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#### **ON THE COVER**

Municipalities can now avail themselves of cost-saving alternatives to conventional snow and ice removal equipment. Arctic Snow and Ice Products Inc., the nation's largest self-operating snow removal company and privately owned fleet of snow removal equipment, offers several models of sectional snow plows and pushers and a specially designed salt distribution system, all equipped with Arctic's patented universal hitch, to enhance efficiency and operator safety.

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Editor's Note

Sarah Wright | Editor

018 IS SHAPING UP TO BE THE YEAR OF infrastructure after the passage of tax reform in 2017. The Washington Examiner noted at the end of 2017 President Trump had met with senior administration and House Transportation Committee Chairman Bill Shuster, R-Pa., in regards to a roughly 70-page infrastructure proposal, which is likely to have been released at some point in January. Infrastructure is one of the few uniting topics that draws support from across both sides of the aisle. And with Flint as a near memory and potholes as a constant reminder, there are a lot of driving forces to ensure the U.S.'s infrastructure receives a much needed update.

Funding, of course, has remained a constant concern, but some states are getting creative to address this stumbling block from raising gas taxes to creating new pilot programs like those in Washington and Oregon that test a pay-by-the-mile road tax — thanks to federal grant money. Oregon had already rolled out its pilot program in 2015 while Washington is just getting started. Both are seeking to address the predicted decline in gas tax revenue, which is anticipated to decline 45 percent by 2035, as more efficient cars continue to enter the market.

For their studies, both states have been utilizing volunteers who are tracking their mileage with GPS devices or periodic odometer checks. Washington has also launched a cellphone app for participants to use. Undoubtedly, many states will be eyeing the results when Washington reports its findings by 2020.

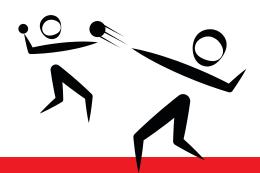
Ultimately, something will need to be done; after all, our roadways received a D on the 2017 Infrastructure Report Card. The recent holiday road trips have probably also reinforced that message with roadways from city to city, county to county and state to state showing the good, the bad and the ugly.

While there is a lot of the bad and ugly, the good is showing a lot of innovation, which we will be highlighting in this issue. This includes embracing roundabouts and converting downtown streets from one-way to two-way.

One of the cities that has dabbled in both roundabouts and the conversion of one-way to two-way is West Lafayette, Ind., which has been easing traffic with its State Street project. Experiencing these changes first hand this past Christmas, I can't believe how much easier it is to navigate with the addition of a roundabout near Wabash Landing and the emergence of a two-way State Street. Writer Sophie Harris caught up with Erik Carlson to talk about West Lafayette's project in addition to New Rochelle, N.Y., which has also been doing some of its own conversions in preparation for the needs of the future.

As for roundabouts, writer Catey Traylor will be sharing some of their pros, including delving into projects that have been undertaken in Michigan and Minnesota. Other topics include turning streets to a light gray, dark sky-friendly streetlights and a spotlight on the finished Harshman Road Bridge in Dayton, Ohio.

Have a safe February, especially if you're busy snowfighting! **M** 





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RAPTOR

Arctic Snow and Ice Products Inc.'s revolutionary lineup of patented technology maximizes efficiency and operator safety while minimizing damage to private and municipal properties.

# A state-of-the-art arsenal for snow removal

by DAVID PETERS | Contributing writer

All photos provided by Arctic Snow and Ice Products Inc.

RCTIC SNOW AND ICE PRODUCTS Inc., headquartered at 22763 S. Center Road, Frankfort, Ill., is perhaps the most respected designer of snow removal attachments in the world for commercial snow contractors. Its signature pusher, otherwise known as a box or containment plow, is the Arctic Sectional Sno-Pusher, and it has had perhaps the greatest impact on commercial snow removal since the very first plow was mounted to a truck or earthmover.

The story of Arctic is really a classic American saga of one individual, his passion for snow, his unfailing commitment to be the very best, and when that is not enough, to be even better.

That man is founder Randy Strait, and as he will tell anyone who will listen, the real key to his success with his products is the fact that he also plows snow for a living.

Arctic Snow and Ice Control Inc., Randy's service operation serving the greater Chicagoland area, is the nation's largest self-operating snow removal company in the country with over 450 trucks, wheel loaders and skid steers, making it the largest privately owned snow fleet in the U.S. as well. It is the source of his design ideas as well as his built-in testing ground.

#### The History Dateline: Chicago, 1978

Energetic young entrepreneur Randy Strait started a snow contracting business with a pickup truck and a plow to clear commercial properties and parking lots during one of the most severe winters in the city's history.

That year tested

his wits and his will, as he dealt with extreme blizzards, fast moving arctic winds and mountainous drifts that kept him going nonstop for days on end, often with no sleep. When his truck would break down, he had to fight record subzero temperatures to get it back on the job again. This ultimate test of his determination and resolve inspired him to make this his life's work.

#### 20 Years Later — A day that changes an industry

By 1998 Arctic Snow and Ice Control Inc. had grown into one of the country's largest snow contracting operations. However, one fateful day plowing in front of a local Sears store, Randy Strait hatched an idea that forever changed his course and that of the industry.

On that particular day, the store's manager was outside and insisted no salting could take place in front of the store until the area was completely cleared of snow. The road was crowned in the middle and Randy's 10-foot pusher teetered on the crown, so when it passed it still left a fair amount of snow behind. When he tried his 8-foot and then his 6-foot plow, each pass scraped incrementally more but could not finish the job.

The manager saw this and rounded up six of his employees, equipped them with 30-inch shovels and had them stand side by side. He then had them move in unison back and forth where they were able to get into the depressions and clear the area completely.

From that moment on, all Randy could think about was how he could mount those six shovels on the front of one of his machines.

Eight years and five prototypes later, the Arctic Sectional Sno-Pusher<sup>™</sup> was finally ready for the market, having been tested thoroughly on Randy's own fleet over several seasons.

This revolutionary design featured multiple independent moldboards with hardened steel cutting blades that raised and lowered to accommodate the contour of the plowing surface as well as any obstructions in its way.



Randy Strait

ontributing

RAPTOR



They could literally trip over obstacles as high as 9 inches, including manhole covers, curbs and boulders, any of which could have ruined a conventional plow. At the same time, they could drop below grade up to 9 inches if necessary to contour to depressions in the pavement.

In addition to the independent moldboards, other features were added that cemented Arctic's soon-to-be-made reputation.

Spring-loaded trip edges and floating mechanical side panels were key performance enhancers and allowed for simultaneous street and sidewalk cleaning.

Polyurethane cushioning blocks added another level of operator comfort and equipment protection.

Best of all, his revolutionary patented Slip-Hitch<sup>™</sup> universal mounting system revolutionized the way plows were mounted and operated for never-before-seen "Drop-and-Go<sup>™</sup>" capability.

#### Arctic enters the municipal market

This year Arctic introduced the Arctic Sectional Sno-Plow<sup>M</sup>, a powerangled wingless plow with the same characteristics of the Arctic Sectional pusher but designed for the needs of municipalities performing on open roads.

Now for the first time, municipalities can realize the huge financial and human benefits that commercial contractors enjoy with their sectional pushers.

For starters, most report salt savings of up to 50 percent. Next, the tripping capabilities of the sectional translate into significant reductions in damage to private property as well as infrastructure such as sidewalks and curbs. The Sectional's modular design characteristics also ensure a prolonged useful life and virtually eliminate the need for full replacement, preserving more of the municipality's long-term funding allocations.

Finally, safety is a major financial as well as human concern. The sectional technology prevents equipment damage and operator injury caused by sudden jolts when encountering a significant obstacle.

Ensuring operator safety reduces worker's compensation claims and can help lower a municipality's insurance premiums while protecting the very families they serve.

For more information, go to www.arcticsnowandiceproducts. com or call 1.888.2.ICE.SNO (1.888.242.3766). Peters is a contributing writer and consultant to the snow industry. **LEFT:** The power-angled Arctic Sectional Sno-Plow<sup>™</sup>, new for 2017, offers municipalities an exciting alternative to their standard plows with never before seen performance, safety and cost savings benefits.



**ABOVE:** Arctic's unique Slip-Hitch™ Universal Coupler System, available on all its products, allows a quick "drop-and-go" connection to any manufacturer's machine coupler without requiring the operator to leave the cab.



The DoubleDown Salt Bucket<sup>™</sup>'s unique technology offers several advantages over conventional equipment, including independent augur controls, adjustable spinner controls and ejection points low enough to salt with precision under parked cars.



Independently moving moldboards "trip" over obstacles up to 9 inches in height and move below grade as well the same amount to contour to uneven surfaces.

### Healing Springs Blackville, S.C.

by RAY BALOGH | The Municipal

#### Blackville, S.C., boasts perhaps the world's only parcel of land owned by God.

God's Acre Healing Springs is a small parcel of damp sod 3 1/2 miles north of downtown.

The attraction sports about a dozen taps a couple feet off the ground that continuously gush natural spring water reputed to have healing powers, as allegedly evinced during the Revolutionary War.

Legend has it that on Dec. 22, 1781, a band of British Loyalists engaged local patriots on Windy Hill just east of the present-day Healing Springs Park and its associated church.

Sixteen patriots were killed in the gruesome battle, earning the location the moniker "Slaughter Hill."

A quartet of severely wounded Tories were left to die under the watch of two of their comrades ordered to stay behind to bury the corpses.

Native Americans discovered the group in the woods and transported them to their sacred healing springs. Six months later all the soldiers returned to their garrison in Charleston 100 miles away, strong and in exemplary health.

Since then, the legend has accompanied the natural artesian springs, fed by an aquifer under the mountains hundreds of miles to the north.

The Rev. Nathaniel Walker (1724-1794), also a surveyor and trader, purchased the springs from the local Indian tribes for a supply of corn. Several owners intervened until L. P. Boyleston deeded the land in perpetuity to "God Almighty" on July 21, 1944.

Regular testings by the Barnwell County's department of health and environmental



God's Acre Healing Springs offers a continuous gush of pure mineral water for the taking. The site is not staffed and visitors are free to fill their containers with the water 24/7. (Photo provided)



(Efy96001 via English Wikimedia Commons)

control earn the mineral-laden water the agency's highest rating.

The unstaffed springs are available 24 hours a day and the water is always free for the taking. Some visitors drive more than 100 miles with truck beds full of barrels to frequently replenish their supply of the "clean tasting, delicious, absolutely refreshing" water.

Local residents can be seen on a daily basis refilling their jugs for home use. "It tastes better than the town water," said Blackville resident Carolyn Hayes. Some visitors take off their shoes to soak their feet in the water sopping the ground.

Visits to the site invariably evoke rave reviews.

Of the 41 comments on www.tripadvisor. com, 29 ranked the attraction excellent, with the remaining feedback rating the site very good or good.

"You could feel the peace, smell the peace and taste the peace," wrote one visitor who took her home-schooled children to the springs on a field trip. "We filled jugs with healing water, we drank from the fountain of



God's Acre Healing Springs was deeded to "God Almighty" in 1944 and may constitute the only parcel of land on earth owned by the deity. (Photo provided)

life and we gave thanks to Jesus the Christ for the blessing of experiencing Healing Springs."

"This is a tranquil spot," wrote another reviewer. "Take in the foliage and soothing sounds of the running water."

One visitor hailed the site as "beautiful, serene, inspirational" and noted, "It's a nice spot to rest a bit and be grateful."

After drinking the water, one visitor said, "I am telling you I could actually feel a difference in my overall physical countenance. I just felt good."

"It worked for me as my sciatica improved after my first visit," echoed another.

"This is sacred ground," another reviewer opined.

Annabelle Galik, a resident of Goose Creek 90 miles to the southeast east of God's Acre Healing Springs, was given four months to live after a diagnosis of lung cancer.

