The Premier Magazine For America's Municipalities

March 2016

Fleet service & menegement

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INSIDE:

Calhoun's economic storage solutions for fleets

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On the Cover

Calhoun Super Structure offers municipalities the perfect solution for any storage need. Use its hot dip galvanized fabric buildings to store a fleet, sand, salt and anything in between. (Photo provided)



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Cars, trucks and blizzards It's all in a day for fleet managers



Editor's Note

Jodi Marlin | Editor

HE MARCH EDITION OF THE MUNICipal is one in which we pay special attention to issues of fleet service and management. But in late January, as I tapped out a few relevant thoughts, states on and near the eastern seaboard had a more pressing matter at hand.

The images I saw that first night of snow chains on fire engine tires would have been edifying, had the method worked. Unfortunately, the rig — I think it was in Tennessee — was still no match for Winter Storm Jonas.

But who's the first out the door the minute blizzard status is downgraded? The plow trucks, dump trucks and backhoes - the big rigs, of course! These are the heavy-duty rigs we don't use every day, but without which life doesn't have a chance of returning to normal in a reasonable time frame, especially after a wallop like that nor'easter. Saturday was the storm: Sunday was big truck day.

In other truck news, after shuttering its medium-duty truck line seven years ago, last October GM worked out a deal with Navistar to develop and build them again. The Class 4/5 trucks, larger versions of a chassis cab pickup w/hood in front, will go into production in 2018.

Navistar already builds medium-duty trucks like municipal dump trucks, so this development will offer buyers more choices and make more Class 4/5 trucks available more quickly for cities that are in the market. News releases said the vehicles would be developed using Navistar's rolling chassis configurations and would include GM commercial components and engines.

If you'd like to hear more vehicle and fleet technology news that could determine how you do business for the rest of 2016, don't miss the NAFA 2016 Fleet Management Institute & Expo coming to Austin in April. Registration is still open, and The Municipal would love to see you there.

In addition to the always-relevant exposition, the opportunity to learn and network makes the trip the most valuable one fleet managers will attend this year. Those topics include:

Alternative fuels and choosing the right fuel technology

Does senior management want to demonstrate sustainable leadership? Then you're probably analyzing alternative fuels options. Identify the alternative fuels and how they're benefitting fleets, as well as what fuel technology is right for your fleet.

· Driver monitoring: myths vs. reality

This overused term varies widely not only in its definition, but also in its interpretation. Learn what driver monitoring is and isn't, how to make driver-monitoring data actionable so your drivers and communities are safer and what elements and tools make up a comprehensive driver monitoring program.

How to improve equipment utilization with smart sharing practices

Local government fleets have a long history of collaboration, mostly done between neighboring communities and at a very small scale. But companies such as Lyft, Uber and Airbnb are changing the conversation of access versus ownership. Learn how new Web-based tools in the government sector can improve equipment utilization and how regional working groups can now work more effectively by searching online for equipment that is close to them.

Fleet management is the function of minimizing or removing risks associated with vehicle investment, while improving the efficiency of service delivery, maximizing productivity, and ensuring 100 percent compliance with 'duty of care' regulations for optimal efficiency and economy. Because so much taxpayer money goes in and out of the fleet budget, those decisions must be made wisely. I hope we've given you the information you need to do just that in 2016. 🔟

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Calhoun dominates with economical, fully engineered, intelligent storage solutions *Keep your fleet safe from the elements*



By TORI MATICHUK | Calhoun Super Structure

F YOU THINK ALL FABRIC BUILDINGS are the same, think again. Meet Calhoun Super Structure, the Canadian, family-owned company with over two decades of manufacturing and engineering expertise in the industry. Calhoun prides itself on being an innovation leader in the way it meets and exceeds industryspecific needs.

Understanding that municipalities are often faced with limited budgets, Calhoun reassures its clients that it can assist with even the most complex storage needs. The Calhoun team helps customers find a naturally bright, quickly installed storage building for their fleet, equipment and goods; one that won't break the bank.

Calhoun thrives on explaining why its hot dip galvanized, steel-framed structures are a wise choice for municipalities in search of an economical storage solution. What's more, every high-density, polyethylene-covered structure is designed and engineered specifically to the exact geographical location and its correlating weather patterns. The initial investment and operational costs are a fraction of the price of traditional wood or steel buildings: Even so, Calhoun is able to custom design a building to meet any city's exact needs. **ABOVE:** The 72-by-100 HT series salt and sand storage structure from Calhoun Super Structure was installed by Hybrid Building Solutions for the town of Clarence, N.Y. (Photo provided)

BELOW: A 62-by-160 CC series storage structure was erected in Wyoming. (Photo provided)





The veteran company has four series to choose from, with structures ranging in width from 32 to 200 feet. The buildings have freespan interiors, which maximize storage space and leave plenty of room for machinery and employees to move around effortlessly. That's why Calhoun promotes itself as being the best storage solution for any type goods or commodity a person can think of. From fleet and equipment to sand and salt, or even waste and recycling, Calhoun sells structures across North America to serve that very purpose.

As the company makes evident on its website, creating a safe, dependable structure is of the utmost importance to Calhoun. During the engineering and design phase, the company's own team and third-party engineers analyze every single point of stress on all parts of a building, down to those the size of a pin head. This attention to detail leaves customers with peace of mind, knowing their personnel and equipment will be enclosed in complete safety. The fabric building company also speaks to how worker safety is improved, since fewer shadows are cast with fabric roofing. Calhoun's HDPE covers also allow natural light to shine through, omitting the need for interior lights on sunny days.

To provide the best buildings on the market, Calhoun sometimes employs a different mechanism for installing its fabric covers. On all buildings over 62 feet wide — or, if a customer with a smaller building wants to upgrade — Calhoun's HDPE sheets are installed using a keder panel system, which is a custom-made aluminium extrusion mounted at each truss section. Keder panels prevent the fabric from touching the structure's steel frame so the building becomes a quieter, more secure environment. This process also substantially decreases the risk of wear points on the cover.

Another differentiator between Calhoun and some of its competitors is that Calhoun's HDG process takes place after the steel is fabricated, creating a completely smooth surface **TOP LEFT:** CoverCo Buildings in Alberta, Canada, installed this 130-by-232 VP series storage structure from Calhoun Super Structure. (Photo provided)

BELOW LEFT: This is an outside view of Hybrid's 72-by-100 HT series building in Clarence, N.Y. (Photo provided)

that won't snag or tear the fabric cover. All of its steel-framed buildings are HDG, which protects against rust and weathering and makes the trusses strong and dependable.

Calhoun has even gone the extra mile to cater to those looking for extra protection on a structure: Its Super Shield rubberized coating spray can be applied to all trusses as well as the concrete and block wall foundation. Super Shield is resistant to most waterborne chemicals and will protect a structure against corrosive materials like salt and fertilizer. With over 1,000-pounds-per-square-inch tensile strength, it adds years of life to any structure and is UV and weather-resistant, nontoxic, noncarcinogenic and asphalt-free. The overall result is a pretty sustainable investment.

Speaking of economical and sustainable products, customers often provide positive feedback on how their job sites are kept clean and minimal in size. Calhoun team members say they are proud that their product and knowledgeable dealers leave behind a relatively nonexistent environmental footprint.

With over two decades of experience, Calhoun seems to have thought of everything. Unsurpassed engineering, customized and innovative designs and attention to every detail are what have helped the family-owned company become one of the most trusted in the industry.

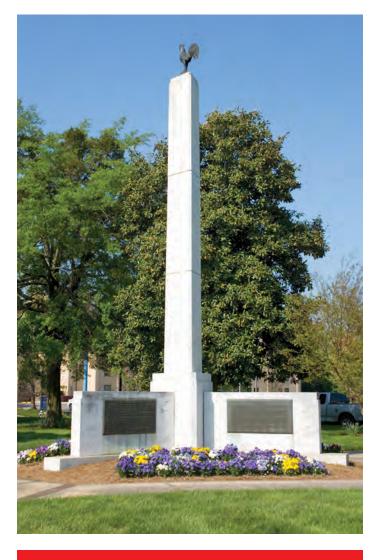
With dealers located across North America, Calhoun can provide service just about anywhere. The head office and manufacturing plants are in southern Ontario, but its products can be shipped to the most remote location. Whether you're beating the Florida heat or gearing up for a cold, snowy Minnesota winter, Calhoun has you covered. ■

Visit its website at

www.calhounsuperstructure.com to see more great photos of the multipurpose storage structures, details of their engineering and the four building series that are offered; or call toll-free (800) 265-3994 for more information. Calhoun's strength is certainly in its structure.

No. 1 for the king of white meat

Gainesville, Ga.



Gainesville, Ga., is a capital within a capital. Business innovator Jesse Jewell, who lived from 1902 to 1975, first carved the city's place in international prominence as the "Poultry Capital of the World," during the Depression era. Furthermore, in 1995 the state general assembly declared Georgia to also be the "Poultry Capital of the World." **BELOW LEFT:** A monument to Gainesville's claim to fame stands tall in Georgia Poultry Park. The city is known as the "Poultry Capital of the World," even though in 1995 the Georgia legislature extended the same honor to the entire state. (Photo provided)

Both Gainesville and Georgia come by their titles honestly. The poultry industry accounts for more than half the state's revenue and produces more than 29.3 million pounds of chicken and 12.4 million eggs every day.

More than 100 Georgia counties produce more than \$1 million worth of poultry annually at the farm level, and the state processes 1.4 billion broiler chickens a year. Gainesville, a municipality of about 34,000 in the northern part of the state, and surrounding Hall County, serve as the primary hub of that production.

Until Jewell's arrival on the scene in the 1930s, chickens had been raised primarily for their eggs in Georgia. The Depression was taking its toll on farmers, though, and Jewell hit upon a plan that infused financial CPR into a dying agricultural industry. He offered to sell baby chicks and feed to the farmers on credit: After the chicks were grown, he bought them back at a price that covered his costs and provided the farmers with a fair profit.

A man of renowned business acuity, Jewell pioneered the practice of vertical integration, combining all phases of his business within a single company, from breeding to marketing. Within a decade after the Great Depression, he integrated the poultry's breeding, hatching, feeding, medical care, processing and marketing and became the largest chicken producer in the world.

Jewell was also a civic leader, founding the National Broiler Council and becoming its first president; establishing a scholarship fund at a nearby university; and serving as president of the Georgia Chamber of Commerce during the 1950s.

He also innovated the marketing of frozen chickens, which shipped across the globe.

The poultry industry in Georgia skyrocketed during and after World War II. The War Food Administration reserved all the processed chicken in north Georgia to feed



America's soldiers, and returning warriors and their families continued to clamor for the meat and eggs after the war.

The area initially turned to poultry as its main agriculture product for a very simple and practical reason. "The hilly country here was not good for crops," said Abit Massey, president emeritus of the Georgia Poultry Federation and a stalwart of the poultry industry for more than 50 years. Today there are more allied industries in Gainesville than anywhere else, with people who supply equipment, medication, education, testing and the like. In fact, Poultry Diagnostic Laboratory, the leading organization that works on poultry health in the industry, recently opened a new facility in the area.



About 7,000 pounds of America's favorite white meat get cooked up at the annual Spring Chicken Festival. (Photo provided)

Putting chicken on the table is not the only way Gainesville welcomes visitors, however. In fact, the city was called the "Hospitality Center of the World" by 1996 Olympic kayaking and rowing competition members. (Photo provided)

Massey tips his hat to Jewell, whom he met when Jewell was in his later years.

