

THE MUNICIPAL

The Premier Magazine For America's Municipalities

September 2016

GOING GREEN



INSIDE:

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“Green” still calls to cities



Sarah Wright | Editor

WHEN I WROTE AN ARTICLE on a SWAT armored vehicle back in February 2012, I can safely say I never saw myself where I am today: editor. Some of you might be familiar with my byline; I have written on a variety of topics, from public safety to pension reform, during three years. Some of you might have even received a phone call or email from me in regards to those articles. Having been involved with *The Municipal* ever since the second issue produced by The Papers Inc., I have had the privilege of speaking with many knowledgeable, passionate people who keep municipalities moving. And in a backstage capacity, I have also been *The Municipal's* copy editor for a year or two, serving under Jodi Marlin.

Jodi has definitely left big shoes to fill, but I hope to follow her example and continue to provide informative stories that are relevant to our varied readership while also showcasing the latest products in the industry.

For September, in particular, we will be focusing on “green” practices and technology. “Going green” has been a buzzword for so long, its meaning has become diluted. It’s no longer a discussion that focuses solely on how to be more ecologically friendly, but also how to reduce energy usage, incorporate alternative sources of energy into processes, utilize replaceable, i.e., “sustainable,” materials in building and more.

This month, *The Municipal* shines the spotlight on several cities that are finding savings as they make the move to “greener” practices. For instance, East Rockaway, N.Y., is expecting

to save more than \$2 million during the course of its 18-year term of energy performance contract after it retrofitted seven municipal buildings. Other cities have also gotten on board with retrofitting as seen in writer Anne Meyer-Byler’s article on page 26. Other cities and organizations are monitoring their energy usages to find areas where they can save money, with writer Denise Fedorow finding Energy Star offers many programs to help do that, including an energy treasure hunt. More on that is available on page 38.

Not far removed from “Going Green” topics are the methods by which a community can improve its ability to return to normal after a disaster. Whether by snow, ice, hurricane, flood or tornado, at one time or another Mother Nature interrupts normal daily operations for all of us.

As soon as commerce can resume in any disaster zone, the area is considered to have rebounded. Municipal leaders are looking for ways to make this happen quickly; they’re looking for processes and plans that will make their community more resilient, including alternative energy sources like solar power. “Resilient” is a word being used nowadays to mean the ability to return to normal in a short period of time. The keys to resiliency are still being sorted out, but they seem to include policy, emergency planning and response, infrastructure, financial planning and environmental management.

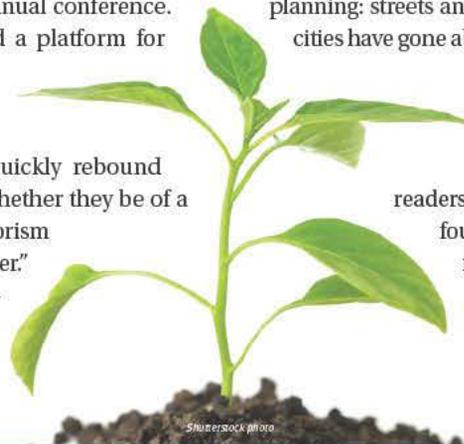
Recently, a National Association of County & City Health Officials conference took on the topic at its annual conference. The event “provided a platform for sharing exciting new ways to build communities able to withstand and quickly rebound from emergencies whether they be of a health, weather, terrorism or other type of disaster.” Dr. LaMar Hasbrouck, executive director, National

Association of County & City Health Officials, spoke about ways partnerships can be leveraged to improve resiliency. He cited an innovative partnership with the U.S. Department of Housing and Urban Development, the Rockefeller Foundation and the international organization 100 Resilient Cities as an example of such a partnership.