Her husband, Steve, visits the site every two weeks with nine giant buckets to take home the ameliorative mineral water. He credits the spring water with prolonging Annabelle's life.

"There's just something about this place," he said. "People for hundreds of years can't be wrong. It's about as close as I think you can get to the Garden of Eden."

"I'd take a shower in it if I could," said Annabelle, who has outlived her dire prognosis by several years. "We have heard some people have been baptized in it," said Harriett McKnight, Blackville's town clerk for more than three decades.

For tourists venturing their first visit unprepared to stock up on water, the nearby Healing Springs Country Store sells sanitized gallon jugs for under \$2 apiece.

Though Barnwell County maintains the parcel, complete with picnic tables, overhead lighting and paved parking slots, the town of Blackville does its share in promoting the site.

"We get calls from all over," said McKnight, citing California, New York, Mississippi and other states.

The attraction "pretty much promotes itself," she said, but several town venues, including town hall and the chamber of commerce, distribute pamphlets and other literature touting the springs.

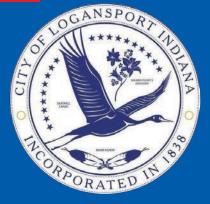
Town personnel constantly field questions about the springs, including whether the water is for sale and "if we can box it up and send it out," said McKnight.

Blackville itself has experienced several miraculous rejuvenations. The municipality of 2,269 was dubbed "The Town of the Phoenix" in 1889 after rebuilding from the ashes of four major fires in 1865, 1876, 1887 and 1888, each of which nearly destroyed the town.

For more information, call (803) 284-2444 or visit www.townofblackville.com.



The Blackville Heritage Museum, founded by the Blackville Area Historical Society, contains exhibits and archives of local interest, including high school yearbooks, Indian artifacts, old farm implements and a video of God's Acre Healing Springs. (Photo provided)



#### Logansport, Ind.

#### The city of Logansport, Ind., has brought its seal home.

In 2017 the Logansport city council passed an ordinance to replace the generic symbol of an eagle flying over two U.S. flags to a seal more depictive of local phenomena, including a sandhill crane, daylilies and two feathers representing the Miami nation of Native Americans.

The sandhill crane is native to the Logansport area along the Wabash River, which meanders through the city of 18,000 and forks into the Eel River coursing along the northern boundary of the downtown area.

Wilmer Flory, a naturalist who taught at Logansport High School, established many varieties of daylilies during his presidency at the American Hemerocallis Society. He was also a city council member.

Flory donated several varieties for the city's France Park, East Broadway Boulevard and a triangle near the south shore of Eel River. Some of his daylilies are preserved in a dedicated garden at the Cass County Historical Society Museum.

The feathers represent the indigenous Miami tribe, led by Chief Little Turtle. Two city streets, the township and a contiguous county are all namesakes of the Miami nation.

The new seal also contains 19 stars, symbolizing Indiana's status as the 19th state admitted to the Union, and a notation of the city's incorporation in 1838.

The seal was designed by Kevin Burkett, a former city council member who resigned to become editor of the local newspaper, the Pharos-Tribune. He was formerly employed for 17 years as a graphic designer for the Philadelphia Inquirer.

"In researching the design of city seals, you find that most reflect a local flavor," said Mayor Dave Kitchell, who cast the tie-breaking vote for the ordinance. "We're thankful to Kevin for coming up with something that really incorporates our local heritage.

"Everything on that seal defines what Logansport is and where it is," said Kitchell.

Response to the change was generally positive, according to online feedback from citizens.

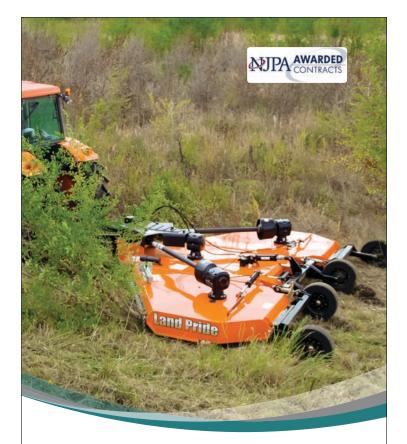
"I love the new seal," wrote Shanna Daniels-Fleming. "I feel it does embrace the environment of our city."

Mike Curtis was "not sure of the reason for the change," but concluded, "it's great."

Logansport is home to the oldest art organization in Indiana and the local high school sports the state's oldest mascot, Felix the Cat, adopted in 1925.

Tyson Foods Inc.'s pork processing plant is the city's largest employer with 2,000 workers.

The city hosts several annual festivals, including the Med Flory Jazz and Blues Fest, Art on the Avenue and Winter Fantasy Production.



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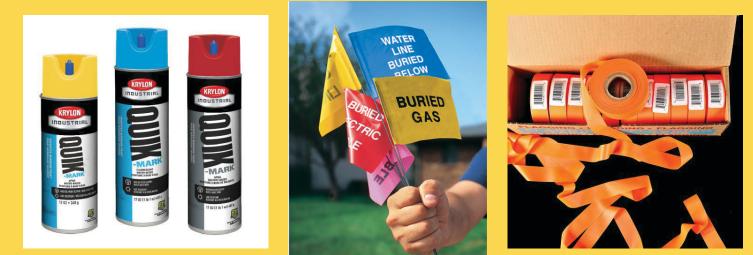


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#### \$7.3 million

The cost to rebuild the structurally deficient Harsh-

man Road Bridge, which included widening it and adding a dedicated bike lane.

Learn more about this project on page 32.

#### \$100 million

The Wisconsin Department of Transportation is planning to start more than \$100 million in projects in 2018 around the site of Foxconn Technology Group's future LCD panel campus, including up to \$87 million in construction on local roads.

Source: www.biztimes.com/2017/industries/construction/dot-plans-100-million-in-road-projects-around-foxconn-next-year/



Streetlights consume this percentage of cities' overall energy consumption, making them one of the biggest energy consumers.

Read more about dark-sky-friendly lighting on page 28.

#### \$1 million

The New York Buy American Act, signed by New York Gov.

Andrew Cuomo in December 2017, will require the use of American-made steel and iron for all New York road and bridge projects exceeding \$1 million.

Source: www.silive.com/news/2017/12/cuomo\_signs\_buy\_american\_legis.html

#### \$150 Million

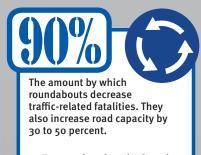
The Los Angeles Bureau of Street Services obtained a total of \$150,000 in funding in 2016-17 to coat one city block each in 15 districts with CoolSeal.

Learn more about Los Angeles' efforts to reduce heat gain on page 22.

#### \$120 Million

West Lafayette, Ind., spent this amount converting State Street into a two-lane road that not only improves traffic flow, but transforms the area into a vibrant, welcoming first impression.

Read more about cities converting one-way roads into two-ways on page 24.



For more about the perks of roundabouts, visit page 18.



by CATEY TRAYLOR | The Municipal

Traffic circles, rotaries, roundabouts — call them what you wish, but get used to them. The popularity of roundabouts in the United States has increased in the last few decades, and they're not going anywhere anytime soon.

Roundabouts are recognized across the board as one of the safest types of intersections a city can have, but that's not the only reason they're popping up more and more frequently across the nation. According to data from the Federal Highway Administration, the conversion of signalized intersections to roundabouts not only decreases trafficrelated fatalities by 90 percent, but increases road capacity by 30 to 50 percent.

"People tend to die at intersections one of two ways: head-on collisions or broadside crashes. Roundabouts virtually eliminate the possibility of those two types of accidents," said Craig Bryson of the Road Commission for Oakland County in Michigan. "Of course, we like them for safety, but secondly, if we can increase road capacity by building a roundabout and not having to widen the road, that's a huge savings for us."

Minnesota Department of Transportation Safety Planner Derek Leuer agreed, citing the construction of the roundabout itself as the reason behind the safety benefits.

"For high severity crashes, right angle crashes — or T-bones and broadsides — tend to be the deadliest. Due to the geometry of a roundabout, you can't have these types of crashes because the angles are too shallow," he said. "Typically roundabouts are designed in such a way that as drivers approach them, they tend to slow down naturally. Any crashes you do have in a roundabout are at a low speed and shallow angle." While some states are just starting to enter the realm of roundabouts, others have long been implementing the practice and have it down to a science. Bryson said Oakland County now has 22 roundabouts, and they started constructing them in 1999. Minnesota is newer to the roundabout game, but Leuer and Bryson agree: the cost of roundabouts isn't significantly different than signalized intersections.

"Every year, we look at intersections with a crash history or traffic flow problem and work to improve them," Bryson said. "We've found that reconstructing these intersections into roundabouts end up being about the same cost as it would be to add lanes or widen the road. It's really not proven to be more expensive than another alternative."

Leuer explained how many cities can work with what they already have to keep the cost of roundabout implementation lower.

"While one of the biggest hurdles is cost, if you have a large intersection that's already **LEFT:** Safer and on the rise in popularity, roundabouts cost about the same as a signalized intersections when there is a large already-built intersection that needs to be reconstructed. Pictured is the 10 Mile/ Napier roundabout in Michigan. (Photo provided by Traffic Improvement Association of Oakland County)

**RIGHT:** Roundabouts reduce high severity crashes; in fact, the Federal Highway Administration found that the conversion of signalized intersections to roundabouts decreased traffic-related fatalities by 90 percent while increasing road capacity by 30 to 50 percent. Pictured is the Northwestern Connector in Oakland County, Mich. (Photo provided by Road Commission for Oakland County)

built that you need to reconstruct anyway, it costs about the same to turn that into a roundabout," he said.

Factors such as safety, natural life of the intersection, traffic volume and characteristics, the land around the intersection and daily usage are taken into consideration when determining whether a roundabout is the right fit.

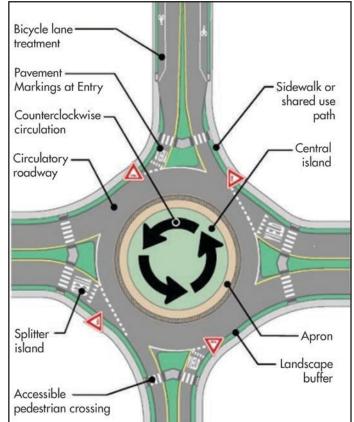
Once construction begins, Leuer said, an education campaign is launched to teach the community how to properly and safely use the new traffic feature.

"We host open houses to try to get people in the community out to look at and understand the roundabouts. We use table flyers at restaurants, videos on local public access channels and social media campaigns to spread the word," Leuer said. "One of our counties even built a mock roundabout in the parking lot of a mall and residents could come ride in golf carts to learn how it operated."

On a larger level, both Bryson and Leuer noted programs designed specifically for senior citizens and new drivers that teach roundabout driving and safety.

"While we do press releases and public information meetings, we also work directly with the AARP to get roundabout information to the senior driving classes our county offers," Bryson said. "We provide information to every student driving center we can find in the county and will go to any location that will have us to talk about the implementation in person."





LEFT: Here is a potential roundabout design that showcases how different features can be integrated into a roundabout, including bike lanes and accessible pedestrian crossings. (Photo provided by Minnesota Department of Transportation)

Minnesota implements many of the same practices, and Leuer said as the years go by, residents have grown more fond of roundabouts.

"Roundabouts can be intimidating, but it seems that as we build them and people use them, they like and understand why we've incorporated this feature," he said. "We've begun to turn a corner where cities and communities are asking for them instead of us pushing the topic."

While roundabouts are a functional necessity, they can also serve as a beautification element in communities. These efforts are

typically created and funded by communities themselves.

"Communities will install gardens, trees or landscaping to the center of the roundabouts to serve as a gateway to the city," Bryson said. "As a road agency, we don't use roundabouts as beautification efforts, but we work closely with communities, and if they're willing to do it and pay for it, we'll work with them to facilitate it."