"I took him to lunch in what may have been his last time out of the house. He had a tremendous influence on the poultry industry, and he was a good, fair man."

The municipality has leveraged the title as public relations fodder. It even passed a 1961 ordinance — reenacted in the 1980s — making it illegal to eat fried chicken other than with one's hands. The first arrestee under the new ordinance was none other than Colonel Sanders, who was released under conditions of probation that required him to visit often and keep selling chicken.

In 1977 Gainesville erected a 28-foot marble monument topped with a bronze rooster at the entrance of Georgia Poultry Park. The county provided the land, businesses contributed the funds to design and build the structure and the city maintains the monument.

But Catiel Felts, Gainesville's communications and tourism director, wants everyone to know the city offers many more diversified attractions. "If it weren't for poultry, we might not be where we are today," she said. "But we are so much more."

By way of example, the chamber of commerce has worked to make the world aware of the local high tech industry, including robotics and education. Felts is also proud of another moniker bestowed upon the city when it hosted the 1996 Olympic kayaking and rowing competition.

"They called us the Hospitality Capital of the World. We appreciate that. We take hospitality for granted down here until we get out and travel around." Referring to the city's founding in 1821, Felts said, "We have been welcoming the world for almost 200 years."

Gainesville is home to a number of Fortune 500 companies, including Kabota, King's Hawaiian, Shasta and Ace Hardware.

Like an actor refusing to be typecast, the municipality is always striving to highlight its variety of natural and commercial attractions. Nearby Lake Lanier is the most-visited Corps of Engineers lake in the nation. The city's industrial park, built in the 1970s, has brought in large manufacturing interests in a number of industries.

But cluckers are deeply—and probably indelibly—embedded in Gainesville's culture.

Every November, to kick off the holiday shopping season, the Jingle Mingle festival in central square features the ceremonial "lighting of the chicken." The city's biggest event is the Spring Chicken Festival, held the last Saturday in April; it features Georgia's official chicken cook-off, with culinary contestants dishing up about 7,000 pounds of chicken.

The "Poultry Capital of the World" also has much to offer in the way of natural beauty and outdoor recreation. (Photo provided)



Focus on: ______ Fleet Service & Management

Managing your fleet's energy budget

In many cases, the simplest and most economical approach to reducing energy costs is to simply consume less energy. There are several triedand-true steps fleets can take. A short list of these approaches includes:

- Maintain proper tire inflation
- Reduce vehicle weight
- Reduce rolling resistance
- Passive idle reduction (driver coaching, reminder signs, etc.)
- Maintain vehicles properly

Read more tips on page 30

Shutterstock Photo

Focus on: Fleet Service & Management



By the numbers

1,325,000/1,727,400

In 2015, **1,320,000 CARS** and **1,715,000 TRUCKS** were owned and in service with local, state and federal governmental entities. An additional 5,000 rental cars and 12,400 rental trucks were in service.

518,200

The total number of cars and trucks in service in LAW ENFORCEMENT in 2015.

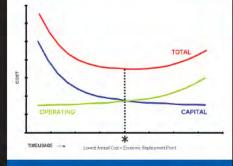
Source: Automotive Fleet magazine



LED lights have made light bars brighter, saving law enforcement lives on the side of the road. Bullet-resistant vehicle panels have contributed to officers' safety as well in recent years. shutterstock photo

See page 26 for more about police vehicle technology news.

Economic theory of vehicle replacement:



Graphics, like this one used by Katherine Vigneau of NAFA, help fleet managers relay their fleets' needs better. Managers need to identify the point where the total of operating and capital costs are the lowest: This is the opportune time to replace a vehicle. (Image provided)

Learn more on page 16

6 years

By the numbers The amount of time it took the city of Ann Arbor, Mich., to reduce its fleet's gas and diesel usage by **30 PERCENT.**

See page 22 to find out how the transition went. Be dedicated to the development of staff by encouraging continuing education through formal and certificate training. Remain

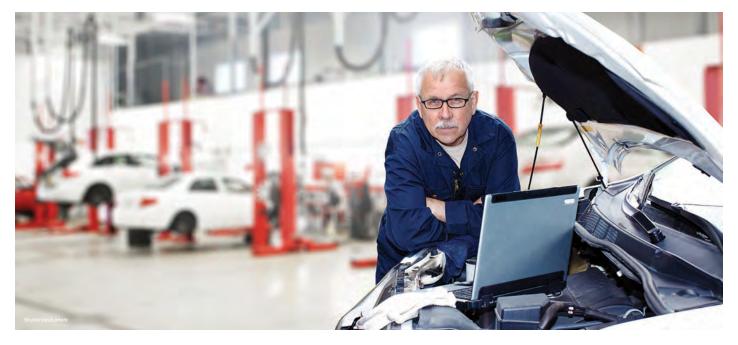
energetic and always listen to your customer needs. If you are not making mistakes, you are not doing. ??

— Carlos Berriz, fleet program manager with the city of Fort Lauderdale

Read more about Fort Lauderdale's award-winning program on page 18



Make your voice heard Strategies for cutting down on the budget blues



By SARAH WRIGHT | The Municipal

UDGET TIME CAN RESEMBLE A SISYPHEAN TASK. ACCORDing to Katherine Vigneau, CAFM, director of professional development for NAFA, "Budget time for fleet managers is a time of opportunity, but also a frustrating exercise of trying to articulate what the organization needs to upper management who may not fully understand the economics of fleet."

As Vigneau noted, fleet managers are often caught in the middle: coordinating and vetting the requirements being submitted by user departments, and translating the consolidated picture to the decision-makers. Due to this, it's important fleet managers have a full understanding of the organization's strategies and leadership priorities. She pointed out some of the questions fleet managers need to ask before they even start planning

"Are there any plans to increase service levels or the population served? Will there be an increased emphasis on the use of alternative fuels? Do new leaders want to emphasize fleet safety? Only with this information in hand can the fleet manager know the organizational events to anticipate and create their framework to start the budget."

Of course, not all municipalities have a separate fleet department. "If cities do not practice centralized fleet management, and the actual practice of fleet management is delegated to department heads, with fleet maintenance being delegated to, say, the public works department, then expect fleet to not be the main focus of a department head who is juggling many areas of responsibility," Sharon Rollins, P.E., technical consulting program manager at the University of Tennessee Municipal Technical Advisory Service, said. "The greatest impact to any fleet budget is the acquisition of new vehicles and remarketing of aged vehicles."

She furthered explained in such circumstances, department heads who are the best communicators often get larger slices of the fleet budget, as do departments that have high public visibility, like police and fire.

"All departments are continually being asked by elected officials to be more efficient and make equipment last longer," Rollins added. "So managers have to be prepared to demonstrate need with factual information."

Cover your bases

Along with an understanding of organization strategies and leadership, fleet managers need a vehicle replacement policy in place.

"The greatest impact to any fleet budget is the acquisition of new vehicles and remarketing of aged vehicles," Vigneau said. "According to NAFA, car fleets generally operate within a three- to four-year replacement cycle, while light truck fleets typically operate within a five- to seven-year replacement cycle. Once the fleet manager can predict how many of each vehicle type they will be replacing over a given budgetary period, they can begin to shape the budget."

Rollins, too, emphasized the importance of having a replacement policy or plan in place. She added decision-makers then need to be reminded recommendations are based on an established, sound plan.

When that plan is developed, she stated, it's important to have buy-in from all department heads and city administrators. Of course, it should be revisited, fine tuned or communicated throughout the year, not just at budget time. She added it's important to arrive at agreements early on if changes are need.

Rollins suggested fleet managers present a citywide priority, list rather than a department by department priority list; and have data on all vehicles and equipment, including description, age, odometer or hours, original purchase cost, condition, life expectancy and replace cost.

"Fleet managers would be wise to use fleet software to help demonstrate need for equipment replacement," she stated. "It is always helpful to use graphics to demonstrate 'break-even' cost analysis."

Depreciation and fuel serve as the biggest operating costs for fleets, along with maintenance. Vigneau explained as a fleet ages, the cost of depreciation declines because the capital cost of the vehicle is reducing. However, operating costs increase because fuel mileage worsens and there are more repairs. With this in mind, fleet managers need to identify the point where the total of operating and capital costs are the lowest: This is the opportune time to replace a vehicle.

"All too often, the fleet manager has carefully laid out his plan and knows when this point is, and when the time comes the money just isn't there. This is when it is critical to educate the decision-makers about the problems of delayed replacement," Vigneau said. When this happens, new technology and safety equipment are delayed from entering the fleet, extending downtime and reducing levels of service — resulting in delayed-replacement costs to the city.

"This is particularly risky for critical equipment like emergency response vehicles and snow removal equipment," Vigneau said. "Imagine delaying replacement of the snow fleet and getting record snowfalls then following winter. As a result, the city core cannot be cleared for five to seven days due to downtime of the aging equipment. Presenting this type of likely scenario to decision-makers is often helpful in getting them to realize the risks of delayed equipment replacement."

Don't go it alone

Both Vigneau and Rollins noted there are resources available to help fleet managers make their case. NAFA offers education through inperson and online seminars that are structured around eight subject areas: asset, business, finance, information, maintenance, risk, fuel and professional development. The organization also offers two certification programs that are the industry standard in fleet education: Certified Automotive Fleet Manager and Certified Automotive Fleet Specialist. Someone who works only in a single area, like fleet procurement, can complete a single module, pass the exam and receive a certificate in that domain.

Rollins noted the American Public Works Association is another great resource, offering leadership/management seminars and conferences and technical/how-to workshops. Such venues, in addition to NAFA, offer chances to network with fellow fleet managers, suppliers and experts.

"We have a chapter network across North America and these chapters hold regular, in-person meetings," Vigneau said. "We also have a national event known as the Institute & Expo, which will be held in Austin this year April 19–22."

Another suggestion: "Find a city near you that's doing a good job with fleet management and observe, inquire (about) what is working is working well," Rollins said.

NAFA recommends: Steps to follow at budget time

"Experienced fleet managers know that budgeting never stops. Preparation for the next cycle begins as soon as the current year is finalized, and changing circumstances, fuel price, higher crash rates, etc., often make the fleet budget a moving target," Katherine Vigneau, CAFM, director of professional development for NAFA, said.

However, a well-planned structure will assist in developing budgets and making changes when needed. To that end, NAFA encourages fleet managers to follow these steps:

STEP ONE: Although the process never really stops, be prepared for the next year one to two months prior to the end of the current fiscal year.

STEP TWO: Put together a schedule of the organization's planned activities for the coming year and identify their impact on the fleet budget.

STEP THREE: Determine available funds, including carryover balance from prior year, cash on hand, funds in the bank, etc.

STEP FOUR: Identify sources of income, if applicable, and estimate when it will come available. Including chargebacks to other departments for use of pool vehicles.

STEP FIVE: Identify expenses, both regular and periodic. Be sure to plan for events such as:

- Organizational activity, i.e., a higher level of service approved in snow clearance operations
- Fleet initiatives, i.e., the launch of new safety training program that drivers will complete in the spring
- Scheduled travel and training, i.e., NAFA I&E convention, supplier site visits

STEP SIX: Get price quotes for planned expenses, such as new vehicle acquisitions with updated model year information.

STEP SEVEN: Negotiate expenses as necessary.

STEP EIGHT: Submit initial budget recommendations. If you are proposing to include any new expenses in the budget, build a business case for this new expenditure. A strong case will include an examination of the return on investment with a payback period calculated. There is a better chance at approval if this can be directly tied to organizational objectives.