Marion Mollegen McFadden, HUD deputy assistant secretary for grant programs, and Andrew Salkin, chief operating officer of 100 Resilient Cities, also discussed their collaboration on the National Disaster Resilience Competition, which aims to aid states and local communities in recovering from disasters while helping them bolster their ability to withstand future emergencies. Participants shared how they worked together to overcome obstacles and realize a vision of robust, flexible communities. I encourage you to learn more about the NDRC winners’ projects, which will advance their community’s resilience plans. Other partnerships involving hard-to-reach populations were discussed, and a tool to help public health practitioners build community resilience was also presented.

The increased resiliency of our cities should be at priority today. I hope you’ll take a look at at the great ideas for improvement that came out of the NDRC competition, as well as the good news reported by *The Municipal* writers on other “Going Green” topics. You might also want to make note of our “Top Ten” this month, which features Complete Street superstars that are doing great things in another category of planning: streets and infrastructure. These 16 cities have gone above and beyond.

Hope everyone is enjoying the last days of summer; it won’t be long before some of our readers are dealing with a certain four-letter word: snow. And finally, feel free to reach out to me; my inbox is always open. **M**



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The A4 Storm is able to pick up heavy materials like its larger Schwarze municipal sweeper counterparts. (Photo provided)



Schwarze takes street sweeping by storm

By JODI MARLIN | The Municipal

Superior performance and maximum maneuverability: They're two great advantages offered by the best in municipal sweepers.

Schwarze Industries offers one of the most comprehensive sweeper lines in the industry, including models for parking area cleaning, airport runway sweeping, street sweeping, milling cleanup and stormwater runoff management. The company has been a leader for 40 years in innovative and quality products for the street sweeper industry, and excels at incorporating new technology and customer demands into what it offers its loyal customers. That's about to translate into a machine that does a great job even

faster than before, and can handle some heavy lifting to boot.

The new Schwarze A4 Storm goes beyond the existing A4 Storm to a whole new level. The A4 Storm was launched in 1998 to fill a unique niche between the A7 Tornado street sweeper and the SuperVac Gale Force heavy-duty parking lot sweeper.

The current A4 Storm contains some of the heavy-duty parking lot sweeper's attributes, like size and maneuverability, but has also adopted the ability to sweep heavier materials in multiple applications.

The new A4 Storm has a new high-performance sweep head and fan housing that are both exact scale-models of the A7 Tornado. The hopper, while retaining the mid-dump style, now dumps at a full 77 inches. The previous models' metal toolboxes are replaced with larger, corrosion-resistant polymer toolboxes; and the standard water system can be supplemented with an optional additional 45-gallon tank, taking the unit's capacity from 130 gallons to 175 gallons. A secondary screen access door allows easy screen cleaning from outside of the hopper.

On dual steer units, the control console mounting has been redesigned to



When operating from either the left side or right side of the cab, the control console on the A4 Storm allows easy access and ergonomics. (Photo provided)

The hopper dumps at a full 77 inches and features a separate access door for easy hopper screen cleaning. (Photo provided)

allow better access and ergonomics when operating from either the right or left side operator position.

When it comes to features and performance, the A4 Storm meets or exceeds all similar competitor models in key performance categories, including dump height, water capacity, broom size, sweep width, ergonomics and, above all, sweeping performance.

With its short wheelbase, high maneuverability and full-size sweeper performance, the A4 Storm is uniquely positioned to excel at construction site cleanup where space is limited. In municipal applications it can operate in heavy spring cleanup or curb and gutter cleaning in limited space areas, such as town squares and malls. Of course, with its 70 mph travel speed, getting to distant job sites quicker is also possible.

The new A4 Storm is truly a full-size street sweeper in a compact, super-maneuverable package. The A4 is the optimal municipal and contractor street sweeper wherever heavy spring cleanup and construction performance is needed but size and maneuverability are critical. The A4 Storm may also

be operated without any special licenses, making it the perfect choice for contractors without a full CDL work force.

Don't miss the unveiling of the improved Schwarze A4 Storm at PWX, the 2016 American Public Works Association Congress, in Minneapolis, Minn., Aug. 28-31. 