It's not uncommon to see signage, sculptures, small gardens and other landscaping efforts at the center of local roundabouts.

With the increasing popularity of the traffic feature, Leuer cautioned cities to use the resources they have and realize bigger isn't always better.

"With roundabouts, we're really seeing that single lane options not only circulate the best, but also tout the best safety benefits," he said. "As you build roundabouts bigger, we start to see more crashes, higher severity crashes especially. Single lane roundabouts can handle more traffic than people assume, just take the time to see how it all pans out."



Pictured is the M-5 and Martin Parkway roundabout in Oakland County, Mich. (Photo provided by Road Commission for Oakland County)



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### Going a shade cooler

By LAUREN CAGGIANO | The Municipal

#### The city of Los Angeles has a cool idea for a hot issue — both literally and figuratively.

Over the summer, the city completed applications of a light gray coating known as CoolSeal, which has shown a 10-degree reduction in heat gain, according to Greg Spotts, assistant director of LA Bureau of Street Services. During the dog days of southern California summers, dark asphalt soaks up the sun and raising surface temperatures. It is believed that even a small dip in temperature could curb energy use and mitigate the health risks associated with extreme heat. In other words, it was both an infrastructure and public health issue. Some might even go as far to say that it's an environmental issue. According to the Union of Concerned Scientists, "The latest research projects the Los Angeles region to be 3 degrees Fahrenheit to 4 degrees Fahrenheit warmer by mid-century."



There is also anecdotal evidence. "The average (LA) resident seems to believe their neighborhood is getting hotter," Spotts said, acknowledging skepticism around climate change.

According to Spotts, the city had been kicking the idea around for a while. For about five years, the Los Angeles Department of Water and Power was studying the viability of cool roofing projects in the area, while also exploring cool pavement techniques. He said the city engaged a "working group" and soon found there was some ignorance when it came to cool pavement solutions.

"(The science community) believed there was a commercially available product ready to go," he said, explaining that further research indicated otherwise. "So, we sought to bridge the gap around expectations and reality."

Spotts said it took several years to find a commercially available product in the area. CoolSeal by GuardTop proved to be an effective solution. According to Spotts, by using a gray coat instead of black, the asphalt absorbs less heat. According to its website, "CoolSeal by GuardTop is a high-performance, waterbased, asphalt emulsion sealcoat designed to achieve lower surface temperatures through its lighter color and reflectivity." It claims the product meets Environmental Protection Agency and LEED requirements of 33 percent reflectivity and can last longer than conventional sealcoats.

The proof was in a "test run" the city completed of a 7,500-square-inch area in the San Fernando Valley in July 2015, Spotts said. They found the material did in fact pass the test and was 10 degrees cooler on average than the black coating. In his words, "We thought that was substantial."

The technique clearly had legs and the city responded by backing it with financial support. The department obtained a total of \$150,000 in funding in 2016-17 to coat one city block each in 15 districts in the city. May 2017 was the first installation — and it was well received. He estimates the cost of installation to be about 50 to 60 cents per square foot. There are also benefits derived related to maintenance. Cool pavements are more

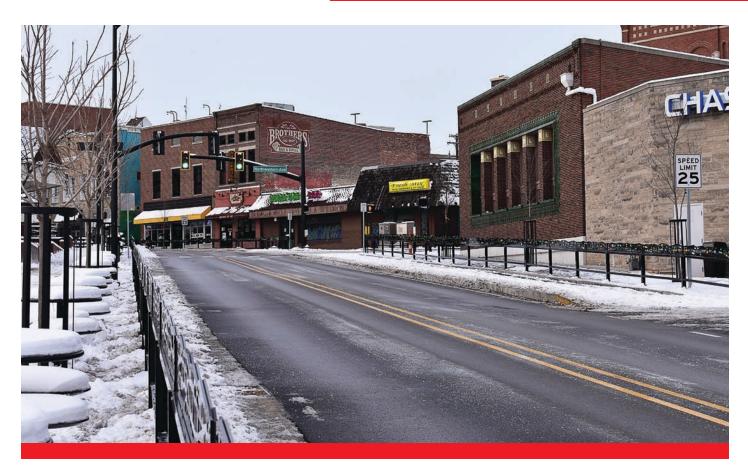
durable than dark ones because they deteriorate less and last longer due to the decreased absorption of solar energy over time.

Los Angeles may be a leader when it comes to employing this technique, but the potential benefits aren't unique to California or even the United States. He said the department has fielded inquiries from governments and media outlets around the world. Los Angeles is leading by example in other ways, too, and showing the world what's possible. "We're hoping to drive more innovation," he said.

This is only the beginning, it seems. Spotts said he hopes to expand the efforts with coating all the streets in one neighborhood to see if there's a "neighborhood cooling effect." To that end, he said the city has applied for a neighborhood cooling grant, which would fund a multi-stage project.

"It's an exciting time to have a chance to innovate a bit," he said.

This innovation has been well received so far. The public feedback has been positive, especially from people who walk their dogs on the streets. 
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#### Updating streets for the future

by SOPHIE HARRIS | The Municipal

A road construction trend is sweeping the nation. Cities all around the U.S. are undergoing projects aiming to transform outdated one-way roads into improved, updated two-way commerce areas. Individual cities have different reasons for implementing the projects, but an underlying theme is improved traffic flow and overall accessibility within the downtown areas.

West Lafayette, Ind., is one of the cities undergoing this transformation. State Street, formerly a one-way state highway, has been undergoing construction to transition the corridor to a two-lane road. However, the project isn't just about traffic flow. Erik Carlson, director of development in West Lafayette, said that project aims to transform the area into a vibrant, welcoming first impression of the college town. "We are in the midst of a redevelopment project that's citywide right now, even though it's just known for the one street," said Carlson. "State Street was recently just reopened to the public, although there's still about a year's worth of work left to do on it."

In 2014, Purdue University's property was annexed to be officially part of West Lafayette. Carlson said this has been beneficial for many reasons, mainly because the city can partner with the university on projects to better the city.

"We really want to reenvision this stretch as a two-way road," Carlson said. "It was a oneway stretch through the center of town, and it was a state highway."

The current project will include adding bike lanes to make the road more pedestrian friendly. According to Carlson, the city wanted the stretch to be used more by those in the community. In his opinion, the changes should unite the community.

Drivers now find many more useful routes around the city without traffic jams, and overall traffic flow has shown improvement. Carlson said he wants the roadways to work for any and all drivers, whether they're just visiting or traversing the streets on a daily basis. The city believes that going back to more of a grid system will allow more **LEFT:** West Lafayette, Ind., is conducting several citywide street projects, including the State Street project. This project converted the formerly one-way street into a two-way; this change has helped traffic flow while also providing a dedicated bike lane. (Photo by Sarah Wright)

**RIGHT:** The old one-way State Street in the Chauncey Hill area of West Lafayette in 2011. (Qsthomson via English Wikimedia Commons)

pedestrian and bike access, contributing to more of an open commerce system in that area of town. The project, while necessary, has been lengthy.

"Some parts have been under construction since April, and other parts were completely shut down. We reopened some recently, in August, when the students from Purdue University came back," Carlson said. "But for a 90-day period, that corridor was completely shut down."

Though the process has been difficult, some positive benefits are already visible to those living in the area. People can turn left and right at most intersections, and the ability for cars to circulate throughout town is much improved. According to Carlson, the area has a completely different vibe and appearance than it did 12 months ago.

During the period of planning and construction, not much else has gone on project-wise within the city. Carlson said the \$120 million project has been all-encompassing, and although city officials are planning for the future, all eyes are currently on this project.

Many cities around the country are aiming to improve traffic flow right now, and Carlson said West Lafayette is no exception — but efforts are keeping travelers in mind, too. "If someone wants to drive through your town, you want them to be able to go around it," Carlson said. "The inner corridors should be for local traffic, whether it's people who live here or those who are visiting. To be an attractive, welcoming town, you shouldn't be packed full of people just passing through."

For the city of New Rochelle, N.Y., the process of changing its one-way streets was more of a preemptive strike. The city sees the changes as improvements, rather than strict problem-solving, although the changes have





The new two-way State Street in West Lafayette has allowed easier access to the commercial Chauncey Hill area, which has a variety of stores and restaurants and Purdue University's campus. (Photo by Sarah Wright)

**RIGHT:** The redesigned State Street in West Lafayette also takes pedestrian traffic into consideration with updated crosswalks. (Photo by Sarah Wright)

already started bringing about some positive changes. The construction was done over a number of months, and law enforcement helped direct major intersections during the first week. However, citizens knew changes were coming: The project was preceded by an intensive public information campaign that lasted over a month to keep drivers abreast of upcoming changes.

"The city of New Rochelle is undergoing major downtown revitalization, and we



conducted a study with the intent of improving traffic circulation and pedestrian and cyclist safety," Public Works Commissioner Scott Pickup said. "Most recently, the city has converted a one-way street near the library to a two-way, and a two-way street near the transit center to a one-way." He added that their roadways were under overall review, and there are plans for a new street that will connect the train center with the downtown area.

"Our aim is not only to enhance our current streets, but to create the streets of tomorrow," Pickup said.

Because of the changes near the transit center, commuters have seen much less waiting time when exiting the parking garage during rush hour. The \$5 million plan's main goals were to convert the streets to two-way for the first time since 1951. Double-parking and speeding were among the concerns of the one-way passages. Allowing citizens to walk and shop downtown, along with making the area feel new and updated, are among the benefits seen by the city in recent months.



Pictured is the new two-way State Street in West Lafayette going toward Purdue University's campus. With State Street being the main roadway going through campus, the change to a two-way creates a more welcoming impression. (Photo via Google Maps)

As cities around the nation grow and change, many will undergo projects similar to these as need grows for better traffic flow and street function. Although the individual reasons for construction projects vary greatly, there's one underlying theme: moving forward and making changes to prepare the city for the future. <sup>™</sup>



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By ELISA WALKER | The Municipal

Light pollution is a growing problem that not only impacts circadian rhythms of wildlife and humans, but also eats up energy and funds. It's no secret that LED bulbs last longer, cut down energy costs and are overall more efficient, but more municipalities have waited to implement smart lighting on the streets — the biggest energy users in many towns and cities.

#### **Effects of light pollution**

Dark skies aren't a primary concern for cities, but some are striving to change that as a lack of darkness affects human and environmental wellness. Streetlights are the first to be demoed to see how it impacts residents, and if there are changes to be made, only a few being switched before a citywide installation. When LED bulbs first appeared, a harsh blue component was present in a 5,000-watt bulb, having a harsh impact on human eyes, melatonin levels and wildlife. Now that the industry has developed more, municipalities are making moves on softer LED bulbs from 2,700 to 3,000 watts. In Knoxville, Tenn., the plan for retrofitted lights is just underway. Streetlights became a priority in the energy usage and sustainability plan a decade ago after the city realized they are the biggest energy consumer, taking about 40 percent of electricity consumption.

"The LED industry has really evolved. Costs dropped, technology improved and warranty periods were extended to 10 years," explained Erin Gill, director of the office of sustainability in Knoxville. "We're spending about \$4 billion on energy and operations. We expect to save \$2 billion. In terms of the environment, we have a city goal to reduce greenhouse gas emissions by 20 percent by 2020, and (it) is predicted to push us past that goal."

Cutting down on the amount of streetlights has been deemed unnecessary by residents and a few government officials as they believe more lighting prevents crime. The International Dark-Sky Association, however, states on its website, "A dark sky does not necessarily mean a dark ground. Smart lighting that directs light where it is needed creates a balance between safety and starlight."

According to various studies, streetlights don't prevent the happenings of crimes and accidents but actually increase crimes as targeted people and properties are easier to see.