STEP NINE: Executive committee reviews submitted budgets, advises of any bottom-line changes that need to be made.

STEP TEN: Review and revise the budget, keeping intact budget for most critical expenditures, and trim back on less critical expenditures as needed. Submit the final budget to management.



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Focus on: Fleet Service & Management



Top-shelf communication

That's the good stuff for Fort Lauderdale, Fla., fleet service

By CHRISTINE BEEMS | The Municipal

UR FLEET SERVICES Department falls under our Sustainability Division within the public works department," said Carlos Berriz, fleet program manager with the city of Fort Lauderdale since 2012. "That puts the environment in the forefront of the way we do things." With an estimated vehicle

replacement cost of nearly \$71 million, it also takes an energetic, united-in-mission, openminded and think-outside-the-box team who are engaged, focused and committed to keep the city of Fort Lauderdale rolling.

The fleet services department is responsible for maintenance, repair and effective replacement of nearly 1,500 cars, vans, trucks, backhoes, trenchers, loaders, cranes,

ABOVE: The Fort Lauderdale Fleet Services Department day shift crew consists of, from left, Cathy Green, administrative aide; Carlos Berriz, program manager; Nadine Blue, administrative aide; Jack Gibson, technician; Mark Aguilar, technician; Ricky Morgan, technician; Domenic Bruzzi, supervisor; Frank Paez III, technician; Marlin Boucher, technician; Farris Cobb, inventory manager; Carlos Blanco, parts clerk; Gabriel Galviz, technician; David Cowart, technician; Osiris Hidalgo, technician; Frank Laguna, technician; Paul Hartley, technician; Edgar Seepersaud, supervisor, kneeling; Phillip Reese, operations manager; Martin Rodriguez, technician; John Dinger, lead technician; William Rischow, general manager; and Sarah Sinanan, office clerk. (Photo provided)



ABOVE: The night shift crew consists of, from left, Mike Butler, technician; William Rischow, general manager; Enroy Foster, technician; Valentine Silvera, technician; Serviliano Bonachea, technician, Nikita Morrison, temporary technician; Hugo Victor, technician; Richard Plaisir, supervisor; Fred Totten, technician; Anel Bien-Aime, technician; and Richard Neira, technician. (Photo provided)

fire department pumpers, rescue trucks and aerial ladders, as well as marked and unmarked police vehicles. It's also in charge of managing the city's gasoline and diesel fuel inventories, including an allocation of reserves for emergency use, and for the operation of four fueling sites. Berriz's department is then tasked with reducing the environmental impact of fleet operations by purchasing vehicles that maximize fuel efficiency and are of the right size and type to meet specific needs, thus decreasing both environmental and financial costs.

Annual operating budget for the city's fleet ranges between \$9 and \$10 million. The annual capital budget is roughly \$5 million, and yearly fuel costs for gasoline and diesel run over \$4.8 million. To administer all of it, the city employs a fleet team of three people — Berriz and two administrative assistants — whose job it is to contract with professional service providers for the maintenance, repair, upgrade and purchase of vehicles, fuel and equipment.

Maintenance and repair of city vehicles and equipment has been privatized since 1981. The fleet team is responsible for overseeing the service contract awarded via RFP and currently held by First Vehicle Services, which provides a labor force — including service technicians, managers, administrators and various specialists — of 47.

"One of the things that we require of the contractor is that their technicians are ASE Certified," said Berriz, referencing the standardized nationwide automotive-professional testing and certification administered by the National Institute for Automotive Service Excellence. Among other criteria, master mechanics must also be Emergency Vehicle Technician certified.

"We make sure they are meeting those contract goals by meeting every single morning

"Sometimes ideas that look good on a piece of paper may not work in practice. We encourage the flow of ideas from any level of the organization."

Carlos Berriz, program manager, Fort Lauderdale Fleet Services, Is a senior automotive and equipment engineer who, prior to May 2012, served the city of Hialeah for nearly 20 years as fleet director and currently holds membership with NAFA, FLAGFA and the NFPA. (Photo provided)

The city of Fort Lauderdale recently achieved ISO14001:2004 Certification at the Fleet Fenceline. This achievement was made possible, Berriz said, "thanks to the efforts of many talented individuals and the support of our city manager and city commission.

"Using the International Organization for Standardization Environmental and Sustainability Management System brought a systematic approach to improve our service performance, lower costs, improve safety, introduce new technology and involve all of our employees in energy and water conservation, pollution prevention, waste reduction, and natural resource protection."

to look at what's in the shop and having knowledge of what's important for the day." Every vehicle and service is tracked with fleet management software so that information is fresh at all times. They also talk about any bottlenecks that may be happening and address those.

"Priorities change, sometimes minute-tominute, based on what is going on, so we send out daily notifications of vehicle status, which forecast how long a vehicle will be in the shop," he said. This is done every day, too, so other departments can organize their work schedules by having information about when a particular vehicle will be back in service.

In August the service workflow was augmented with a tablet system via which repair work is assigned to technicians in electronic format. Once assigned a vehicle, the technician brings it into the shop, diagnoses the issue, requisitions or orders parts and estimates the time needed to do the work. All information is tracked at each step by the software system. When the technician completes the work and the vehicle is ready to go back into service, the supervisor in charge of that vehicle is notified by email.

"We're really proud of the tablet system because the technician, right from the work area, can access so much information," Berriz said. He also explained that the team is in the process of changing over to a paperless shop in which not only will all information be transmitted electronically, but service manuals for the various autos, trucks and pieces of equipment that must be maintained will be readily available in digital format on every technician's tablet.

Once a month fleet user meetings are held, which provide perspective on how the different departments being served are viewing the fleet services department and some of the challenges they're going through. "It's all communication both ways. A lot of the changes that we do internally have come through the fleet user meetings," he noted.

"Our fleet team enhanced our data tracking and reporting capabilities to include idle time, miles driven by vehicles and mpg comparisons. These reports are shared at every monthly meeting, and strategies are put in place to improve those metrics."



Berriz's Fleet Team has been together just over three years. They look at problems as an opportunity for improvement.

"We understand that what may have worked yesterday may not work today or tomorrow, and we recognize that sometimes ideas that look good on a piece of paper may not work in practice. We encourage the flow of ideas from any level of the organization," he acknowledged.

Notably, even though the people who provide the hands-on service are employees of the private sector, Berriz sees them all as "one big team with a common goal. There is no 'them and us,"



Teams work to assess a staged spill at the Fort Lauderdale, Fla., Fleet Services Department. To simulate a fuel spill, dyed water was discharged to the drill area. The response teams swiftly put booms in place to contain it: Now, mop-up can begin. (Photo provided)

he assured. "It's all us, and our team's relentless pursuit of perfection has honed our sense of urgency. Regardless of significant improvements to the fleet, we firmly believe in our environmental and fiduciary responsibility to the current and future citizens of our community."

Using the International Organization for Standardization Environmental and Sustainability Management System brought a systematic approach to improve to the department's service performance, lowered costs, improved safety, introduced new technology and involved all of employees in energy and water conservation, pollution prevention, waste reduction and natural resource protection.

"We made changes to our procurement practices to include capital cost as well as projected fuel cost when determining each vehicle replacement ... We increased the number of ultra low emission hybrid vehicles replaced from 2 percent of the vehicles scheduled for replacement in fiscal year 13 to an average of almost 30 percent since then. We have a goal to reduce our fuel consumption by 20 percent by FY2020 from FY2010 baseline, and we are committed to meet or exceed this target," he said.



The best advice Berriz offers is to never stop learning, never get set in one's ways and always keep an open mind to ideas offered from any level in the organization.

"Be dedicated to the development of staff by encouraging continuing education through formal and certificate training. Remain energetic and always listen to your customer needs. If you are not making mistakes, you are not doing. Never be afraid to fail, own them, learn from your mistakes, and move on. Our team is the greatest asset we have, and our development is paramount to our success."





Ann Arbor: *at the forefront of green fleets*

By ANNE MEYER BYLER | The Municipal

Ann Arbor was featured in 2012 as a "Clean Cities Success Story: Michigan Green Fleets" on the website of MotorWeek magazine. The spotlight explained how, starting in 2004, the city's Green Fleets Project established a goal of reducing the municipal fleet's gas and diesel use by 10 percent before 2012. It achieved the goal in half that amount of time when the city set a complimentary goal of using 30 percent renewable energy across all municipal operations by 2010. That goal was met as well.

Ann Arbor has an energy office, along with an environmental coordinator. In 2012, the city's energy analyst was Andrew Brix. Brix believed it was important for Ann Arbor to green its fleet to help fight climate change, first of all, but that the bigger impact laid in using fuels produced in Michigan and the rest of the U.S. in order to keep money in local economies.

"The Green Fleet Project started when the energy office received a grant to help offset the cost of purchasing or converting (to) light vehicles powered by natural gas," explained Ann Arbor, Mich., was among the first cities in the U.S. to incorporated a wide variety of clean fuels into its fleet. Some worked out well, including E-85 and CNG. But there were also some snags, such as the purchase of several early-production hybrid electronic recycling collection trucks. Their hydraulic lift assist systems had to be turned off. (Photo provided)

Thomas Gibbons, head of the city's fleet purchases. "The grant was for something like \$2,000 or \$4,000 per vehicle, which was about half the added cost. Because it did not cover the full cost of the project, we wanted some direction from the city council members as to how they felt about spending more money for vehicles that were cleaner to operate."

The council adopted a resolution on Aug. 21, 2000, requesting that the city administrator develop a "Green Fleets" policy for council approval that would reduce both fuel use and emissions within municipal operations. At the time, Ann Arbor's fleet consisted of about 400 vehicles. Just prior to that edict, in April 1999, the city, along with a coalition of local fleets and fuel providers, had become a designated member of the U.S. Department of Energy's ▶

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Clean Cities Program. It subsequently set up and ran the federal government's Ann Arbor Area Clean Cities program, which became the Clean Energy Coalition.

Measures of the success of the Green Fleets Project were, first, a decrease in annual total gallons of gasoline and diesel fuel used; and second, a reduction in carbon dioxide and other emissions.

Thomas reported the easiest part was reducing the amount of fuel used since this was mostly done by replacing vehicles with more efficient ones. The hardest part was finding alternatively powered vehicles that would still meet the city's operational needs.

How did Ann Arbor arrange to train mechanics who were switching from working on gas-powered vehicles to those using other fuels?

"We sent a number of our mechanics to compressed natural gas engine classes," said Thomas, "and used them to train the other mechanics. For other types of alternative fuels or hybrids, we relied on the dealer to service them."

In 2012 Ann Arbor bought two hybrid electronic lift trucks, which he said have worked out very well.

"When the system worked, the operators loved it as it allowed them to not run the truck while the bucket was in the air, making it much easier to communicate with the guys on the ground." However, the two units were early models, and "Start out small until you find the system that works best for you. For us, it seems to be CNG."

the department has not been able to keep their hybrid systems operating.

In addition, four recycling collection trucks with hydraulic launch assist were purchased. These were also from early production, and technicians wound up having to turn the systems off. The city didn't go with full hybrids, which cost \$100,000 a truck, in case the hybrid system went down: Now they are at least able to use the six trucks with the systems turned off.

Regarding fuels used by the green fleet, Thomas reported current use of E-10; a very limited amount of E-85; and up to B-10 diesel during the summer.