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The enhanced Schwarze A4 Storm is truly a full-size street sweeper in a compact, super-maneuverable package. (Photo provided)



A town of 13,605, McMinnville, Tenn., is known as the "Nursery Capital of the World" and is within one day of shipping to 80 percent of people east of the Mississippi. (Photo provided)





‘Nursery capital of the world’

McMinnville, Tenn.

by RAY BALOGH | The Municipal

McMinnville, Tenn., sits in the eye of a perfect storm of fortuities, meriting the town of 13,605—and its contiguous five-county area in central Tennessee—the designation as “Nursery Capital of the World.”

The “concatenation of circumstances,” according to Dr. Nick Gawel, superintendent of the Otis L. Floyd Research Center at Tennessee State University’s McMinnville campus, includes “geographical location, fortuitous environmental diversity and moderate climate.”

McMinnville, the county seat of Warren County, is “within one day of shipping to 80 percent of people east of the Mississippi,” said Gawel. “Most of our product is going north and east.”

By “product” he means the thousands of varieties of trees, bushes, ornamentals, flowers and crops harvested by the 500 state-certified growers in the five-county region. All told, nurseries cultivate 55,000 acres of fertile Tennessee soil, producing 19 million containers of plants every year.

The central Tennessee climate is ideally suited to sustain the industry. As Philip Pelham, president of Cumberland Valley Nursery, put it, “If you go any further south, the climate is too hot, and if you go north, the growing season is too short.”

The Otis L. Floyd Research Center at Tennessee State University’s McMinnville campus aims to strengthen and expand Tennessee’s nursery industry through innovative research and extension programs. (Photo provided)

Family tradition is also a factor in the area’s success as the “Nursery Capital of the World.” Some nurseries are in their fifth generation of family ownership since the appellation stuck in 1887.

“You’ve got some people who because their parents or grandparents did some of this specialized work back in the early days, they’ve continued it,” said Mike Hobbs of Warren County Nursery.

The abundance and variety of the product paired with marketing and distribution systems streamlined over many decades yields price breaks found almost nowhere else. The economic impact of the nurseries, from mom-and-pop operations to sprawling corporate enterprises, amounts to \$400 million annually for Tennessee, with \$90 million of that total generated in Warren County alone. ▶

“It’s a great industry. It’s a lot of fun being centered around something with aesthetic value.”

The research center, which Gawel has headed since its inception in 1997, employs about 25 scientists and annually contributes \$20 million of know-how and technological benefits for growers around the nation.

The center’s “genesis lies in the nursery industry itself,” remarked Gawel. “Visionary growers knew ‘we have a great thing going here.’ Sales were going great and the growers wanted a facility dedicated to their needs, all summed up in one spot. So they lobbied one of the U.S. senators and got some money appropriated, and they amassed an arsenal of money and resources.”

Gawel was employed as a plant breeder at TSU’s main campus in Nashville when he was tapped to lead the newly established research facility.

He loves his job. “It’s a great industry. It’s a lot of fun being centered around something with aesthetic value,” he said.

The “generally accepted version” of how the area acquired its moniker begins with the mysterious deaths of several cows in 1887. The animals died after seeds of the mountain allspice plants blocked their small intestines.

The farmers enlisted the help of some New York scientists, who, while determining the cause of death, developed a fascination with the allspice plant. They purchased a bushful of seeds for \$5.

The cows’ owner, John Henry Harrison Boyd, offered more of the seeds in a local farm journal and word spread around the world. Boyd began receiving orders from Germany, France, England and Japan, and the industry was born.

Boyd expanded his business to selling trees and other plants. Business mogul George Vanderbilt bought 1 million trees from Boyd to plant on his 146,000-acre Biltmore Estate in Asheville, N.C.

Boyd and subsequent generations never looked back.

Gawel has seen a couple notable trends during his two decades at the helm of the research center.

“We’ve seen an increase in attention to environmental concerns,” he said. “Growers are actively trying to reduce pesticides. We are the state’s true green industry and growers understand that as well.”