North Coventry Township, Pa., used a grant to upgrade streetlights — a project that's been on its radar for some time. Under the guidance of Stan Stubbe, president of the Pennsylvania Outdoor Lighting Council and volunteered resident of the township, they waited out the LED industry for warmer colors despite complaints calling for replaced lights. Since the conversion, there have been no complaints from citizens. **LEFT:** A night view of the city of Knoxville. Knoxville tries to closely follow the standards recommended by the International Dark-Sky Association. (Photo provided)

"We wanted to change our lights from the original mercury vapor lights to LED for the savings when they first came out," said Township Manager Kevin Hennessey. "In talking with Stan over the years, we decided not to. He said they're a harsh bright blue and that we should wait to see how they develop in the industry. It has been well worth the wait for us."

"The American Medical Association said that the blue light at night disrupts circadian rhythms and humans' health," added Stubbe. "We didn't want to be in a position to encourage that sort of problem. By waiting sources became available and I felt more confident in converting to LED."

#### **Making the switch**

The main benefits of the switch to smart lighting are the savings in energy consumption, both in rates and costs, as well as environmental impacts in terms of light pollution, resulting in a win-win situation. Planning the execution of the switch is more complex when it comes to deciding how and when to do it as well as who should be consulted.

"There are a couple different aspects on how to design to maximize the benefits," said Gill. "We made sure this was a technology to implement in a city of our size, and there was quite a lot of work we did with our local utility provider. We talked to sustainability directors and other city staff across the nation to know the good, bad and ugly. We looked at what we could learn from them and build upon getting that institutional knowledge. We took every opportunity to hear from a city that had done this and looked at its challenges to try to get ahead of that."

While side glow could pose as a problem for some places, it's written within the township's ordinances for all lights to be aimed downward and fully shielded.

"As far as power consumption, we'll be applying to the Philadelphia Electric Company for additional rebates for fixtures since they'll be reducing energy," Hennessey said. "I'm extremely glad we have Stan and listened to his advice. I would strongly recommend any municipality that's looking to make changes seek out an expert who has a dark-sky background. You need a lighting consultant who will steer you in the right direction."

Fitting smart lights isn't exactly a one-size-fits-all scenario as softer lights would line residential streets and slightly brighter lights would be place at intersections. Finding to proper wattage, tilt angle and color is what the township had to combine in order to reach the perfect lighting, which hasn't faced any complaints. The future appears to be heading towards everyone eventually making the switch, but it's important to pick the right fixtures for the city.

"Our roads are evenly lighted, we've had fewer outages than before and we're saving money. That's an unbeatable combination of advantages. We might consider including dim-ability in LEDs in the future," reflected Stubbe. "Municipalities need to do their homework. You shouldn't rush right into it but give consideration to the details of the impact on drivers, residents and the community's budget."



LED Cobra Heads were installed in Knoxville and use less energy to create a clean white light than the high-pressure sodium lights. (Photo provided)



Knoxville began its project with 17 pilot locations and plans to begin replacing lights citywide in 2018. (Photo provided)

#### **Lighting and crime studies**

Various studies, from 1997 to 2015, with findings that welllit places don't prevent crime:

- The 1997 National Institute of Justice study concluded that it isn't likely that improved lighting prevents crime. https://www.ncjrs.gov/works/
- A study in England and Wales, which was published in 2015, found that lighting had no effect on road traffic collisions and crime. http://jech.bmj.com/content/ early/2015/07/08/jech-2015-206012
- The Chicago Alley Lighting Project found that brightly lit alleys experienced increased crime. http://www.darksky. org/wp-content/uploads/2014/09/Chicago-Alley-Lighting-Project.pdf



By JULIE YOUNG | The Municipal

Any bridge that has put in 60 years of service and accommodates about 20,000 vehicles on a daily basis is going to need some routine maintenance every now and again. However, when officials in Montgomery County, Ohio, examined the Harshman Road Bridge, which spans the Mad River between Springfield Street and SR 4, they knew it required more than a little TLC.

"It needed to be replaced," said Paul Gruner, Montgomery County engineer. "We couldn't really patch it anymore. The expansion joint was getting rusty. Deteriorated concrete was falling onto the bikeway below the bridge. There was a lot of erosion around the piers in the water, and we needed to get some piling down there."

Officials also wanted to widen the bridge in order to accommodate two lanes of traffic in each direction and include a dedicated bike lane as well as put in points for kayaks. It was an ambitious two-year project that cost \$7.3 million, but it was a welcome upgrade that has garnered a lot of public support. "It's an attractive bridge and we've had a pretty positive response from the public," Gruner said.

#### Bridging the gap

Planning for the Harshman Road Bridge project began in 2015 when county officials conducted extensive examinations of the bridge to identify those areas that were structurally deficient. Although the bridge did not look that bad aesthetically — due to a temporary overlay — there were some serious issues that needed to be addressed. The steel beams were rusting. The deck was falling apart and cracks had appeared in the pier and abutment walls. County officials installed rocks around the pier at one point to keep the erosion problems from getting worse, but eventually the pier cracks required a more long-term solution.

"At that point, we decided to replace the entire bridge and update the structure as well," Gruner said. "The Harshman Road Bridge was constructed in 1958 and was 311 feet long by 59 feet wide. The new bridge would be 311 feet in length and 92 feet wide with two lanes in each direction as well as a center lane for left turns. It would also feature a new bike path, which we knew would be a popular addition."

Funding for the project came from a wide range of federal, state and local sources, including \$5,607,063 from County Local Bridge Program, Surface Transportation Program and the Federal Land Access Program; \$1,099,299 from the Ohio Public Works Commission; and \$622,298 from the Montgomery County Engineer funds.

"We applied for everything we could. We even tied into some funds because the bridge



The completed Harshman Road Bridge project turned a structurally deficient bridge into something community members have embraced, particularly its dedicated bike lane. (Photo provided)



Plywood was used to prevent debris from falling on the bike path below prior to the construction of a new bridge. (Photo provided)

is connected to the National Museum of the United States Air Force at Wright Patterson," Gruner said.

#### **Getting it done**

Once the money was in place, officials opened up the bidding process for the project, eventually awarding the Harshman Road Bridge to the Eagle Bridge Company of Sidney, Ohio. Founded by John Frantz in 1902, it is a family-owned and -operated company that is in the Ohio Contractors Association Hall of Fame. Although it has done its fair share of road building whenever there was a need in the market, the company concentrates most of its efforts on bridgework for the Ohio Department of Transportation in the western half of the state.

In order to replace the bridge without causing any undue inconvenience on the public, the contractor spent a few weeks installing temporary pavement and preparing the bridge to maintain traffic during the construction phase. It was determined that one lane of traffic in each direction would be open while the other half of the bridge was under construction. The first phase of the project began in November 2015 while the second portion got underway in August 2016.

"The whole thing went pretty smoothly except for the obvious slowdowns during the construction phase," Gruner said.

On Sept. 29, 2017, Gruner and other officials held a ribbon cutting ceremony to formally unveil the new bridge to the public, and so far, the response has been tremendous. Not only does the new bridge look better than the old one, the public is pleased with the dedicated bike lane on the west side that connects the two entrances to Eastwood Metro Park as well as the put in points for kayak access.

"With the additional features, it's like a whole new amenity for the community," Gruner said. "People seem to like it a lot."

**RIGHT:** The newly reconstructed Harshman Road Bridge is wider and able to accommodate two lanes of traffic in each direction and also has a left turn lane. The community loves the addition of a dedicated bike lane, which is protected from traffic, and the put-in points for kayaks. (Photo provided)



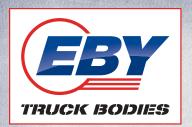
**ABOVE:** Pictured is the Harshman Road Bridge in 2011. Its deck had been falling apart while cracks had appeared in the pier and abutment walls. Erosion also posed a concern. (Photo provided)





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### From Navy to construction work, York now oversees growing city's streets

By BARB SIEMINSKI | The Municipal

#### Joe York, street department director of Franklin, Tenn., has seen the world, thanks to Uncle Sam.

While serving in the armed forces after high school graduation, York's tour of duty was aboard the destroyer USS Sarsfield where he saw several countries in South America and the Middle East. His ship was also deployed to Vietnam in 1972, assisting in the war effort.

"When I got out of high school, I worked on the family farm until I joined the Navy in 1968," said York, who received an honorable discharge as Navy seaman and boatswain mate third class.

"My duties included maintaining the decks, and I was responsible for bridge watch and lookout and often steering the ship. We were also in charge of replenishing, which included refueling, food, ammunition and supplies at sea. I spent four active and two reserve years with the Navy."

After he left the armed forces, York worked for a construction company, which meant he worked many hours, days, nights and weekends.

"The city of Franklin posted a job for a road inspector," said York, adding that his two children — Lindsey and Jason — were very young at the time.

"Obviously, I did not get to spend much time with them, and even though I loved construction work, I knew that I'd be able to spend more time with my family if I got accepted by the city. So I applied and was offered the job and came to work for the city as first road inspector in October 1994." In 1999 the former street director took an early retirement and York was placed in that position as interim for six months, and after that, he was offered the job permanently when it was approved by the Board of Mayor and Aldermen.

York supervises the street, landscape, stormwater, fleet and traffic maintenance divisions, overseeing a total of 69 full-time employees.

Some of the significant changes he has seen over the years in technology included various implementations in York's department.

"In 1994 inspections were written in field books, our office had two computers and our former street director had the only cellphone in the department, and it was as big as a brick," recalled York, adding that



Franklin, Tenn., has grown exponentially, and the street department plans to move from a reactive model of yearly maintenance to a completely pro-active model to better meet growing needs. (Photo provided)



Vehicles travel down one of Franklin's tree-lined streets. (Photo provided)

keeping up with new technology was the most challenging part of his job.

"Today, all of our inspectors and office staff have their own computers, and inspections are input into a computer program called INFOR so that every department in the city can access the information should they need it."

By the same token, Franklin — which in 2016 had a population of 74,794 — has changed, mainly in population growth and more traffic, according to York.

"In 1994 we were around 25 to 30 thousand citizens, and now we exceed 76,000, and it's still growing," said York.

What about winter — does Franklin get any snow?

"We do occasionally encounter snow," said York, "and we presently have the ability to place salt brine on the streets in advance of potential snow or ice conditions. We have seven salt trucks equipped with salt spreaders and plows to apply salt when necessary. Franklin also has two storage facilities on opposite sides of the city, which hold 2,200 tons of salt this winter."

York, who belongs to the American Public Works Association, was born and raised on a Peytonsville, Tenn., farm and still lives there, renting the land to his neighbor who cuts hay for his cows. Years ago, Joe and his brother built a small two-bedroom log cabin home on the farm where he now lives.

"My son and daughter helped stain and seal all of the wood in the home," said York.

When asked earlier if he had any grandchildren, York said none yet, but that he was the owner of many "grand-dogs" — Jax, Bruce, Lucy, Layla and King.

"Growing up on the farm we always had dogs," said York. "The five dogs stay inside when I'm not home, but they love to go outside and run through the fields and chase squirrels and deer. They sleep inside with me, and I enjoy hanging out with my kids, walking with my five dogs and feeding corn to the deer."

An especially tough challenge York has encountered on the job was when his department moved three years ago from the street department facility on Southeast Parkway to the new public works facility on Lumber Drive.

"There were a lot of adjustments that had to be made by both departments as we combined our workspaces," said York. "We resolved the issues then by learning each other's abilities and working together.

"Our city has grown exponentially in the last decade, and our department has at times struggled to keep up with the need for our services. I would like to see our department move from a reactive model of yearly maintenance to a completely pro-active model."

It's always nice when his team receives compliments from the community for the services they provide, said York, and that reassures him they are doing a good job.

Consequently, York expects challenges every day and is prepared to overcome them

by always including his staff in the decisionmaking process.