"We had mostly Ford Crown Vic for police cars, and when they came out as E-85 compatible, we had to use only E-85; but they started having engine codes pop up and our local Ford dealer advised us to stop using it. As for the bio-diesel, we have had to cut back on its percentage to the B-10 after the low sulfur fuel was mandated in," he said. "Once that happened, we started having a large number of trucks with fuel filters plugging up until we cut back on the percentage of

Throughout a 19-year Green Fleets Project, Thomas Gibbons, financial analyst, fleet and facilities unit, reported the easiest part was reducing the amount of fuel used since this was mostly done by replacing vehicles with more efficient ones. The hardest part was finding alternatively powered vehicles that would still meet the city's operational needs. (Photo provided) bio. In addition, we have been getting some push back from some who do not want us to use food for fuel."

Along the way, members of the department had to figure out how to afford and build the supply infrastructure.

"We built a new fuel tank and pump facility for our E-85 station. We do not do anything special for the bio-diesel. As for the E-85, we are lucky to have two locally owned stations that have CNG pumps that are meeting our needs now, though we are maxing their capacity now. We have added funding to this year's budget to add a CNG fueling pump of our own." Ann Arbor's fleet also includes three commercial front-load refuse trucks and a street sweeper on CNG now. They hope to purchase more refuse trucks powered by CNG, but are waiting to get the station up and running first.

Currently, the fuel most used by the city is still bio-diesel, but at a percentage much lower than 30. As much CNG is being used as possible with the available capacity. Once the city has its own stations, the plan is to increase the number of CNG-powered vehicles in the fleet.

For other cities moving in the direction of cleaner energy for their fleets, Thomas recommended:

• "Start out small until you find the system that works best for you. For us, it seems to be CNG."

• "Do not purchase systems that will take your vehicles out of service if they do not work out. For us, the two electric hybrids and four hydraulic launch assist vehicles were a total investment of almost a million dollars. So when thinking about purchasing a hybrid truck, you need to have a plan in place for that possibility. Our plan was to make sure we could still use the trucks if the system needed to be shut off."





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Breaking new ground with police vehicles, technology



By AMY WENGER | The Municipal

The field of law enforcement is treacherous terrain. But in a middle ground where innovation and integration unite, technological advancements add a measure of protection for those who strive to ensure public safety.

When engaging with those directly or peripherally affiliated with police work, two particular vantage points emerge. In one variant equipment and devices are cited while the other delves into particulars of the vehicles themselves.

Technological advances

More notable trends of the past year or so include the implementation of body cameras, the use of drones and thermal imaging. While the use of body cameras by law enforcement remains a hotly debated issue, their capacity for exonerating or implicating a person has uniform merit.

In November a significant partnership formed between Edesix, a frontrunner in the



global market of body-worn camera solutions, and Vidsys, which formulates software for the cameras. The alliance allows what is being touted as "an integrated joint solution between Edesix's VideoBadge, VB-300 The Ford Police Interceptor Sedan, above right, includes key safety features like side protection and cabin enhancement architecture. Safety cell construction, which helps direct the force of a collision around the occupant compartment using ultrahigh-strength boron steel, high-strength aluminum alloy and advanced plastics, is also always improving. (Photo provided)

and Vidsys real-time situation management software." The VB-300 series is among the pioneering formats for WiFi-enabled products, which provide security and footage protection features and streaming in real time.

Richie McBride, CEO of Edesix, said in a press release: "We're delighted to be collaborating with Vidsys to ensure that public safety users are provided with an overall management solution. As body cameras become more commonplace, the importance of seamlessly integrating footage with an operation center's management system is fast becoming prevalent in the security marketplace." >



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One unique collaboration that has law enforcement applications merges the concept of thermal imaging with the prevalence of drones. Two companies are already preparing devices that will be capable of airborne and ground-based surveillance, condition monitoring, search and rescue, drug interdiction and the detection of chemical, biological, radiological, nuclear and explosive weaponry. (Shutterstock photos)



Another unique collaboration merges the concept of thermal imaging with the prevalence of drones. Thermal imaging is an imperative asset in any ancillary emergency services, assisting with hindrances where a line of vision is hampered. Temperature measurements can detect heat within a structure and provide monitoring of mechanical and electrical equipment at minute changes not immediately detectable to the naked eye.

Just weeks ago, FLIR Systems Inc. announced a merger with drone industry leader DJI Innovations that gives them the initiative to create a joint product known as the DJI Zenmuse XT: a stabilized camera that intertwines the visual impact of thermal imaging technology with the acuity and agility of drones. "FLIR and DJI today support many of the same commercial applications," said Andy Teich, president and chief executive officer of FLIR. "FLIR is thrilled to work with DJI to deliver these customers a plugand-play thermal imaging solution for DJI's established ecosystem of unmanned aircraft and related apps, while expanding our collective opportunities in the rapidly growing commercial drone market."

Teich specified a lengthy list of scenarios in which the applications can be put into practical use, including airborne- and ground-based surveillance; condition monitoring; research and development; manufacturing process control; search and rescue; drug interdiction; and the detection of chemical, biological, radiological, nuclear and explosive weaponry.



Professional-grade vehicles

Ford Motor Company has been lauded for tremendous strides in the past several months when it comes to accommodating the needs of vehicles with a unique blueprint.

Stephen Tyler, car/police marketing manager, outlined the variety of features classified as either essential or optional when designing the models.

"Safety is a key component of our police vehicle DNA," he said. "Some of the key safety features of Ford Police Interceptors include side protection and cabin enhancement architecture, (which is) a hydroformed cross-vehicle beam that solidifies the vehicle's sides. Safety cell construction also helps direct the force of a collision around the occupant compartment, using ultra-high-strength boron steel, highstrength aluminum alloy and advanced plastics."

Standard amenities include anti-lock brakes, AdvanceTrac with Roll Stability Control, driver and front-passenger airbags, a rearview camera with washer and exemplary crash test statistics at 75 miles per hour.

Optional features include ballistic door panels that are certified by the National Institute of Justice to withstand Type II and all lesser NIJ rounds. Also available is reverse sensing, blind spot monitoring mechanism with cross-traffic alert and a special surveillance mode that warns of approaching pedestrians at the rear of the vehicle. When movement is detected, a chime alert activates, the driver's side window automatically rises and the vehicle doors instantly lock.

What lies ahead

What is on the "wish list" for the foreseeable future, in what one officer jokingly referenced as the "James Bond" style of equipment? In more remote locales across the globe, ideas have already materialized in the form of spy drones, high-end surveillance cameras, automatic license readers and secret LEDs embedded behind the front grill of patrol cars. Some K-9 units are being outfitted with GPS devices and heat sensors, and industrial-grade tires are being fashioned exclusively for police vehicles. A company called StarChase even manufactures a tiny, air-compressed cannon that projects a minuscule GPS tracker, which attaches to a speeding vehicle. Even if the criminal manages to elude officers during the chase, with such technology, the driver can be apprehended at a

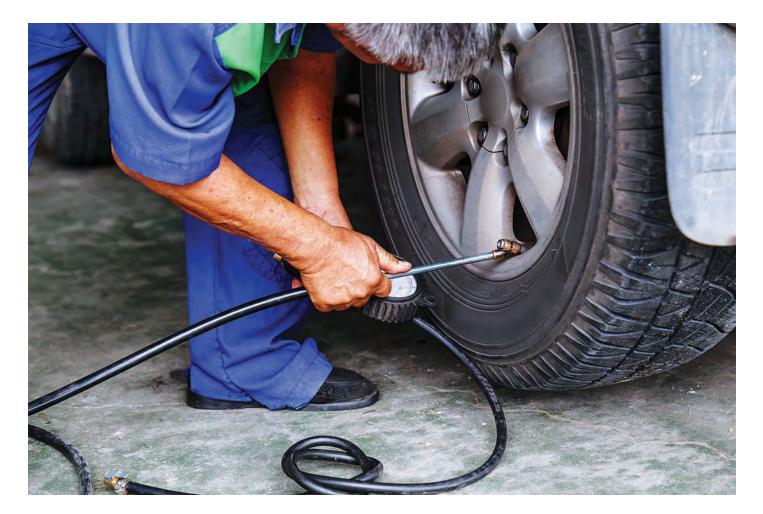
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later date.

From the visionary to the conceptual to the practical, the technology does offer a common goal: to give law enforcement officials and the people they serve a sense of reassurance and peace of mind.



Focus on: Fleet Service & Management



Six steps for managing your fleet's energy budget

By CHRISTOPHER LYON | NTEA - The Association for the Work Truck Industry

ECAUSE A TYPICAL VOCATIONAL FLEET SPENDS A LARGE portion of its total operating budget on energy/fuel, fleet managers are always looking to reduce energy costs. There are really only two methods for doing so: consuming less of the energy you are currently using and switching to a lower-cost energy source. While this sounds cut and dried, actual implementation can be complex due to the nearly limitless configurations and designed mission capabilities of work trucks.

First, most fleets have to maintain service during any conversion process. They also may have to figure out how to relocate vehicles on an emergency, short-term or permanent basis.

Funding is another important consideration. Depending on how a fleet approaches energy cost reduction, it could require significant capital expenditures, one-time expense payouts, and ongoing supplemental maintenance and operating costs. Assuming the required funding is available, a fleet manager might need to prove an acceptable return on investment within a reasonable payback period.

This article outlines six steps fleet managers can take to determine the best ways to maximize their fleets' energy budgets.

Analyze drive and duty cycles

Because the effectiveness of energy reduction technologies is generally closely related to a fleet's drive cycles, fleet managers can utilize drive cycle data to identify technologies that could reduce their energy budgets. They can also use duty cycle data to determine if the projected savings associated with an alternative are adequate to cover



the investment and provide the desired ROI. Remember, a single fleet can have multiple drive and duty cycles, so one approach to energy cost reduction might not work across the board. Also, drive and duty cycles are frequently seasonally dependent, especially in areas with harsh winter weather.

Remember the basics

In many cases, the simplest and most economical approach to reducing energy costs is to simply consume less energy. There are several tried-and-true steps fleets can take. A short list of these approaches includes:

- Maintain proper tire inflation
- Reduce vehicle weight
- Reduce rolling resistance
- Passive idle reduction (driver coaching, reminder signs, etc.)
- Maintain vehicles properly

Going beyond these somewhat passive approaches, fleet managers can take action to make new or existing vehicles more efficient. Since the powertrains of newer vehicles are computer-controlled, fleets can often re-map the engine performance curves and transmission shift points of their trucks to improve overall powertrain efficiency. When ordering new trucks, carefully choosing and matching components to specific drive and duty cycles can produce impressive energy reductions. **OPPOSITE PAGE:** The simplest techniques for reducing fuel costs, such as proper tire inflation, have been recognized for so long that they are often downplayed. However, when implemented correctly, they can be very effective. (Shutterstock photo)

LEFT: When utilizing hybrid vehicles to save energy and fuel, the selected technology should be matched to the drive and duty cycles. (Shutterstock photo)

Implement telematics and driver behavior modification

There are a number of ways to improve vehicle operational efficiency. Two approaches that provide great potential are telematics and driver behavior modification. The most familiar application of telematics in the vocational fleet environment is GPS functionality. This technology can have a direct impact on operating costs by reducing miles driven. Going beyond this aspect of telematics, the ability to track vehicle condition in real time offers multiple possibilities for energy management. By mapping the PCM to the telematics system, fleet managers can read system fault codes, tire pressures and other information. By using an exception reporting system, vehicles with defects are flagged so repairs can be made at the earliest opportunity. The data collected can also be used to develop drive cycle profiles and identify issues such as hard acceleration and braking, sudden radial maneuvers and engine idle time.