He noted a “greater attention to scouting insects and disease” and enticing them away from the crops rather than killing them outright. In battling the harmful pests, insecticide sprays tend to also inflict casualties on 90 percent of the innocent bystanders that are beneficial to or benign toward the vegetation.

The other trend is increasing water-use efficiency, said Gawel. “We are very diligent in understanding water is a limited commodity,” even though the area abounds in the natural resource.

“It all comes under the big umbrella of sustainability,” Gawel said.

Sustainability is one of the research center’s seven departments, the others being entomology, genetics, horticulture, pathology, chemical ecology and nursery extension. **M**

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TOP: McMinnville’s location is ideal for nurseries due to its moderate climate. In fact, the economic impact of the nurseries amounts to \$400 million annually for Tennessee, with \$90 million of that total generated in Warren County alone. (Photo provided)

BELOW: The bulk of McMinnville’s and central Tennessee’s nursery products end up going north or to the east. In all, nurseries in a five-county region, which includes McMinnville, produce 19 million containers of plants every year. (Photo provided)



McMinnville’s nurseries, along with others in a five-county region, grow thousands of varieties of trees, bushes, ornamentals, flowers and other crops, which are harvested by 500 state-certified growers in a five-county region. (Photo provided)



Zackquill Morgan:

Morgantown, W.Va.

Several rival factions—including settlers, Native Americans, the English and the French—grappled over possession of the land now known as Morgantown, W.Va., until Zackquill Morgan (1735–1795) literally settled the matter for good.

Morgan served honorably in the French and Indian War and attained the rank of colonel in the American Revolutionary War, commanding a 600-man militia in Virginia.

Morgan and his older brother David arrived in the area around 1767 in the latest of several attempts to establish a settlement.

In 1772, Fort Morgan was established—one of several fortifications that dotted the nearby landscape—on the present site of the city of more than 31,000 residents.

The Virginia Assembly chartered the town, first called Morgan's Town, on Oct. 17, 1785, appropriating, at Colonel Morgan's request, 50 of his 400 acres to plat the municipality.

The land was sold in half-acre plots—the deeds required purchasers to build a small house within four years—and the Virginia town, then 700 residents strong, was incorporated in 1838.

The town became part of the newly created state of West Virginia in 1863.

Several of the neighborhoods that comprise Morgantown were independent towns annexed during the city's growth. The city is home to West Virginia University, which hosts approximately 30,000 full-time students. The wider metropolitan area boasts a population of almost 120,000.

Zackquill Morgan's home served as the county seat of Monongalia County and also housed the county court pending construction of a courthouse in the public square. He also opened the town's first tavern in 1783.

Morgan married Nancy Paxton in 1755. They had four children during their seven-year marriage before she passed away in 1762. Three years later he wed Drusilla Springer; together they had 11 children.

Morgan died in 1795, leaving behind a modest estate of about \$60,000 in today's money. Included in his estate inventory: 20 livestock, including horses, cows, pigs and sheep; a pair of "plow irons"; a few pieces of household furniture; some essential kitchenware, including "seven pewter plates and one pewter salt seller... one old tea kettle... one old iron kettle and hooks" and a couple other pots and pans; and a suit of clothing. **M**

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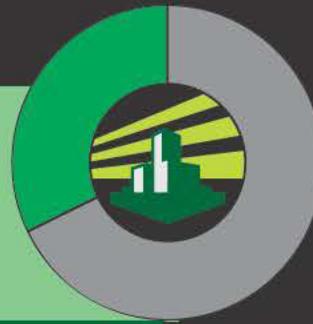
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“Cities are leading the way to a more sustainable environment—they’re not waiting for state or federal governments to do something.”

Read more on page 30

SUSTAINABILITY

THIRTY-TWO PERCENT of local governments have adopted a sustainability plan, according to a national survey of U.S. cities and counties. Of those jurisdictions, 68 percent indicated that those plans contain goals or strategies related to economic development. Other plan priorities include energy conservation—60 percent—and disaster mitigation—48 percent.