"Joe is the consummate professional, and it permeates throughout his department from top to bottom accompanied by his constant smile," said Ken Moore, mayor of Franklin. "There are a lot of Joe York stories, but one of my favorites had to do with some damage left by a contractor to a citizen's mailbox. Getting the contractor to return would have taken weeks possibly. Instead of waiting, Joe's team went out immediately and fixed the issue that day. Actions such as this reflect the positive leadership in his department and the can-do attitude."

His assistant street director, who had been with the city for 21 years, had lost his beloved dog, a Labrador retriever, some years ago, recalled York.

"He was looking for another Lab to replace his pet and found a puppy he really liked but didn't want to pay what they were asking," said York.

"Our street department family found out and raised the money for the puppy and surprised him that Christmas with his puppy. This man, who is usually not very emotional, was overwhelmed with joy when he saw that puppy in his office when he came into work that morning. He named his new puppy Sadie and she is still one of his best buddies today!"

York, who lists the Bible as the book that has had the greatest impact on him, also named the two things he could not live without: "Friendships and love."

# Programs seek to give second chances

by CATEY TRAYLOR | The Municipal

Across the U.S., more than 1,800 offenders are released from prison every day. Often these individuals have been incarcerated for a number of years and are released only with the clothes on their backs, any belongings they've been able to purchase and a little bit of money.

According to the national average, more than 60 percent of these people will commit another offense and end up behind bars again — unless they find themselves in a reintegration program.

The Second Chance Act of 2007 was enacted to break the cycle of criminal recidivism, improve public safety, and help state, local and tribal government agencies and community organizations respond to the rising populations of formerly incarcerated people who return to their communities. The SCA helps fund programs that help formerly incarcerated individuals through the transition back to life on the outside by aiding with job training, housing and access to community resources. One such program is the Project H.O.P.E. Reentry Initiative — H.O.P.E., which stands for Helping Offenders Pursue Excellence, is housed within The Neighbor Center in Mobile, Ala.

More than 60 percent of formerly incarcerated people will commit another offense and end up behind bars again, according to the national average. Reentry programs, however, can help stem criminal recidivism.

(Shutterstock.com)

"People who have been incarcerated have been given two sentences: the first when they are in jail and the second when they come out and are labeled a convict for life," Gwendolyn Darty, the reentry director for The Neighbor Center, said. "The purpose of our program is to give these individuals a second chance."

Project H.O.P.E. was launched in 2015 and has since provided aid for more than 140 individuals. Job readiness, education,



Participants take part in an anger management session at The Neighbor Center in Mobile, Ala. The center also has the Project H.O.P.E. Reentry Initiative, which helps formerly incarcerated individuals transition back to life on the outside. (Photo provided)

transportation, healthcare, disability services and referrals for employment are just a few services provided.

"We were concerned about the injustice, especially in terms of black males in our area, that people face when they exit jail," Darty said. "The system just isn't fair for them — it doesn't set them up for success. We start helping them with these basic needs like food, shelter and employment, both before they get out and once they're released."

Before being released, Darty will meet with individuals to determine what their greatest need will be once they're out. She will then reach out to local contacts to start building a plan for them. Once they're out, the plan is put into action.

"We'll provide transportation vouchers and help them find appropriate healthcare, especially when dealing with mental health," she said. "We've also recently gotten funding to start a small housing program, so when people have nowhere else to turn or have burned bridges with all of their loved ones, we can help them get back on their feet and find a place to stay."

Project H.O.P.E. employees and volunteers partner with agencies across the city to provide assistance for individuals and have had great success, but Darty said forming partnerships isn't always an easy task.

"Most of the time when you are dealing with agencies and talking about offenders, the answer is automatically a 'no,' because they don't think people can change," Darty said. "That's when we start to explain to them that most of these individuals have been incarcerated for a number of years, and if nobody gives them a chance, they're going right back. Once we have that conversation, places are usually willing to work with us."

RISE, the Reentry Initiative through Structured Employment, based in Fishers, Ind., has a similar belief: Once offenders can find steady employment, they're more likely to become productive members of society and less likely to reoffend.

"For the city of Fishers, this is all about giving RISE participants a second chance while accessing an underutilized segment of the work-force," said Fishers PR Director Ashley Elrod.

Still in the pilot phase, RISE works with offenders to establish a monthly training regimen that includes basic personal financial



A board oversees the operations of The Neighbor Center. (Photo provided)

management skills. Participants are also given the option of going through the agency's in-house CDL class.

If there are positions available within the Fishers Department of Public Works when participants complete the program, an opportunity is offered for them to apply for full-time employment. If no positions are open and they were model employees, they can receive a letter of reference from the mayor.

A large factor of the program's success, Elrod said, is that RISE participants are treated the exact same as any other new employee.

"RISE participants have the opportunity to start fresh as an equal among their coworkers: everyone gets the same uniforms, training and experiences without being singled out," she said.

Since the program's infancy in 2015, 15 RISE employees have been hired by the city.

Darty and Elrod both caution that while reentry programs are important and overwhelmingly helpful, it's not an easy task to get off the ground.

"There are many challenges like transportation, scheduling and helping our participants adjust to life beyond Hamilton County Corrections," Elrod said.

Beyond the logistical challenges, the element of humanity comes into play as well, Darty said.

"It's easy to impose what you think people should do on them," she said. "You need to listen and see what they want. You need to also understand that sometimes you can't help somebody if they don't want to help themselves. Just understand you're going to run into a lot of unfair things that you can't control, so keep your head down and focus on what you can control."







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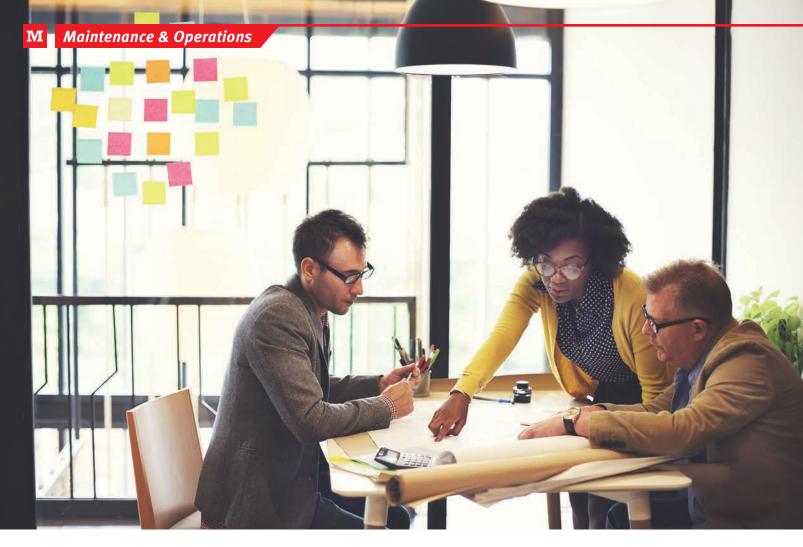
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## Workforce redevelopment techniques for a myriad of generations — Part 2

By ELISA WALKER | The Municipal

T SEEMS LIKE A DAUNTING TASK TO implement change in the workforce, but when broken down, even the smallest gestures can begin altering it. With a wide set of skills and generations employed, leaders are left wondering if the way they've been operating is still the most efficient way today. Some are utilizing redevelopment resources and techniques to create a thriving workplace culture and propagate thoughtful practices that keep good employees empowered and engaged.

#### No budget? No problem

Workplace unhappiness can be attributed to a multitude of reasons, but it's imperative

to recognize that unhappy employees create an unhappy environment, leading to production not reaching full potential. That doesn't mean there isn't anything that can't be done. Incorporating change in the workforce could be what they and the municipality needs. The major part in redeveloping is understanding and appreciating the differences everyone has to offer.

Some changes that can be implemented without a budget include providing consistent constructive feedback, assigning teams to work on a project, carrying conversations, grabbing lunch together, dismantling preconceptions of different generations and generally seeing employees as human beings. Several organizations have become so driven that the workforce becomes an intense overwhelming place where employees are no longer treated like or looked at as people. Employees are more than numbers on a spreadsheet and are more than what they can do for their job.

Techniques that Josh Schneider, founder of Millennial & Employee Engagement Institute, discusses in keynote speaking engagements are about empowering employees by letting them know they matter, keeping them engaged by offering varied experiences and giving constructive feedback to help them grow. **LEFT:** Working as a team helps everyone, from leaders to employees. In doing so the morale of the work environment can rise to create a comfortable workplace. (Shutterstock.com)



Josh Schneider does keynote speaking for leaders and employers looking to create an engaging workforce. For more information, visit www.joshuaschneider.com. (Photo provided)

"Not feeling appreciated is the biggest reason most people leave their jobs."

"The work that you do is tied to impact," explained Schneider. "Leaders simply have to care, connect the impact of the work employees are doing and give them varied experiences. In doing that, it makes them think the leader cares about them. Not feeling appreciated is the biggest reason most people leave their jobs."

Feedback is a major way to give employees some insight on how they're performing. Annual performance evaluations aren't enough to get a clear look as to what employees are doing right and wrong, whether they're improving and growing. By giving them a quick comment or email when they do something well or need to work on ►



Cassandra Halls provides a wide variety of business consultation through 2 The Top. Halls addresses generational issues that may arise in the workplace, breaking each generation down and discussing ways to dismantle preconceived notions and assumptions. For more information, visit www.2ttop.com. (Photo provided)



The most successful organizations have a willingness to adapt. If it wasn't for change, then workforces would never experience growth. (Shutterstock.com)

something, they can feel more involved and empowered in knowing where they stand rather than stumbling around blindly.

Providing feedback may seem intimidating for leaders, but those on the receiving end are more appreciative. Everyone thrives on feedback as it motivates them to be better. By shifting from annual performance evaluations to feedback sessions throughout the year, managers will more effectively convey their messages while employees will get better at receiving them.

Cassandra Halls, founder of 2 The Top, recommends breaking down preconceptions leaders and employees have towards generations as it can be harmful in not doing so. To rid the workforce of generational preconceptions, a variety of employees can be teamed up and work together. That would give them the ability to learn from each other's skills and exchange information.

"The challenges we're having will always be with those who are newest," explained Halls. "The biggest obstacles are the assumptions and perceptions of generations. We have to be willing to embrace them, make improvements in the workplace and drive innovation."

#### **Glancing into the future**

Long-term changes will cause the workforce to continuously adapt. Mentoring, internships, coaching, info sessions and employee outings are ideas Halls suggests investing in to prep incoming generations in the workforce as well as keeping current employees updated. Continuous adaptation sets employees on their toes and doesn't give them a chance to settle into a stagnant routine where they could eventually become resistant to change in the future.

"It isn't a quick fix for a leader to change the workplace culture," commented Schneider. "I know there are budgets and constraints that limit opportunity to be innovative. You need patience. A municipality could be locked in, thinking it doesn't have the flexibility or that everything is too regulated for change.

"When it comes down to it, the leaders set the tone, and they have the incredible opportunity to show this person that they have value. Help develop their strengths in a work culture that thrives in appreciation and recognition. It doesn't have to be massive sweeping changes. It can happen one person at a time. It could happen over getting coffee with someone who's on your team."

A variety of programs can be brought in for leaders and employees, strengthening morale and making them feel like their positions matter.



Josh Schneider's speeches also address millennials and developing them into leaders, changing workplace culture and being innovative towards employees. (Photo provided)

Leaders can attend talks and workshops, sharing what they've learned with each other while implementing it in their department. Employee programs can be similar to info sessions that keep them updated on what's going on with current projects, eliminating the possibility that people could be lost and uncertain.