The driver impacts overall fuel economy by as much as 30 percent. The most effective behavior programs provide the driver with realtime performance feedback. Something as simple as instantaneous fuel economy feedback on the vehicle's dash can be effective.

Consider hybrid and electrification technology

Hybrid and electrification technology can be effective choices. They reduce energy costs in several ways:

- Allowing the engine to operate in an optimum efficiency range
- Recapturing kinetic energy normally lost during braking
- · Capturing surplus engine energy for use later (driveline or power export)
- Facilitating engine idle management
- Allowing for the primary vehicle power source to be downsized

When utilizing hybrid vehicles, the selected technology should be matched to the drive and duty cycles. Many vocational trucks are driven a relatively limited number of miles per day so the efficiencies **>**

Drive vs. Duty cycles

Most of the processes and technologies for reducing fleet energy costs are sensitive to drive and duty cycles. While these terms are often used interchangeably, they are actually separate measurements of how a fleet operates.

A drive cycle defines how vehicles operate based on factors such as:

- Average speed
- Amount of incidental idling time
- · Power export time (PTO operation, etc.)
- Number of starts and stops per cycle
- Longest average continuous running time per cycle.

A duty cycle defines how much a vehicle is used and looks at factors such as:

- Length of average operating cycle
- Number of operating cycles per period
- Total miles driven per measurement period
- · Percentage of loaded vs. empty operation
- Percentage of on-road vs. off-road operation



associated with full hybrid drivetrains might not justify the cost and complexity of such a system. This has resulted in the development of worksite hybrids. These vehicles utilize surplus engine power, stored as electric energy and sometimes supplemented by plug-in battery charging, to operate truck-mounted equipment without having to run the primary engine. This technology is much simpler than full hybrid powertrains, but still provides substantial idle time reductions during stationary worksite operations. Idle management can be further enhanced by using the system to maintain cab heating and cooling.

Evaluate lower-cost energy options

Fleet managers have several lower-cost energy options such as biodiesel, electricity, natural gas and propane.

Biodiesel is generally more expensive than conventional diesel fuel; however, in some regulatory environments, it offers significant tax advantages that may result in lower total cost. In these areas, biodiesel represents a significant opportunity for fleet managers, since it is basically a drop-in replacement for conventional diesel. The primary expense associated with conversion to biodiesel is cleaning fuel storage tanks before taking delivery and changing fuel filters frequently until the biodiesel has cleaned all residue out of the vehicle tanks.

Electricity is typically the lowest-cost alternative fuel available to fleets, and when the capabilities of an available vehicle fit the associated drive and duty cycles, operating cost savings are very attractive. But electric trucks are limited in availability and range/ speed capabilities. Upfront costs can be high, as they require a fairly large capital ABOVE: Compressed natural gas, currently the most commonly used natural gas variant, imposes weight and space penalties on trucks: so it may not be feasible to convert existing trucks to use CNG. Most of these weight and space issues can be addressed when designing new vehicles. (Shutterstock photo)

RIGHT: Most fleets have to maintain service during a conversion process. They also may have to figure out how to relocate vehicles on an emergency, short-term or permanent basis. (Shutterstock photo)

investment and, in some cases, significant infrastructure investments for charging systems and grid tie charges.

An alternative to pure electric trucks is the extended-range electric truck. These units utilize an all-electric drivetrain with a small, onboard motor generator set that can provide a portion of the electric demand. This combination offers operating ranges in excess of 250 to 300 miles before a full battery charge is required. There is a fine line between extended-range electric vehicles and series electric hybrids. If the onboard motor generator set is large enough to provide all the truck's power demands, it crosses over to being a hybrid.

Natural gas has the lowest cost of all the alternative internal combustion engine fuels currently in use and generates the smallest carbon footprint. These advantages are offset in some drive/duty cycle applications by both high conversion and infrastructure costs. If a fleet has access to public natural gas fueling infrastructure, or if the quantity of

The Work Truck Show 2016 and Green Truck Summit

The technologies discussed in this article will be addressed in detail during The Work Truck Show 2016 and concurrent Green Truck Summit educational sessions; they will also be displayed on the show floor. The show will be held March 1–4 at the Indiana Convention Center in Indianapolis, Ind. Educational programming and the Green Truck Summit begin March 1 and exhibits open March 2. For more information visit **worktruckshow.com**.



fuel consumed at a given location is enough to justify the infrastructure investment required for a captive facility, natural gas has the potential to generate major energy cost savings.

Propane, also known as autogas, has the second-lowest carbon footprint of currently viable alternative fuels and is priced between natural gas and gasoline. It has the advantage of requiring the lowest infrastructure costs of any of the alternative fuels, other than electricity, if major infrastructure investments are not required. It also has a much higher energy density than CNG and is stored at a lower pressure so the tanks are lighter and cheaper. This makes it much easier to convert existing vehicles and more attractive for fleets with lower volumes per fueling facility.

Christopher Lyon is a former fleet manager and currently serves as director of fleet relations for NTEA – The Association for the Work Truck Industry.



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By RAY BALOGH | The Municipal

Franklin, Tenn., experienced phenomenal population growth 25 years ago. The city doubled in size from 1990 to 2000, and grew half again as large over the next 10 years. Between 1990 and 2010, it tripled its population from 20,000 to more than 62,487. Current census estimates tag the population at more than 70,000 residents, and both the number of residents and the number of jobs are expected to double again over the next 25 years. The reasons for such growth are varied and legion.

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Location

Franklin is fortuitously situated 20 minutes south of Nashville and consequently experiences a spillover effect in tourism.

The serene confines of the city's historic downtown provide "a nice complement to the Nashville experience," said Ellie Westman Chin, president and CEO of the Williamson County Convention and Visitors Bureau.

Not that Franklin has nothing Nashville-like to offer. There are 15 live music venues, including The Factory At Franklin, a former stoveworks and mattress facility that was recently purchased and turned into an interactive cultural destination with restaurants and shops. Every Wednesday night the venue offers Music City Roots, a musical menage often featuring local talent.

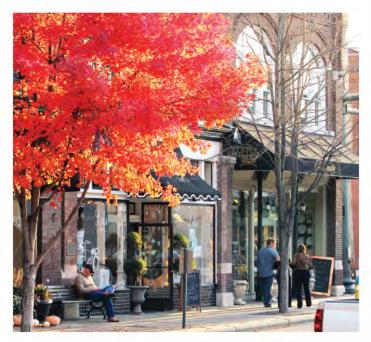
"It's like an old-time radio show," said Chin. "You can hear jazz, rock, bluegrass and country all in one night." The Factory also houses a repertory theater and offers an annual music tribute to such artists as Johnny Cash and Ray Charles. ►



LEFT: A recent survey stated visiting downtown is the No. 1 reason travelers come to Franklin, Tenn. A larger-than-average number of them then choose to remain permanently. (Photo provided by VisitFranklin.com)

ABOVE: The fountain at Five Points is a gathering and resting place in Franklin, Tenn., a city located about 20 minutes from the hub that is Nashville. (Photo provided by VisitFranklin.com)

BELOW LEFT: A recent redevelopment of downtown Franklin included the installation of a collection of unique stores, and very few chain outlets. "It's almost like you can take a stroll down Main Street and have a nice lunch or a cocktail," said Ellie Westman Chin, president and CEO of the Williamson County Convention and Visitors Bureau. (Photo provided by VisitFranklin.com)



ABOVE: Franklin first doubled and then tripled its population, from 20,000 to more than 62,487, between 1990 and 2010. Both the number of residents and the number of jobs are expected to double again over the next 25 years. (Photo provided by VisitFranklin.com)

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ONSISTENTLY LEADING THE WAY

continued from page 35



The city's goal is to keep infrastructure ahead of growth. Plans call for a \$100 million upgrade to Franklin's water reclamation facility, the creation of an integrated water resource plan and a master parks plan revision.



Beginning with the construction of a Saturn plant in 1991, business relocations to the area are part of the explanation for Franklin's rapid growth. Industry brought workers who needed a place to live, and some good family entertainment. (Photo provided by VisitFranklin.com)

(Photo provided by VisitFranklin.com)

"The Heritage Foundation led the charge to preserve and develop the downtown."

Geography

"We have always been blessed with a lot of farmland and beauty," said Ken Moore, Franklin's mayor since 2011. "People want to live here to raise their families."

Ten miles to the south, the topography yields to picturesque rolling hillsides that attract "a lot of motorcycles," added Chin.

Nearby Natchez Trace Parkway has been declared a federal park, along which the county recently opened Timberland Park for family outdoor activities. No

developments or billboards are allowed along the parkway, and speed limits are capped at 50 miles per hour.

CoolSprings Galleria

North of town, a 1.1-million-square-foot mall opened in 1991. The sprawling shopping mecca hosts four anchor stores and more than 165 restaurants and shops.

"The advent of the galleria was probably the start of our growth," said Moore. "A lot has happened because of the mall."

Downtown redevelopment

Franklin's businesses gave the city a big boost by taking on the redevelopment of the downtown area.

"In the late 1980s, a group of building owners downtown looked around and saw a Main Street with nobody on it," said Moore. "So they organized and through funding, which the city helped facilitate, took awnings and streetlights back to a late-1800s, early-1900s look. It changed the appearance of the area. Then we changed the infrastructure, getting rid of telephone poles and resolving drainage issues," he said. "It was our first streetscape project."

"The Heritage Foundation led the charge to preserve and develop the downtown," said Chin. Today historic downtown Franklin has 150 restaurants and retail establishments.



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People tend to say they "just like the vibe" in Franklin, Tenn. (Photo provided by VisitFranklin.com)

"They are almost all unique, with very few chain outlets. It's almost like you can take a stroll down Main Street and have a nice lunch or a cocktail."

Consequently, tourism has grown by leaps and bounds in the last five to 10 years. "CoolSprings is more modern," said Chin, "so we have a combination of modern shopping and a stroll to unique boutiques, where you can step forward by taking a step back into time."

Influx of businesses

Saturn started the commercial immigration, and since then, several Fortune 500 companies have located in Franklin. The roster includes Nissan, Mars Pet Care and several health care companies.

"Five days before the opening of the Cool-Springs mall, it was announced that Saturn was building a plant just outside of Franklin city limits," said Matthew Maxey, public relations coordinator for the Williamson County Convention and Visitors Bureau. "That brought a bunch of people with it who needed a place to live and some good family entertainment. It was a several-year accumulation with hundreds of employees."

Civil War site

Union and confederate forces clashed in the eponymous Battle of Franklin, a brutal fivehour conflict that took 10,000 lives.

Much of the battle site was lost to subsequent development but the city has been



concertedly reclaiming the land to attract history buffs. It's "finishing up reclaiming 20 acres at the epicenter of the battle right in downtown," said Moore. The land will be converted into a city park "with the historic city buildings to be preserved."

Three house museums have been restored, including one that served as a hospital during and after the battle. The estate also has a Confederate cemetery open to visitors.

All in all, Franklin's 1.2 million annual visitors create an economic impact of more than \$407 million for the city.

Chin, who served seven years with the Atlanta CVB, said, "I've been a part of lots of surveys, and Franklin's (survey) is the only one where high on the list is that people heard about Franklin, came to check it out and moved here. People just come because they like the vibe."

"Franklin is a unique town," agreed Moore. "One of the reasons we've had such success is the great quality of life here."

City administrators aim to keep it that way. For Moore, the future is in the present. "We include long-range planning in every department. In everything we do, we plan for the next 20 to 25 years. We are keeping infrastructure ahead of growth."