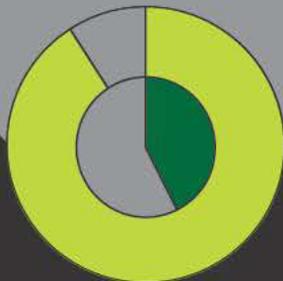


Source: icma.org/en/ICMA/knowledge_network/documents/kn/Document/308135/2015_Local_Government_Sustainability_Practices_Survey_Report?diff=lastapproved

COMMITMENT TO ENVIRONMENTAL PROTECTION

A plurality of local governments—**47 PERCENT** identified environmental protection as an overall community priority; but this is in contrast to the nearly **91 PERCENT** that identified economic development as a key community issue.

Source: icma.org/en/ICMA/knowledge_network/documents/kn/Document/308135/2015_Local_Government_Sustainability_Practices_Survey_Report



RETROFITTING

55,000

The number of streetlights Hempstead, N.Y., has retrofitted with LED lights. The city expects to see a total net utility and operational savings of \$43.1 million after factoring in all costs over a 20-year period.



Learn more on page 26

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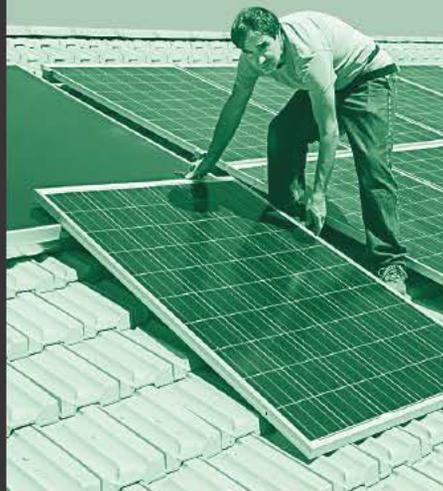
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ALTERNATE ENERGY

\$16.3 billion

In 2015, new U.S. photovoltaic installations were valued at \$16.3 billion, an increase from the \$5.3 billion value of installation in 2010. Solar jobs have also grown 123 percent, adding more than 115,000 jobs for a total of about 209,000 solar workers.