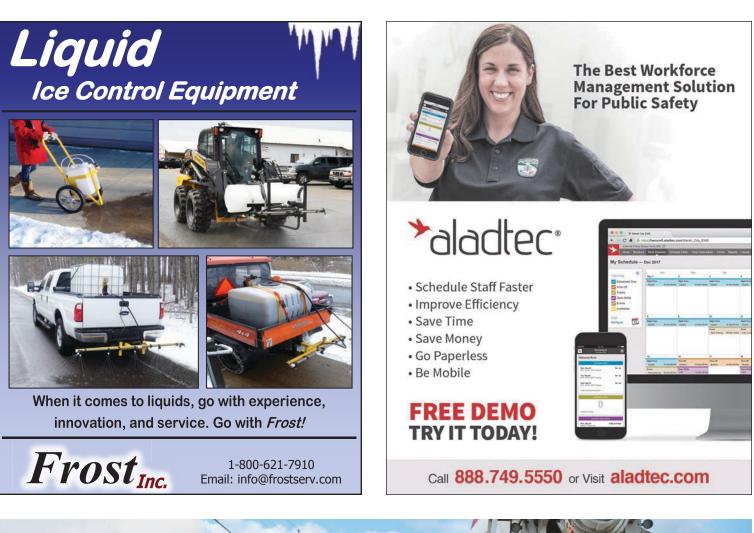
In Carlisle, Iowa, the idea of hosting info sessions has sparked a change within the municipality where people are no longer uncertain on projects. The certainty established in the sessions created a sense of security where employees are no longer intimidated in asking questions or speaking to others. By lifting the cloud of uncertainty, the municipality has become a brighter outgoing place to work.

"Make sure you understand that your employees aren't nine-to-five worker bees and just there for the paycheck," explained Carlisle City Administrator Andy Lent. "They have a place in the organization. They should feel needed and appreciated."

Josh Schneider's constructive feedback follows "I like, I wish, I wonder." For example:

- I like the work you did.
- I wish we talked in more detail about...
- I wonder if next you could...





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FEBRUARY 2018 | THE MUNICIPAL



#### Boynton Beach combines sustainability practices and upgrades to win the Envision Bronze award

By NICHOLETTE CARLSON | The Municipal

The Boynton Beach City Commission approved a partnership on March 2, 2015, allowing CDM Smith to begin the East Plant Ion Exchange and Upgrades Project. This partnership on the upgrades project led to the Envision Bronze award from the Institute for Sustainable Infrastructure in August 2017.

In Boynton Beach there is an East Water Treatment Plant and a West Water Treatment Plant, both of which are operated by Boynton Beach Utilities. Each plant has its own water supply, and, historically, the East Water Treatment Plant draws from the wellfields to the east while the West Water Treatment Plant draws from the western wellfields. Rebecca Harvey, Boynton Beach Utilities sustainability coordinator, stated, "With increasing saltwater intrusion in the eastern coastal wellfields, this project was implemented to avoid saltwater intrusion and diversify water sources to reduce dependence on the eastern wells.

"To shift to greater reliance on the western wellfield but utilizing the existing assets at the East Water Treatment Plant—where most of the increase in demand is expected — Boynton Beach Utilities installed a 6-mile-long raw water pipeline to connect the western wellfield to the East Water Treatment Plant." With the water demands in the city projected to expand up to 25 percent, the pipeline provides up to 16 million gallons per day of raw water to support this future growth.

However, the western wellfields contained high levels of dissolved organic compounds, as well as high color and hardness, when compared to the eastern wellfields. This required alternative processes to meet water quality needs.

The East Water Treatment Plant Ion Exchange and Upgrades Project "added (a)

**LEFT:** A ribbon cutting ceremony was held for the upgraded East Water Treatment Plant on July 27, 2017. Pictured, from left, are Boynton Beach Commissioner Joe Casello, Mayor Steven Grant, Utilities Technical Services Manager Michael Low, Commissioner Christina Romelus and Vice Mayor Justin Katz. (Photo provided)

**RIGHT:** In order to optimize the contactor format, Boynton Beach used computation fluid dynamics. This means it used counterrotating mixers without baffle stators in order to minimize rotation. The top of an ion exchange contactor is shown with mixer motors and resin transfer tank. (Photo provided)

MIEX ion exchange pretreatment system for removal of organic compounds from the western water to the existing East Water Treatment Plant," commented Harvey.

This means that the entire process is included in the East Water Treatment Plant, and following the western water's passage through the pretreatment system, it is then treated by the existing lime softening treatment.

Following construction, Boynton Beach Utilities took charge of the plant's operations. With the new upgrades, it is anticipating an increase in water treatment plant capacity; a significant reduction in color and disinfection byproducts; and a reduction in both the production of lime solids as well as chemical usage.

While the primary contractor that handled all aspects of the project was CDM Smith, additional collaborators on the project included The Merchant Strategy; AW Architects; Tierra South Florida; Engenuity Group; Cooper Construction Management and Consulting; DCR Engineering Services; Carollo Design Build Group; and PCL, which installed the MIEX process.

#### **Envision Bronze award**

The Envision Bronze award received by Boynton Beach was one of only four granted in 2017 and the first to ever be granted in Florida. The Envision system judges sustainable infrastructure projects based on a range of environmental, social and economic impacts in five categories. These categories are quality of life, leadership, natural world, resource allocation, and climate and risk.

When it came to the \$30.8 million Boynton Beach Ion Exchange Resin Plant and East Water Treatment Upgrades Project, the Institute for Sustainable Infrastructure took many of the plant's upgrades into consideration. Harvey listed many of the upgrades that were completed with the project in 2017, mentioning "filter valve replacements, replacement of the plant's high service pumps, replacement of main electrical systems, improved stormwater management, modifications to plant disinfection system, upgraded security features and a new 3 million gallon finished water storage tank with a new repump station."

A growing population for Boynton Beach meant the project was able to upgrade to support potable water needs for a growing and thriving community for many years. This project also ensures that a long-term potable water supply will be both protected and delivered in a reliable manner.

The diversified water sources provided by this upgrade will help meet the community's needs to reduce dependence on a surficial aquifer. Additionally, these upgrades will protect the drinking water supply from saltwater intrusion while benefiting the local environment.



#### **Additional upgrades**

- East Water Treatment Plant will now be able to process 24 million gallons of water per day.
- MIEX pretreatment system will also provide odor removal and a reduction in chemical costs.
- Project involved certified Envision Bronze certification.
- Over \$260,000 of public art in the adjacent city park, including a water fountain and pavilion, will help to connect visitors with the facility.
- The existing building was renovated so that a full-time, onsite medical clinic is provided for city employees and their families as well as providing additional parking and material storage areas.
- Over \$5.2 million in direct owner purchases helped to reduce the overall owner construction.
- The number of stormwater ponds and onsite storage for flood protection was increased to help eliminate stormwater runoff.
- Security improvements included increased access control and video surveillance.
- Eight deep bed filters saw filter system improvements, which included new valves and flow meters.
- All six 150 horsepower and 300 horsepower high service pumps were replaced with premium efficiency pumps and motors.
- A new repump station with emergency generator backup was constructed.
- Additional system storage was provided with a new 3 million gallon pre-stressed concrete, above-ground finished water storage tank.
- $\cdot$  Software upgrades were also performed, with controls and the SCADA system upgrading to the VT SCADA version 11.
- \$1.4 million completed in electrical work and site lighting.
  Over \$500,000 worth of Siemens "smart" electrical switchgear was also installed.

Best management practices were employed during construction for both erosion and turbidity control. This included protecting surface and groundwater resources by preventing runoff and pollution from leaving the site, and specific plans were created for spill and leak prevention, with the city continually monitoring the groundwater and providing monthly reports on the results.

The project team worked with various local and state agencies, including the Florida Fish and Wildlife Commission. The commission identified particular habitats either on or around the project site. They then assisted in relocating priority species such as the gopher tortoises to another suitable habitat. A 1.8-acre onsite preserve was also created with a program that specified the removal of all invasive tree and brush species.

The city has demonstrated a commitment to following principles of sustainability as well as sustainable performance improvement. In order to oversee the environmental needs of the community, a climate action plan and green task force were created. Mayor Steven Grant also signed the Mayor's Climate Action Pledge. This made Boynton Beach a key partner in the Southeast Florida Regional Climate Compact.

Utilizing the progressive design-build delivery method, the project team increased collaboration between the design and construction teams. This, in turn, optimized project delivery by reducing design elements that may have been conflicting. The majority of design issues that were encountered were also resolved before construction took place, which assisted in decreasing the number of change orders during construction.



Basing the design off the nearby Palm Beach County Water Treatment Plant, Boynton Beach enhanced and optimized the contactor design. This resin regeneration area shows the recycled brine tank and resin regeneration skids. (Photo provided)





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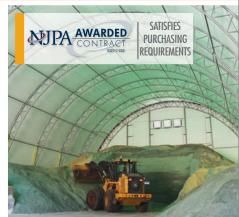
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## Lessons learned from Las Vegas and other tragedies

By ANDREW MENTOCK | The Municipal

2017 was a year full of turmoil in the United States as several cities experienced mass shootings and other violent attacks. These tragedies occurred all over the country—from New York to Las Vegas.

The year's deadliest event occurred in Las Vegas on Oct. 1 when a gunman opened fire from his hotel room into a crowd of concertgoers, killing 58 people and injuring over 500 others. It was one of the most devastating civilian attacks in America's history.

As the nation mourns, law enforcement agencies and departments throughout the country have been working to adjust to the heightened sense of danger many citizens feel.

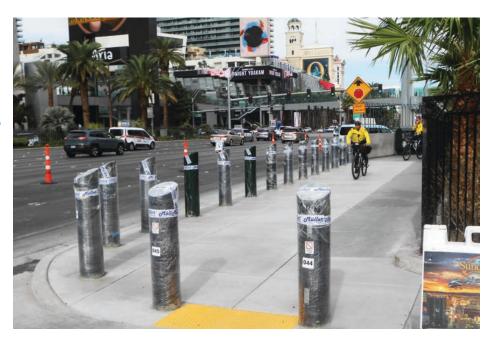
"Anytime there is an event we all look at ways of prevention and preparation," said Chief Blaine Clark, the chief of police for Dubois, Pa. "As you know, nothing is normal anymore, and we as a nation are seeing a new style or unfamiliar tragedies every day."

Of course, it's about more than making sure people feel safe. In order to thwart potential attacks, it's important that police officers are always on high alert and doing their best to be cognizant of suspicious activities.

"We have put in cameras in our public parks, increased our patrols and, as a whole, have become more proactive," Chief Clark said.

It's also necessary for law enforcement to interact with the members of its community.

"It is our intent to educate the public to be more aware of their surroundings, to say something if they see something and never take anything for granted."



A Las Vegas officer patrols the strip. The Las Vegas Police Department has been praised for its quick response to an Oct. 1 mass shooting that occurred in the city. Las Vegas and Clark County are also being proactive in protecting pedestrians from weaponize motor vehicle attacks by installing barriers. (Photo provided)

Officers can engage with their community while they are on patrol or by hosting forums in their local newspaper, which is what the Berrien Springs Oronoko Township Police Department does. The township, located in southwest Michigan, also has a community resource officer, who is assigned to each local school.

These things are important because if the community doesn't feel comfortable enough speaking to police officers, then it's difficult for law enforcement to function effectively.

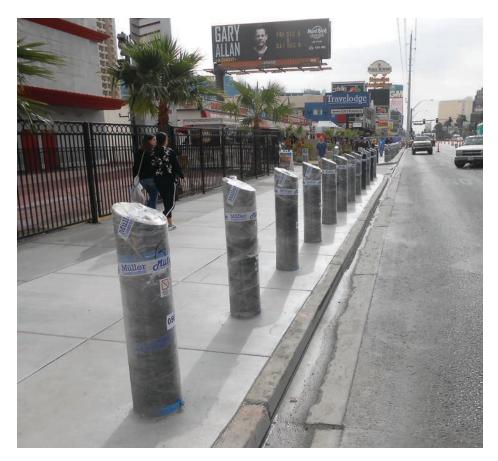
"We are as proactive as we can be, but we usually only have one or two cars on per shift in a community of over 10,000 people," Berrien Springs Oronoko Township Chief of Police Paul Toliver said. "It's impossible to see everything all of the time, so we really depend on the public. We'd rather have a false alarm that we respond to than not know about a situation that turns out to be a tragedy. If there's suspicious activity, we want to know about it."