Those plans include a \$100 million upgrade to Franklin's water reclamation facility, an integrated water resource plan, a master parks plan revision for the city's 750 acres of parks and some ideas about how to "devise a more connected city with greenways" and other visitor-friendly amenities.



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Race to boost the economy

By DENISE FEDOROW | The Municipal

Are you looking to boost your local economy and tourism? Consider hosting a triathlon event. Those who have say that doing so definitely created economic profit for their community, and in many cases had a ripple effect.

The percentage and amount of profit recouped depends on the type of event hosted: A sanctioned national championship event will bring in more people and, therefore, more money. But host cities report that even smaller events bring in revenue and benefits above any cost involved.

Take the King Boreas Winter Carnival Winter Triathlon in St. Paul, Minn., for example. Its January triathlon is a 5K run, 17K bike and 7.5K ski, instead of swim. Jeremy Sartain is race director. He said he expected the economic boost from the event to be less than that of a summer triathlon, but because organizers combined this new event with the established King Boreas Winter Carnival, some of the usual costs won't apply. It also won't have to pay park rental fees, and since much of the race, including the skiing, takes place on existing cross country trails, only one road had to be blocked. Athletes take off at the start of the 2015 USA Triathlon Olympic-Distance National Championships in Milwaukee in August. The race, held as part of USA Triathlon's Age Group National Championships weekend, saw more than 2,600 finishers and featured a 1,500-meter swim in Lake Michigan, followed by a 40K bike ride and 10K run. (Photo: Rich Cruse/crusephoto.com)

The cost of the permit to close that road was \$90. There were some soft costs, but Sartaub estimated the revenue earned by hotels and restaurants during the triathlon to be \$7,500-\$8,000.

"Not a massive amount, but the athletes and their families may visit our sponsor shops," he said, adding that most important was the good exposure for the city. "The marketing alone reached well over 1.2 million people."



ABOVE: A group of college athletes representing 120 universities participated in the Clemson, S. C., USAT National Collegiate Triathlon last spring. The city invested \$45,000 over two years to bring the event to town and received \$20,000 in grants to help cover expenses. (Photo provided)

Spooner, Wis., hosted a triathlon for several years to raise funds to build a playground at the lake. The Lions Club, city officials and several volunteers partnered to host it, and the costs were T-shirts, chip timing and sanctioning by USA Triathlon, which worked out to about \$20 per entrant. Organizers charged \$60 for early registration and \$80 for late registration, and had about 200 participants each year.

Key to a successful event, said Sartain, is having someone who understands the sport in a leadership role: plus communication with the public and any businesses that may be affected by road closures.

Huge venue/huge impact

The city of Milwaukee has seen a tremendous economic boost by hosting the national championship USA Triathlon for the last three years. Kristin Settle of Visit Milwaukee said that, aside from the revenue generated, "the larger impact was the sense of pride we felt by being chosen for a third consecutive year. That's never been done before. They loved Milwaukee so much!"

Lindsay Wykowski of USA Triathlon agreed it was unprecedented. USA Triathlon normally operates on a two-year rotation for its national championships.

Numbers are not final yet for 2015, but in 2014 the largest event in USA Triathlon's history was the event in Milwaukee. Approximately, 4,800 participants over two days qualified for the national championship.

"That's the larger end of what a triathlon sees — it was one of the top three largest events in the country and generated over \$11 million in revenue for the city," Wykowksi said. "By contrast, in 2013 the same event in the same city but with fewer participants generated \$5.7 million."

That event is on the higher end for economic impact, she said, and compared to the duathlon in St. Paul, "that's a pretty stark difference. If you're attracting a larger audience, you're going to raise more money."

Settle noted that by hosting the triathlon Milwaukee was able to "showcase our city to the athletes and their families — our amazing lakefront and beach, museums and restaurants and our down-town area." >

Clemson Bicycle Research Team studies impact of bicycle tourism

The Clemson University Bicycle Research Team is a relatively new program, run through the school's department of park, recreation and tourism. Professor Charles Chancellor started and leads the team of mostly graduate students.

Chancellor discovered that not much research existed on bicycle tourism or sustainable tourism. Because of his interest in the subjects, he gathered a couple of graduate students together to jump start it. He's since enlisted some undergraduate students as well.

Seven members now comprise the group, which is working on grants and talking to bicycle clubs about the topic.

The group teamed up with the city of Clemson to create GIS analyses and maps. Chancellor said the students are also working on a paper that will highlight the different economic impact of hosting a bike event like a triathlon, or a tourism attraction like the rails to trails bike programs.

Chancellor is a former professor of Indiana University at Bloomington, where he taught during the time frame when rails to trails became a big movement. At the time the feeling among property owners was that it was a great idea, but not on their property.

He interviewed some of these naysayers after the fact. Now they think it's the greatest thing since sliced bread, he noted, because their properties have increased in value due to proximity to the trail.

The "Hilly Hundred" race draws 4,400 people to the little town of Elliston, located next to Bloomington, the host city. One of the reasons the event is popular is because of the beautiful scenery in the area. Chancellor said it was one of the most organized rides he's been a part of.

Nearby Brown County is a case study for bicycle tourism, on the other hand, because it embraced mountain biking as an attraction and partnered with the Mountain Biking Association to make the county avenue.

He noted that Greenville, S.C., built the 17-mile long Swamp Rabbit Trail — a route that has become a significant tourist attraction. For a little town on the outskirts of Greenville called Traveler's Rest, the trail has been vital: It was on the decline, but the trail revitalized businesses there.

> A senior in the Parks, Recreation and Tourism program at Clemson University interviews a student who is part of the Bicycle Research Team. The team collected data at the National Collegiate Triathlon held at the university to use in their study of the economic impact of bicycle tourism. (Photo provided)



LEFT: Milwaukee hosted the USA Triathlon Age Group National Championships from 2013–15, welcoming athletes from all 50 states and Washington, D.C. Age Group Nationals is USA Triathlon's longest running National Championship event and is consistently among the largest triathlons in the country. (Photo: Rich Cruse/crusephoto.com)

BELOW: USA Triathlon owns and operates four national championships each year, but the National Governing Body sanctions more than 4,300 events annually for athletes ages 7 to 80-plus. The Youth & Junior National Championships has been in West Chester, Ohio, since 2011 and sold out to nearly 1,000 athletes ages 7–19 the past two years. The Butler County CVB and an incident management team are heavily involved in the event's production. (Photo: Erik Schelkun/USA Triathlon)

Since venues such as the art museum and Discovery World were utilized for staging or parking, there were costs involved, along with police costs, coast guard and Harbor Master costs. Regardless, "you recoup those costs in so many ways, and from a public relations perspective, you can't pay for that kind of good presence," Settle said.

Clemson, S.C., and Clemson University

Clemson, S.C., partnered with Clemson University to host a USA National Collegiate Triathlon last year.

Clemson Parks Program Director Jaime Cathey is also an adjunct professor at Clemson University's Park, Recreation and Tourism Department. She said that the full economic benefit of the 2015 race isn't yet known, but based on research conducted by students, "conserva-



tively, it was over a million dollar impact for a \$45,000 investment over two years."

She said for a town like Clemson, which has approximately 14,000 residents and an additional 20,000 students at the university, that's considerable. She added that in the spring and summer, when the college kids are gone, it's important to host events like this to help businesses thrive.

The two entities paid a rights fee to USA Triathlon; rented some university facilities; and paid police and EMS, which Cathey said were the biggest expenses. A volunteer rescue squad was utilized, which saved some money.

The partnership with the university has been great, she added. In fact, since the

city doesn't have a beachfront and is only 7 square miles, it was a necessity. The event is a boost for the college as well, because the athletes are college students who may be looking for a graduate school. This year a high school race will be added, bringing additional exposure to the university.

Most of the revenue generated from these events goes to hotels and restaurants. The city's parks and recreation department receives revenue from a hospitality tax, though, making it is an indirect recipient.

"If the question is—is it worth it? It's definitely worth it," said Cathey. "To see the events and the spotlight it puts on our town—it's fun to see Clemson come alive."

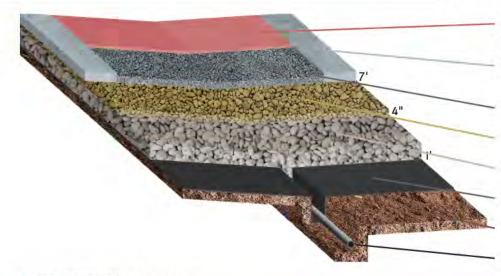


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Dubuque Green Alley Project mitigates flooding, improves water quality



The structure of Dubuque's stormwaterpermeable pavement is shown below. (Illustration by Richard Aguirre & Shutterstock, data provided)

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By JULIE YOUNG | The Municipal

Between 1999 and 2011, six presidential disaster declarations were issued for Dubuque County, Iowa, due to increased episodes of flash flooding in the area. With damage estimates nearing \$70 million over the past decade, leaders in the city of Dubuque decided it was time to stand up to Mother Nature.

The Bee Branch Watershed Flood Mitigation Project is a \$200 million, multi-faceted initiative designed to combat frequent and severe flooding that occurs throughout a 6.5-square-mile area inside the city limits. Fifty percent of Dubuque's citizens live or work within this perimeter.

According to Kristin Hill, communications specialist for the project, Bee Branch Watershed is an area characterized by steep slopes and bluffs. Both shed water quickly, allowing it to collect in the flatlands adjacent to the Mississippi River — where it has nowhere to drain. The mitigation project consists of several infrastructure improvements that will reduce the volume of stormwater, slow the rate at which it flows through the upper watershed, increase the safe convergence of stormwater through the flood-prone areas and provide floodwater protection to the city's water treatment plant.

"The project will protect nearly 1,400 homes and businesses... and prevent an estimated \$582 million in damages over its 100-year design life," she said.

Improvements include upstream detention basins, storm sewer capacity increases and opening approximately 1 mile of Bee Branch Creek. One of the most exciting aspects is the conversion of 240 of Dubuque's back streets into green alleys, in what is known as the Green Alley Project.

What is a green alley?

As with green streets, green alleys utilize permeable pavement to enable stormwater to filter through the surface and drain into the ground rather than collect on the street level or drain into the sewer system.

Although green alleys are a valuable tool for creating inviting public spaces, in this case, the alleys were converted primarily as a flood control measure.

A number of materials qualify as "permeable," including asphalt and concrete: but Dubuque opted for interlocking pacers, which are both attractive and easy to manage.

"If you think about it, many alleys were paved with brick because they are easy to clean, pull up when they needed to be reset and put back down," said Jon Dienst, civil engineer II for the city. "They will also reduce the amount of stormwater that ends up polluting the sewer system and the river because the pavers will grab the water farther up the watershed, clean it, sift out the minerals and put a better quality of water back into the ground."



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continued from page 42



LEFT & BELOW: Dubuque, Iowa, located in the Bee Branch Watershed, is a floodprone area. Converting the city's alleys to green surfaces reduced the volume of stormwater and increased the safe convergence of stormwater through the area. In this case, it also provided protection to the city's water treatment plant. (Photo provided)



"The project will protect nearly 1,400 homes and businesses ... and prevent an estimated \$582 million in damages over its 100-year design life."

Dienst said 23 alleys were completed in 2014, with another 28 finished last year. Thirty more are slated for conversion this year, and the rest will be completed between 2024 and 2038.

The entire Green Alley Project is expected to cost \$57.4 million and is being funded through the Clean Water State Revolving Fund and the Iowa Environmental Commission, which helped the community restructure a loan in order to help it save \$9.4 million in interest.

