Grove Rd.

Dixon, IL 61021







PLOWS, WINGS & BODIES