It's also helpful for law enforcement departments to be in contact with each other, especially when it comes to hosting major events. That's what the police department in Tinley Park, Ill., does.

According to the city's chief of police, Steve Neubauer, his department always reaches out to sites that previously hosted events that are coming to Tinley Park's Hollywood Casino Amphitheatre, which has a capacity of over 28,000 people. The department wants to know if any unexpected issues arise that they need to be aware of so they can prepare accordingly.

However, there is only so much prevention that a police department can do.

"All agencies and municipalities have to recognize (something)," National



Following a driver driving onto the sidewalk on the Las Vegas Strip, Clark County, Nev., installed physical barriers to prevent any vehicles from accessing sidewalks on the strip. (Photo provided)



Berrien Springs Oronoko Township Police Department in Michigan has been focusing on building relationships between officers and the community so citizens feel comfortable speaking with police if they see anything amiss. (Photo provided)



A member of the Berrien County Sheriff's Office's bomb squad shows off equipment ready for use if needed. (Photo provided)

Association of Police Organizations Executive Director Bill Johnson said. "As important as it is to try and do everything that we can to prevent an attack, we also have to try and prepare for the very real possibility that if someone is determined enough, they can still attack and hurt us."

"Nothing is normal anymore, and we as a nation are seeing a new style or unfamiliar tragedies every day." them into pedestrians on the sidewalk — similar to what happened outside of a New York City hookah bar in December of 2017.

The most egregious example of this in Las Vegas is from Dec. 20, 2015, when Lakeisha Hollo-

Johnson applauds the efforts exhibited by several police departments in the wake of tragic events that took place in 2017 — particularly Las Vegas' department, which responded immediately to the gunman's attack in October.

"I think it shows the kind of proactive desire to learn and thus to be better prepared. I think Las Vegas did a very good job in the midst of unthinkable carnage," Johnson said. "As horrific as it was, it would have been much, much worse if the officers had not gotten there as quickly as they did."

"They demonstrated that their police department, like a lot of police departments, has learned a lot since the Columbine school shooting, where some departments were criticized for waiting before they went in."

The recent shooting isn't the only civilian attack Las Vegas has experienced in the past few years. The city has also been affected by attackers who weaponize motor vehicles by driving way killed a woman and injured 34 others after she drove onto the sidewalk on the Las Vegas Strip. At the time of press, Holloway is awaiting trial.

In order to combat this type of attack, Clark County is putting up physical barriers that would prevent any vehicles from being able to access the sidewalks on the strip.

"It will serve as a dual purpose: Prohibiting a vehicle from accidentally leaving the roadway and hitting pedestrians and also preventing someone who may intentionally want to ride up on the sidewalk," said officer Larry Hadfield, who works in the Office of Public Information at the Las Vegas Police Department.

The best thing that America can hope for is that the string of tragic events seen in 2017 doesn't continue. They are causing United States citizens to fear their neighbors and anyone who is near them. Yet, it's important for police officers to remain prepared for the unexpected and continue to learn from the tragedies. Perhaps then 2018 will feel a little safer.



# Parks collaborate for the benefit of the community

By DENISE FEDOROW | The Municipal

While the economy is better than a few years ago, many municipalities still struggle with tight budgets for a variety of reasons. Often when looking at where to make cuts, parks and recreation can become victim.

That was the case for the city of Grand Rapids, Mich., a few years ago when faced with having to make deep cuts in the budget, and city officials decided to merge the parks department with the department of public works.

Grand Rapids Parks and Recreation Director David Marquardt said city officials have admitted it was "one of the worst decisions made," so three years ago they reversed that decision and Marquardt was hired to head the parks department. "I quickly learned that Grand Rapids has a rich and deep history of collaboration, but where Grand Rapids is unique compared to other places where they talk about collaboration, here that talk is always followed up with real action."

He said when they became autonomous again, they were presented with an opportunity for grant money allowing them to write a new five-year master plan, which was adopted June 2017.

Marquardt said throughout the process of creating the new master plan, "We were

able to reenergize and reengage very good park supporters who never went away, but weren't quite as engaged" in the transition time. Major support came from local organizations like family foundations or Friends of the Grand Rapids Parks.

Marquardt said the parks department also has a lot of partners in the health care world who helped with the planning. He said the health care partnership is "primarily led by Kent County Health Department working through the federal REACH grant, which provides funding to support and invest in lower income neighborhoods." He said they've also engaged in better collaboration with neighborhood associations to reach specific demographics and ensure the city is responding to their recreational needs.

#### **Friends of Grand Rapids Parks**

Marquardt said the Friends of Grand Rapids Parks organization started 10 years ago and "were instrumental in holding up to city leadership the importance of parks during those reductions."

In 2013 they established smaller neighborhood Friends of the Parks groups or NP3's, which concentrate on pools and programming in specific neighborhoods. There are reportedly 13 registered neighborhood associations in Grand Rapids and a handful of others not registered. These friends groups helped to get a millage on the ballot in 2012 dedicated to parks, which provided \$3 million for park improvements and less than a million dollars to keep three city pools open and operating.

#### **Partner organizations**

Grand Rapids has an extensive list of collaborative partners to help support the 2,000 acres of park-owned land, including 74 parks and six city-owned cemeteries. Those partners include Grand Rapids Public Schools system, Friends of Grand Rapids Parks, neighborhood associations, health care organizations, business partners, family foundations, downtown Grand Rapids organizations and others.

Marquardt said the parks department and the Grand Rapids Public Schools system entered into a joint—use agreement in the 1980s.

"Through our shared resources we're committed to helping one another," he said. "For example, the school system allows us to use its pool in winter to train lifeguards, and we allow the school to use parks and gym spaces after school."

He said businesses stepped up when they were undergoing major cuts. A real estate company committed resources to maintain Veterans Memorial Park. Spectrum Health, meanwhile, has taken care of the annual maintenance of Crescent Park.

"It's near its facility and gives its employees respite from daily work," Marquardt said.

The Downtown Grand Rapids Development Authority has been a "key partner in our downtown park." He said the downtown Grand Rapids organization hosts a summer series called Movies in the Park on Friday nights and actually runs the program.

"The park is by the river and the place is packed on Friday nights," he said. "This is a great example of energizing and getting people involved in the parks, too. They've really stepped up."

He said the downtown development district has to use revenue collected in the downtown in that area for the benefit of the community so this partnership brings benefits to both parties.

#### Minneapolis, Minn.

Minneapolis is another city that has numerous partnerships and collaborations, and it's likely a contributing factor in helping the city earn the distinction of being ranked as the No. 1 park system by Trust for Public Land Use in 2013, 2014, 2015, 2016 and 2017.

Jayne S. Miller is the park superintendent for Minneapolis and shared some of the department's bigger partnerships. One that has proven to be especially successful and popular with residents is the collaboration with local restaurants for concession operations.

In 2004 Miller said they took one concession stand and converted it and sent out requests for proposals to have local restaurants operate it. They now have four local restaurants operating concessions at parks and are on the verge of two more. The parks are around lakes so they're open only six months of the year. "The agreement states we get 12 percent of the revenue generated, and they also put money into an escrow account for the physical maintenance and upkeep of the building," Miller said.

She added that even though the parks department owns the buildings, making sure they're well-maintained and aesthetically pleasing helps the restaurants' business as well.

"It's a huge source of revenue for us and has become a destination in the parks—people will stand in line and wait—it's become incredibly popular," she said.

Miller said the concession operations agreement with restaurants has generated \$1.7 million in revenue. Beer and wine is served at these locations.

"Every one (of the concession stands) is done by a local restaurateur, not a franchise, so they have their own unique menus," Miller said.

Minneapolis Parks also has partnerships with sailing clubs on three of the 22 lakes in the city-owned parks. They have kayak racks where people can leave their kayaks versus carrying them back and forth in addition to sailing schools operated by the sailing clubs. ►

Authority. It takes place at Ah-Nab-Awen Park on the Grand River in Grand Rapids, Mich. (Photo provided)



#### Arts in the parks

A 30-year-long agreement with Walker Art Center has provided the city an internationally renowned sculpture garden, with Miller noting, "We own the land and maintain landscaping and flower beds, and they provide the outdoor art sculptures."

The sculptures do change from time to time, and Miller said they're about to provide 70 new pieces of art for the grand reopening of the sculpture garden.

The parks department also has a partnership with composer Andre Fisher where he brings mobile jazz into the parks, does concerts and offers lessons for children.

Minneapolis offers a summer concert and movies in the park series with over 200 concerts and 70 movies offered free to the public. Sponsors help defer the costs.

Miller said they have "tons" of friends organizations and mentioned two, including People for Parks, which was formed in 1981 in response to a tornado that destroyed numerous trees — the organization ultimately replaced them. People for Parks continued on and now provides micro grants for staff education and maintenance.

The Minneapolis Park Foundation is another nonprofit organization that helps with large capital projects. Right now it is working on a vision plan for the riverfront, and it secured \$17 million in private donations. The two projects currently being worked on are Waterworks, which will reconstruct the old Mill Ruins Park, and 26th Avenue.

Miller said there is a men's and women's garden club that helps take care of the gardens in the parks and numerous other friends groups that assist with the large park system, including 6,804 acres of park land and 179 parks, 394 athletic fields, 63 outdoor ice skating rinks, 12 beaches, 15 miles of cross country trails and 163 miles of walking trails. Minneapolis' park and recreation department has \$112 million annual budget.

#### **Building relationships**

Both Marquardt and Miller said the key to beginning and maintaining successful partnerships is building relationships.

"A lot of it is thinking about who you already have good relationships with and building off of that," Miller said. "When it comes to the private sector, (find) who is doing similar work that you want to accomplish and partner with them."

"It begins with honest, trusting relationships with community members to get the greatest success," Marquardt said. "Once that relationship is established, it's far easier to make a request or ask for help—whether it be financial or something they're knowledgeable about."

Marquardt said it's helpful to have city leadership on your side when entering into these partnerships, and it's helpful to have the partner organizations tell city leadership, "This is something important to us—we want to get engaged." He also suggested building a deeper understanding of the worth of the park system.

Sometimes volunteer organizations can be passionate at the onset of a project, but long-term maintenance can often fall on the city's shoulders. Marquardt was asked how to handle a situation like that.

He replied, "There's no built-in safeguard, and long-term maintenance can be a concern when projects are at the grassroots level. One solution we've found is to have the Friends of the Parks organization



The Bread and Pickle Restaurant is one of the restaurants that has taken over park concessions for Minneapolis' parks department. Its location is at Lake Harriet Park in Minneapolis, Minn. (Photo provided)



The band shell in the park at Lake Harriet Park was one of the projects supported by People for Parks in Minneapolis, Minn. (Photo provided)

build a stewardship group, which resonates more in some parts of the city than doing the volunteer work."

He said stewardship is a big part of the new five-year master plan. One example is getting people comfortable with looking at parks differently so it's less about having a perfectly manicured green space and more about "natural beauty and wildlife."

Maintaining those relationships long term means staying in contact with the organizations and businesses.