There is a special assessment charged to property owners who live along the alleys. A state sales tax increment makes up the rest of the financing strategy, which will be spread out over 20 years.

Getting involved

The firm contracted to design eight of the new Green Alleys was Fehr Graham. Ryan Wicks, branch manager for the company's office in Manchester, Iowa, was the lead on the project.

With every project there are challenges to consider, and the Dubuque Green Alley project was no exception. Wicks said engineers had to take into consideration the clay-laden soil, as well as grading issues, when converting the pathways into green alleys. Because water tends to collect and remain in void spaces, his team created some storage chambers and tile connections in the storm sewers that would help the water move more effectively.

"The conventional or prior standard for reducing runoff was to store the water and then release it slowly; but with these pervious pavers and a few other adjustments, we can allow the water to return to the ground more naturally without a lot of extra contaminants," he said. "These pavers essentially help facilitate what a water treatment system does, but in a natural way."

Although they are not a trend yet, cities that are prone to flooding have begun looking into and installing green alleys as a way to manage the water flow. Communities in Ohio, Illinois, Washington, Maryland and other states have integrated them into their cityscape and are reaping the benefits.

"Communities see the advantage of them," said Wicks. "They provide the storage that is required while improving the water quality at the same time. When municipalities seek to make improvements in this area of the infrastructure, they want to know how they can get the most in return for the investment. Green alleys are one way to do it."

Green alleys: the process

(Photos provided by Fehr Graham)













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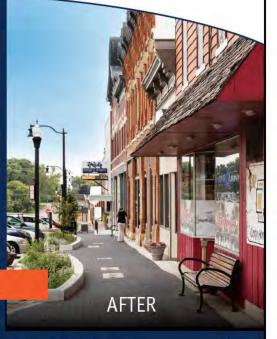
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EMS subscriber fees: Is it time?



By LAUREN CAGGIANO | The Municipal

Voluntary emergency medical service subscription programs have been prevalent in certain parts of the country for decades. They are receiving more attention recently, however, due to changes in health insurance, municipal funding and the emergency response industry. In the new environment, such programs are a way of affording certainty to both provider and patient.

The details differ among agencies, but most charge an annual fee to subscribers who, in return, receive financial benefit. Typically, subscribers can write off or enjoy a reduction on out-of-pocket charges, or receive a discount on services. Subscription programs can also be good revenue sources for EMS agencies, and they provide a piece of mind for members who are sickly, low-income or who have minimal insurance coverage.

One organization that has experienced success with the model is Medstar Mobile Healthcare, a public agency serving the Fort Worth, Texas, area. MedStar provides advanced life support ambulance service to 421 square miles and more than 960,000 residents in Tarrant County, and responds to about 125,000 emergency calls a year with a fleet of 55 ambulances.

Public Affairs Director Matt Zavadsky said the StarSaver Membership program has been in place for about 30 years. It started, he said, as a way to help defray the out-of-pocket cost for an ambulance trip. The program has benefited the community in more ways than one. "It's good for EMS providers because it ensures we get paid for our services."

The average cost for emergency transport, nationwide, is more than \$1,000. Not every insurance policy will cover all or even some Fort Worth, Texas-based MedStar EMS agency has had a subscriber program in place for about 30 years. It started as a way to defray the out-of-pocket cost of an ambulance trip for patients but also ensures that MedStar gets paid for its services. (Photo provided)

of the expense, and even if it does, some patients simply cannot afford to pay the deductibles. That's why agencies like Medstar have to account for some percentage of write-offs every year.

Uncollected fees plagues public agencies. With the majority of collection rates ranging from 19 percent to 60 percent, it's difficult to balance a budget. The uncertainty has compelled many agencies to look for security in revenue-producing solutions.

"With increasing financial pressures, city leaders need to find new and innovative ways to keep the cost of EMS service affordable," Zavadsky said.



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continued from page 46

With pre-payment programs like Star-Saver, that assurance comes from an annual subscription fee. StarSaver membership is available to anyone who lives or works in the MedStar service area: Currently, it has 3,500 households on the program, representing about 8,000 members.

Membership entitles everyone in the household to unlimited emergency transports for the full year of your active membership. It covers anyone who permanently resides in the household. Rates are \$55 for members with health insurance, \$110 for those without insurance.

Once the fee is paid, no co-payment or deductible is charged for service trips. Put simply, it's a way to pay a little now to avoid paying a lot in the future.

"It's very helpful, especially for people on fixed incomes," Zavadsky said. "One ambulance bill could really set them back."

The revenue from subscriber fees is used to offset the cost of uncollected debts. In other words, the program helps make the agency "revenue neutral." In Fort Worth it generates about \$200,000 annually.

The employment of innovative revenue streams became crucial for EMS providers during the recession. Tough times put personnel and service areas on the chopping block. Many states had to make painful budget cuts to emergency medical response workforces when the econ-

omy was weak.

The numbers speak for themselves. More than half of all EMS departments reported budget cuts, according to



Uncollected fees are a significant problem that plagues public agencies like EMS. With the majority of EMS collection rates ranging from 19 percent to 60 percent, it's difficult to balance a budget. (Shutterstock photo)

the National Emergency Medical Service Management Association. A 2014 survey of emergency medical services leaders in the 200 largest cities found 44 percent cut services the year prior, according to the Journal of Emergency Medical Services. It also found that more than one-fourth of big-city EMS agencies had imposed hiring freezes or had no plans to fill open positions, some for the third consecutive year. Fifteen percent reported layoffs. About one in five had no cost-of-living or pay-for-performance increases, some for the fourth year.

Even in stable economic times, funding isn't predictable. About 87 percent of funds for state EMS office budgets comes from in-state revenues. The remaining 13 percent that comes from the federal government includes grants from multiple agencies with diverse priorities.

Add Medicaid into the mix and it gets even more complicated. State Medicaid agencies are responsible for developing Medicaid reimbursement policies for EMS. It is estimated that for most EMS agencies,

A 2014 survey of EMS leaders in the 200 largest cities found 44 **PERCENT** cut services the year prior



Medicaid patients represent 20-40 percent of all patients. That percentage tends to be higher in rural areas.

The way EMS services are reimbursed can vary greatly from state to state. But Medicaid reimbursement rates are almost universally low, making it harder for agencies to make ends meet.

Federal action has also impacted EMS agencies in another way. Zavadsky said he expects membership to increase due to the adoption of the Affordable Care Act. Some families have found they cannot afford insurance, especially high-deductible plans.

Industry research underlines this reality. Nearly 30 percent of people insured through the federal exchange who had deductibles higher than \$1,500 forwent needed medical care in 2014 because they could not afford it, according to Families USA, a healthcare consumer group based in Washington, D.C. That includes diagnostic tests, treatments and follow-up care as well as prescription drugs. To add insult to injury, deductibles have grown six times faster than wages since 2010, according to a Kaiser Family Foundation study.

Emergency services are not immune from these anxieties. Many consumers choose high-deductible plans to keep premiums low, but they can face a high bill for EMS transport, even with insurance. Membership is one way to "minimize that expense," Zavadsky said.

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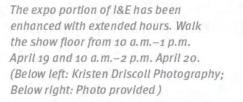
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As a prior I&E attendee noted, NAFA Fleet Management Association Institute and Expo is a great event regardless of whether one is a novice or veteran fleet employee. Between the show and the sessions, fleet professionals are guaranteed to leave with new knowledge, as well as more information on products that can benefit their fleets.

The event is the largest in the industry. Designed around the needs of managers, I&E provides a convenient and valuable opportunity to get the tools required to be successful and to increase networking power.

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For the fourth year, the NAFA I&E Flexy Awards will recognize success in several aspects of fleet management, as voted on by their peers and experts. Pictured are The Municipal Publication Manager Kim Gross and Account Executive Chris Smith announcing the 2015 Flexy winner in the Public Fleet Safety category. (Photo provided)

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Among the required presentations for those who aim to update themselves on news, innovations, ideas and more is Move-Over advocate Donna Setaro's keynote presentation. Her message of "Slow Down, Move Over, It's the Law" will open I&E with an early assign-

> ment managers should take back to each and every one of their drivers. Catch it at 9 a.m. Thursday, April 21, at the Austin Convention Center, the location of I&E 2016.

> "For fleet managers, delivering that understanding to every driver needs to be as common as assigning the vehicle," NAFA CEO Phillip Russo, CAE, said.







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ABOVE: Law enforcement, code enforcement, utility and public works are among the departments that will find a selection of vehicle updates at the 2016 NAFA Fleet Management Association exposition. (Photos by Chris Smith)

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MARCH

March 14–17 Mid-South Transportation & Parking Association

Historic Brown Hotel, Louisville, Ky. www.mstpa.org/2016_Annual_ Conference.html

March 20–24 NASTT No-Dig Show Gaylord Texan Hotel & Convention Center, Dallas, Texas www.nodigshow.com

March 21–25 International Wireless Communications Expo Las Vegas Convention Center, Las Vegas, Nev. www.iwceexpo.com

March 22–23 Michigan Municipal League 2016 Capital Conference Lansing Center, Mich. blogs.mml.org/wp/cc

March 30–31 New England Parking Council Seaport Hotel, Boston, Mass.

www.newenglandparkingcouncil.org/ events

March 31–April 2 Mid-America Trucking Show Kentucky Expo Center, Louisville, Ky. www.truckingshow.com

APRIL

April 1–2 GovSec Conference & Expo Washington, D.C. govsecinfo.com

April 3–6 Water Environment Federation Residuals & Biosolids 2016 Wisconsin Center, Milwaukee, Wis.

www.wef.org/ResidualsBiosolids/

April 17–19 Fire Department Training Network Live-Fire Training Camp Indianapolis, Ind. www.fdtraining.com

April 18–22 NAFA 2016 Institute & Expo Austin Convention Center, Austin, Texas www.nafainstitute.org

APRIL

April 18–23 Fire Department Instructors Conference 2016 Indiana Convention Center/Lucas Oil Stadium, Indianapolis, Ind. www.fdic.com

April 21–23 Summit 2016 EMS Conference

Coeur D'Alene, Idaho emsassociates.com/coeur-dalene

April 24–27 NGWA Groundwater Summit Denver, Colo. www.groundwatersummit.org

April 27–29 Parking Association of Georgia Annual Conference & Trade Show Jekyll Island Club Hotel, Jekyll Island, Ga. www.parkingassociationofgeorgia.

com April 27–29 International Academies of Emergency Dispatch

Navigator Conference Gaylord National Resort, National Harbor, Md. www.emergencydispatch.org/ NAVIGATOR/

MAY

May 1–3 New York State Conference of Mayors & Municipal Officials Annual Meeting & Training School Gideon Putnam Hotel, Saratoga Springs, N.Y. www.nycom.org/meetings-training/ conferences.html

May 2–5 ACT Expo 2016 Long Beach Convention Center, Long Beach, Calif. www.actexpo.com

May 4–5 National Fire & Emergency Services Symposium 28th Annual National Fire & Emergency Services Dinner Washington Hilton & Towers, Washington, D.C. www.cfsi.org/events/annual_ dinner.cfm

MAY

May 17–20 International Parking Institute Conference & Expo Gaylord Opryland Resort & Convention Center, Nashville, Tenn. www.parking.org

May 20–22 Lancaster County Fireman's Association Annual Fire Expo

Pennsylvania State Farm Show & Expo Center, Harrisburg, Pa. www.lcfa.com/index.php?src=even ts&srctype=detail&category=Event s&refn0=43

May 21–25 International Association of Fire Chiefs Fire-Rescue Med Henderson, Nev. www.iafc.org/conferences

May 22–25 APWA North American Snow Conference Connecticut Convention Center, Hartford, Conn. newengland.apwa.net

May 22–27 Community Transportation Expo Portland, Ore. web1.ctaa.org

May 23–26 AWEA Windpower 2015 Conference & Exhibition Ernest N. Morial Convention Center, New Orleans, La. www.windpowerexpo.org

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June 5–8 Electric Utility Fleet Managers Conference Williamsburg Lodge & Conference Center, Williamsburg, Va. www.eufmc.com

JUNE

June 7–9 WasteExpo Las Vegas Convention Center, Las Vegas, Nev. www.wasteexpo.com

June 7–10 Public Risk Management Association 2016 Annual Conference Hyatt Regency Atlanta, Atlanta, Ga. www.primacentral.org

JUNE

June 11–14 Tennessee Municipal League Annual Conference Gatlinburg Convention Center, Gatlinburg, Tenn. www.tml1.org

June 12–15 American Association of Motor Vehicle Administrators Region II Conference Louisville Marriott Downtown, Louisville, Ky. www.aamva.org

June 13–16 National Fire Protection Association Conference & Expo Mandalay Bay Convention Center, Las Vegas, Nev. www.nfpa.org/training/conferences

June 14–17 League of Minnesota Cities Annual Conference Intercontinental Saint Paul Riverfront, St. Paul, Minn. www.lmc.org

June 16–19 International Hazardous Materials Response Teams Conference Hilton Baltimore, Baltimore, Md. www.iafc.org/hazmat

June 20–23 Government Fleet Expo & Conference (GFX) Music City Center, Nashville, Tenn. www.governmentfleetexpo.com

June 22–24 Snow & Ice Management Association 19th Annual Snow & Ice Symposium Rhode Island Convention Center, Providence, R.I. www.sima.org/show/symposiumhome

June 24–28 Georgia Municipal Association Annual Convention Savannah International Trade & Convention Center, Savannah, Ga. *www.gmanet.com*

June 28–29 Police Security Expo 2016 Atlantic City Convention Center, Atlantic City, N.J. www.police-security.com

Product Spotlight

















MARCH 2016 | THE MUNICIPAL 53

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Know Your Founder



Walter Law Briarcliff Manor, N.Y.

Walter William Law, 1837-1924. a 23-year-old carpet dealer from

Kidderminster, England, arrived in New York with a dream, a sense of adventure and enough money to last him two weeks.

By the end of his 64-year stay in America, he had thrived in several businesses, donated millions to civic and religious causes and founded Briarcliff Manor, N.Y., a village still hailed as one of the more beautiful and affluent communities in the country.

Industrious, committed to excellence and possessing the golden touch in all his business endeavors, Law steadfastly followed the advice of a poem his father gave him when he was eight years old:

> "If a Cobbler by trade, I'll make it my pride The best of all Cobblers to be: And if only a Tinker, no Tinker on earth Shall mend an old Kettle like me."

The early days of his professional life were pockmarked with struggles. He quit his first job as a carpet salesman because his employer misrepresented the domestic merchandise as imported and overcharged his customers.

His next employer, an outfitter of steamships and hotels, went out of business, ravaged by the Civil War.

Law finally found his success in a 24-year career with W. & J. Sloane, an upscale furniture and rug store in New York City, becoming a partner within four years and retiring as vice president in 1890.

That same year, Law bought a 236-acre parcel of property in what would become Briarcliff Manor. Over the next 10 years, he purchased 40 more parcels, accumulating more than 5,000 acres of real estate in Westchester County.

His highly successful second career as a dairy farmer, realtor and greenhouse owner yielded enough finances to develop a village, where he founded a fire department, churches, schools, parks and world-renowned Briarcliff Lodge.

Briarcliff Manor was officially established in 1902, when it met the criteria of having at least 300 residents per square mile: It had 331. Most of the residents were Law's employees, on whose homes he held the mortgages.

The village was mapped out in a manner unlike most others. Law refused to crosshatch his geographic brainchild with sterile perpendicular streets. Instead, he preferred gently meandering roads lined with trees after which they were named. He planted elm trees along Elm Road, maples along Maple Road and so forth. The greenery included oak, larch, pine, birch, hickory and willow.

Briarcliff Manor rapidly became known for its wealthy, estateowning families, including the Vanderbilts, Astors and Rockefellers. The village now boasts about 8,000 residents.

Law passed away in 1924 in Somerville, N.C., where he had gone for a rest cure. M



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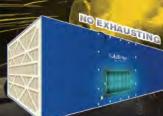
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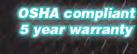
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INFORMATION DISPLAY



APWA appoints Kansas City Division Manager Patricia Hilderbrand to ISI board of directors

KANSAS CITY, MO. — The American Public Works Association announced recently that Patricia Hilderbrand,



MPA, PE, division manager of Coordination Services for the Kansas City Public Works Department, has been appointed to the Institute for Sustainable Infrastructure board of directors. Hilderbrand was appointed to the 11-member ISI Board by APWA President Brian Usher, PWLE.

Within Hilderbrand's career at the Kansas City Public Works Department, her responsibilities included project management of major flood mitigation projects with the U.S. Corps of Engineers; direction of the department's five-year Capital Improvements Program; management of the city's transit contracts; and service as liaison to the city's primary Metropolitan Planning Organization, MoDOT, railroads, transit authority, counties and franchises. She also oversees a staff of 16 employees.

Hilderbrand holds a bachelor's degree in civil engineering and a master's degree in public administration from the University of Kansas. She has served in many leadership roles at the APWA chapter and national levels, including serving as the director-at-large for engineering and technology on the National Board of Directors. In 2003, she received APWA's Young Leader of the Year Award.

APWA commends House bipartisan passage of bill to block WOTUS

WASHINGTON, D.C. — In January, the American Public Works Association commended bipartisan passage of the U.S. House of Representatives' bill S.J. Res. 22, a resolution blocking the U.S. EPA and Army Corps of Engineers' proposed rule known as "Definition of 'Waters of the United States' Under the Clean Water Act." The bill was previously passed in the Senate in November and is headed to the president's desk.

As a partner in protecting America's water resources, APWA has signed on with other national organizations to stress the importance of federal, state and local governments working together to craft reasonable rules and regulations, in order to have a clear understanding of the vast impact that a change to the definition of 'Waters of the U.S.' will have on aspects of the Clean Water Act.

"To that end, APWA commends the House bill that blocks this WOTUS ruling, and addresses specific concerns with the proposed rule," said APWA President Brian Usher, PWLF, public works director of Largo, Fla. "We remain concerned about the direct and indirect impacts of the proposed rule on state and local governments."

News releases regarding personnel changes, other non-product-related company changes, association news and awards are printed as space allows. Priority will be given to advertisers and affiliates. Releases not printed in the magazine can be found online at www.themunicipal.com. Call (800) 733–4111, ext. 2392, or email jmarlin@the-papers.com.

Raising the bar on fleet safety ownership in Edmonton



By CHRISTIE PELLETIER and JASON ALLAN | Guest columnists

On April 14, the city of Edmonton's Fleet Services Branch received the 2015 North American Fleet Association Flexy Award for Excellence in Public Fleet Safety.

The NAFA Flexy Awards recognize organizations that have impacted fleet management in both the corporate and public fleet sectors across North America. Nominations are reviewed by a panel consisting of fleet managers, fleet management professionals and other members of the fleet industry.

We, Christie Pelletier, occupational health and safety consultant, and Jason Allan, fleet maintenance supervisor, were honored to represent the city of Edmonton's Fleet Services Safety & Environment Committee to accept the award for Excellence in Public Fleet Safety for the second time.

Fleet Services Branch Manager Steve Rapanos attributes the department's success to the work of the safety and environment committee, and to every Fleet Services employee for making safety their highest priority. We work in a highrisk environment, he acknowledged, so safety is a team effort.

Edmonton's Fleet Services is one of the most diverse and integrated municipal fleet operations in Canada. It serves as the city's experts in vehicle and equipment procurement, maintenance, engineering, fabrication and fleet safety. Fleet Services ensures over 5,000 city vehicles, transit buses and essential city operations equipment are well maintained, safe and reliable for use on a daily basis. Creating an environment where managers and employees keep safety top of mind is integral to providing a safe fleet and workplace for maintenance staff.

In 2013 the branch prepared for a safety audit, which was a perfect opportunity to

"They overcame their fears and shared their story with more than 600 employees."

improve how workers engaged in safe activities and how managers support the safety management system. Fleet Services knew the vision and priorities were established but realized it would take intentional effort to ensure their hard work and commitment to safety would translate into results. It was observed that although documentation and processes were in place, lines of communication required improvement. Occasionally, information between the shop and leadership staff wasn't clear, and front-line staff and leaders didn't feel as confident in their ability to act on safety concerns on their own. This realization shifted perspective. Curiosity around how to ensure staff safety concerns and ideas for change became the focus of the safety program.

A task team led by Jason set out to determine what was working and what required change. The team focused on the Safety & Environmental Committee structure, which ensures all staff are represented and have a means of raising concerns and following up on the status of the concerns; and that complex safety issues were escalated in a timely manner to the right level of the organization for review and action. It was really important to ensure all levels of employees had representation on the committee and that they had a place to go whenever they had questions or wanted to bring up concerns.

This structure review has done more than prepare the branch for a safety audit as the effort resulted in a change that was immeasurable. Being involved with our safety and environment committee since 2008, we've been able to see it evolve and become



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continued from page 58

something more than a checklist or another meeting. It's grown by leaps and bounds through support from management, from engagement with staff at every level, and through better documentation. It's extremely rewarding to be recognized, and more importantly, we are making our workplace safer every day.

After this change was made, a shift in safety culture began to occur. The impact became apparent when two staff involved in a serious near miss reported the incident and spoke passionately about the importance of sharing the lessons they learned. Despite the discomfort and apprehension that often comes with self reporting of incidents at the workplace, they overcame their fears and shared their story with more than 600 employees. Both workers also admitted personal responsibility by taking ownership for the part they played in what happened. It is this shift in culture that landed the branch the formal acknowledgement by NAFA with a 2015 Flexy Award.

Our success wouldn't have been possible without the support of upper management who allowed us the opportunity for change and continuous improvement.

It's important to recognize that people are what make your safety program come alive, and when they start to see that success, they own it. They start doing things they haven't been asked to do.

Rapanos is proud of the work the committee has accomplished.

He said we set the framework in place for our safety program, but that it's our people with their boots on the ground who make it count: We are so grateful of the work they do. He also feels that the work of the committee really speaks to the culture we've created around the safety committee, that the frontline workers feel comfortable, welcome and that their voice will be heard.

"It's important to recognize that people are what make your safety program come alive, and when they start to see that success, they own it. They start doing things they haven't been asked to do."





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Top cities for e

Home rentals compete with hotels and bed-andbreakfast establishments for the accommodation dollars of tourists. The practice is big in beachfront cities for obvious reasons; but the market is also strong in a few cities you might not expect since they're far from the sand and waves. Instead, they offer a different kind of captivating scenery and copious family entertainment.

CBS Moneywatch posted a list late last year of the 11 cities in which home rentals are in demand. Prices below show the average one-week rental price for a one-bedroom home



Source: www.cbsnews.com/media/top-11-cities-for-renting-out-your-home Illustration: Richard Aguirre & Shutterstock



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