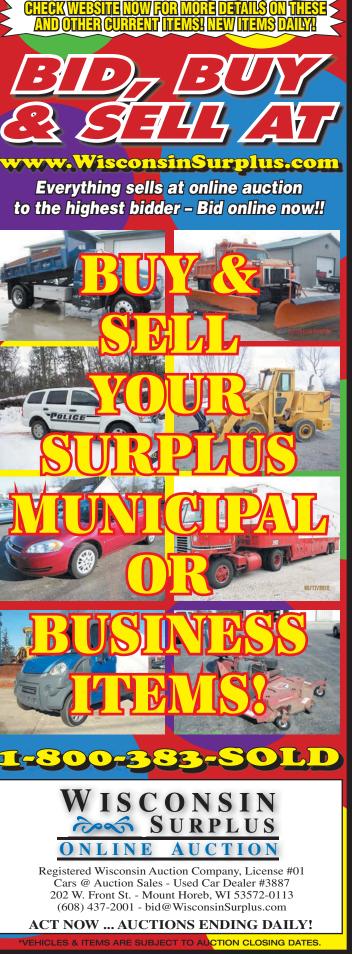
"Working with them on a day-to-day basis," Miller said. "You just can't wait till the agreement runs out to communicate."

Marquardt also advised attending meetings of the partner organizations whenever possible.

Miller said good communication, making sure the agreement is clear to both parties and staff support is key to her city's successful agreements.

Marquardt said he is pleased with the engagement of the residents, but there's always room for more. "I'd like to get more Grand Rapids citizens involved in caring for the parks. Boots on the ground, hands in the earth involvement."





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

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

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March 5-9 International

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March 6-9 NUCA Annual

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March 6-9 The Work Truck

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March 11-14 NLC Congressional

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#### FEBRUARY

Feb. 11-13 NYCOM Winter Legislative Meeting Hilton Albany, Albany, N.Y. www.nycom.org/meetingstraining/conferences.html

Feb. 11-14 DRI2018 Gaylord Opryland Resort and Convention Center, Nashville, Tenn. driconference.org

Feb. 21-23 EMS Today: The JEMS Conference and Exposition Charlotte Convention Center, Charlotte, N.C. www.emstoday.com

Feb. 21-24 WWETT 2018 Indiana Convention Center, Indianapolis, Ind. www.wwettshow.com

Feb. 26-March 1 2018 ARFF Chiefs & Leadership Orlando, Fla. arffwg.org

Feb. 27-March 2 Missouri Park & Recreation Association Conference and Expo Tan-Tar-A, Osage Beach, Mo. www.mopark.org

Feb. 27-March 1 Wildland Urban Interface 2018 Peppermill Resort, Reno, Nev. www.iafc.org/events/wui

#### MARCH

March 5-7 MSTPA 2018 Annual Conference and Trade Show Embassy Suites, Huntsville, Ala. www.mstpa.org/annualconference.html MARCH

March 22-24 Mid-America Trucking Show The Kentucky Exposition Center, Louisville, Ky. www.truckingshow.com

March 25-29 NASTT No-Dig Show Palm Springs, Calif. nodigshow.com

#### APRIL

April 5-6 Labor-Management Alliance Conference Denver, Colo. www.iafc.org/events

April 11-12 New England Parking Council Annual Conference and Trade Show Providence, R.I. newenglandparkingcouncil.org

April 18-19 National Fire and Emergency Services Symposium and Dinner Washington Hilton and Towers, Washington, D.C. www.cfsi.org/2018-dinner/

April 22-24 Fire Department Training Network Spring Live-Fire Training Camp Indianapolis, Ind. www.fdtraining.com

April 23-26 WasteExpo Las Vegas Convention Center, Central Halls, Las Vegas, Nev. www.wasteexpo.com

April 23-28 FDIC International 2018 Indiana Convention Center and

Lucas Oil Stadium, Indianapolis, Ind. www.fdic.com

#### APRIL

April 24-26 Navigator 2018 Las Vegas, Nev. navigator.emergencydispatch.org

April 24-27 NAFA Institute and Expo Anaheim, Calif. *nafainstitute.org* 

April 25-27 2018 Parking Association of Georgia Conference Marriott and Convention Center, Augusta, Ga. parkingassociationofgeorgia.com

April 26-28 The "Summit" Conference Coeur D'Alene, Idaho emsassociates.com

April 30-May 3 Advanced Clean Transportation Expo Long Beach Convention Center, Long Beach, Calif. www.actexpo.com

#### MAY

May 3-5 VOCS Symposium in the West Phoenix, Ariz. www.iafc.org/events

May 7-10 AWEA WindPower Chicago, Ill. www.windpowerexpo.org

May 6-8 NYCOM Annual Meeting and Training School Gideon Putnam Hotel, Saratoga Springs, N.Y. www.nycom.org

May 6-9 North American Snow Conference Indianapolis, Ind. www.apwa.net

Atlanta, Ga.

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#### New guide for planning, designing and implementing green infrastructure in parks now available

**ASHBURN, VA.** — The National Recreation and Park Association announced the release of "A Resource Guide for Planning, Designing and Implementing Green Infrastructure in Parks." The new guide, which draws on lessons learned from the Great Urban Parks Campaign pilot projects, was created in partnership with the American Planning Association and Low Impact Development Center.

Communities everywhere face challenges as a result of a changing climate — especially those most vulnerable to flooding. To help address these challenges, this new guide provides basic principles, inspiration and ideas to help planners, designers and decision-makers integrate green stormwater infrastructure into parks and park systems across the country. Additional resources, including technical guides and webinars, and a completion checklist, are also available, along with briefing papers and case studies that detail issues related to financing, park system planning, community engagement and equity.

"Parks are a smart and effective solution to many of the challenges associated with a changing climate," said Lori Robertson, NRPA director of conservation. "Our hope is more communities will discover these benefits through the use of this guide, and the implementation of green stormwater infrastructure projects in parks across the country."

To access the new guide, visit www.nrpa.org/greeninfrastructure. To learn more about NRPA, visit www.nrpa.org.

#### Borough of Fair Haven administrator elected president of the New Jersey Municipal Management Association

**NEW BRUNSWICK, N.J.** — The membership of the New Jersey Municipal Management Association recently elected Theresa S. Casagrande, borough administrator of Fair Haven, N.J., as its president for 2018. Casagrande, as well as the rest of the 2018 slate officers and executive board members, were officially installed at the organization's annual awards luncheon, which took place during the New Jersey State League of Municipalities conference in Atlantic City in mid-November. Her oath of office was administered by Fair Haven Mayor Ben Lucarelli.

"During my presidency, our elected officials in Trenton will know the vital role that professional managers and administrators play in municipal operations, and that their focused and consistent leadership helps our municipalities effectively manage the delivery of services while ensuring efficient local operations," said Casagrande to more than 165 professional peers during her keynote address at the luncheon. "NJMMA members collectively represent the talent, education, expertise, and, most importantly, the commitment that will be needed to resolve the many issues that our great state will face in 2018 and beyond."

Casagrande, a municipal management professional since 2005, has been an active member of NJMMA since 2009 and its executive board since 2012. She has served as Fair Haven's borough administrator since 2011, following an extended tenure in Spring Lake Heights. She holds both a Bachelor of Science and Master of Business Administration degree from Monmouth University. Casagrande is also a New Jersey-licensed municipal clerk and a certified tax collector.

In addition to her position in Fair Haven, Casagrande was a founding member and served as the vice chair of the Southeast Monmouth Municipal Utilities Authority, a group of five municipalities that purchase and process drinking water. She was previously recognized by NJMMA for her work in Spring Lake Heights, where she negotiated five separate shared services agreements. She has continued those efforts in Fair Haven where she presently has multiple shared service agreements with neighboring communities.

#### **NAFA Institute and Expo**

**PRINCETON, NJ** — NAFA Fleet Management Association, the vehicle fleet industry's largest trade association, launches an all-new NAFAInstitute.org website for the association's annual conference, the Institute & Expo. Key additions to the site offer easier access to information with customization options, intuitive navigation and exclusive, first-look access to I&E details.

The new NAFAInstitute.org features a fresh, new look with responsive layout for all Internet platforms. NAFAInstitute.org provides more resources and information on I&E's events and education, and offers a best-in-class experience for users not only up to and including the conference, but year-round.

NAFA's 2018 I&E takes place on April 24-27, 2018, in Anaheim, Calif. The all-new www.nafainstitute.org provides the full spectrum of I&E information including:

- Intuitive online agenda with information filtering for greater accuracy in conference experience planning
- Interactive floorplan of the 2018 expo hall
- Comprehensive attendee toolkit that offers proven approvalsecuring information
- · Responsive design for mobile users
- Exclusive first-look announcements about keynotes, special events and networking opportunities
- Enhanced Fleet Excellence Awards nomination and information section

"In keeping with the benefits of the refreshed www.nafa.org website from earlier in 2017, www.nafainstitute.org has absorbed the clean design and ease-of-use that members favored," said NAFA CEO Phillip E. Russo, CAE. "The new nafainstitute.org provides an optimized user experience that enables visitors to find the information they need quickly and efficiently."

Attendees can register today at the official conference website: NAFAInstitute.org. ■

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. 2307**, or email **swright@the-papers.com**.

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## Most dangerous bridges in the U.S.

The American Society of Civil Engineers' 2017 Infrastructure Report Card gave the U.S.'s bridges a C+ grade, and as for the potential impact on Americans, the American Road & Transportation Builders Association notes on its website, "There are 185 million daily crossings on nearly 56,000 structurally deficient U.S. bridges."

Auto Insurance Center used ARTBA's state bridge profiles from Federal Highway Administration's 2016 National Bridge Inventory Data, which was released in February 2017, to determine the U.S.'s most dangerous bridges in each state. Additionally, it compiled lists of states with the busiest

structurally deficient bridges (D.C. topping that list), states with the most new bridges (tip of the hat to Utah), states with the most proposed bridge replacements (New Hampshire is leading that pack), to name a few.

This month The Municipal is sharing the most traveled structurally deficient bridges within our coverage area.

As noted on Auto Insurance Center's website, "Specific conditions on bridges may have changed as a result of recent work."

**ELEN** Florida — Fuller Warren Bridge in Duval County Georgia — I-285 over South Utoy Creek in Fulton County Illinois — I-55 over Lemont Road in DuPage County Indiana — I-65 CD over New York St. in Marion County Iowa — Centennial Bridge in Scott County

Kentucky — I-65 Southbound off-ramp over I-64 Westbound Ramp River Road in Jefferson County

Michigan - Second Boulevard over I-94 in Wayne County

Minnesota — TH-36 over Lexington Ave (CSAH 51) in Ramsey County

Missouri — I-270 East over Conway Road in St. Louis

New York — Route I-278 over Relief in Richmond County

North Carolina — Greensboro Bridge in Guilford County

Ohio — Ramp Eastbound 35 to Northbound 75 over Ramp US-35 East I-75 North in Montgomery County

Pennsylvania — Delaware Expressway over Palmer-Cumberland Streets in Philadelphia

South Carolina — I-85 over Trib. Laurel Creek in Greenville

Tennessee — I-24 over Mill Creek in Davidson County

Virginia — I-264 over Lynnhaven Parkway in Virginia Beach

West Virginia — 1-64 Westbound lane and Eastbound lane over Creek 61/12 in Kanawha County Wisconsin — I-94, US-12 over S-35 Southbound in St. Croix County

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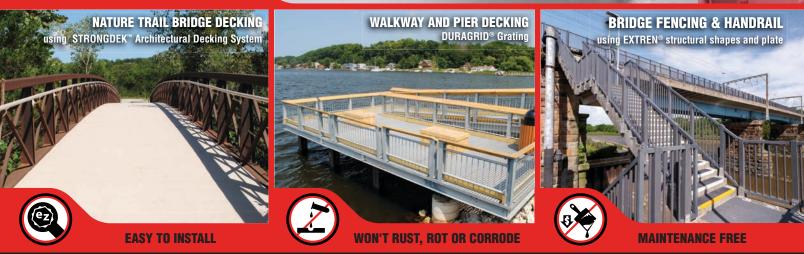
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