Read the whole story on page 34



ENERGY USE FOR WASTEWATER TREATMENT

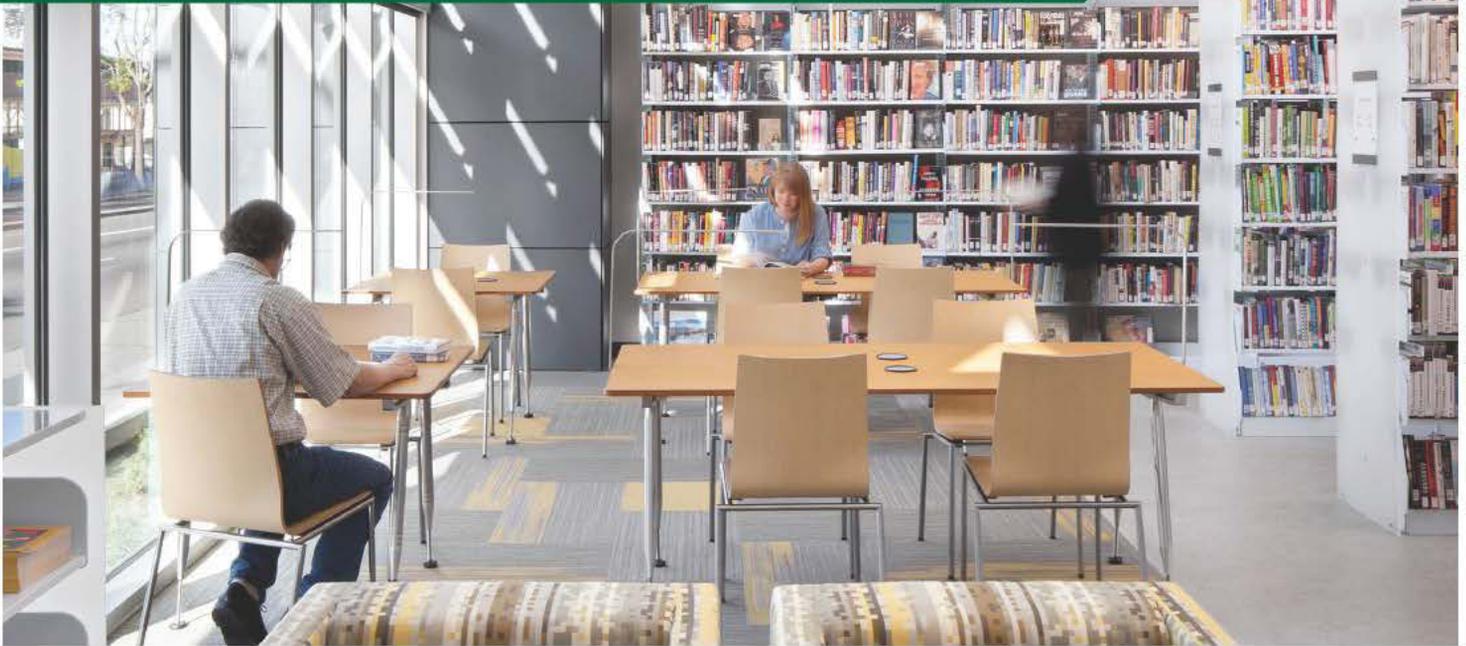
5-50kBTu/gallon per day

Energy use intensity across all wastewater treatment plants in the U.S. ranges from less than 5 to more than 50 kBTu/gallon per day, with those at the 95th percentile using nine times the energy of those at the fifth percentile. The distribution has a negative skew, which means the most energy intensive plants are further away from the median than the most efficient. Plants may use more or less energy for many reasons, including variable equipment efficiency and energy management practices, as well as variations in climate and business activities

Source: www.energystar.gov/sites/default/files/tools/DataTrends_Wastewater_20150129.pdf

Berkeley, Calif.:

Spotlight on sustainability and environmental management



by ANNE MEYER-BYLER | The Municipal

JOY BROWN IS AN EXPERT IN SUSTAINABILITY and environmental management, given her title as environmental compliance specialist for the Public Works Department in Berkeley, Calif. Brown shared that Berkeley has a Climate Action Plan that outlines the path the city is taking to become more sustainable. It describes a future in which:

- New and existing Berkeley buildings achieve zero net energy consumption through increased energy efficiency and a shift to renewable energy sources such as solar and wind
- Public transit, walking, cycling and other sustainable mobility modes are

the primary means of transportation for Berkeley residents and visitors

- Personal vehicles run on electricity produced from renewable sources or other low-carbon fuels
- Zero waste is sent to landfills
- The majority of food consumed in Berkeley is produced locally
- The Berkeley community is resilient and prepared for the impacts of global warming
- The social and economic benefits of the climate protection effort are shared across the community

As for which “green” building ideas were the most cost effective, Brown responded with

energy efficiencies. “Energy use in residential and commercial buildings is a major source of greenhouse gas emissions and a major expense. Not only do energy efficiency improvements provide the most return on investment, they also substantially reduce greenhouse gas emissions.”

Net-zero energy use is not an impossible goal for cities either, with the proper planning. Brown said, “The city of Berkeley worked diligently on its new West Branch Library, which is the first certified net-zero energy library in California and only the third municipal building of its kind in the nation. It actually produces enough extra electricity to power two average-sized Berkeley homes for a year. It is also LEED certified Platinum.”



LEFT: Certified LEED Platinum, Berkeley Public Library – West Branch actually produces enough extra electricity to power two average-sized Berkeley homes for a year. (Photo by David Wakely)

ABOVE: Berkeley Public Library – West Branch, located on University Avenue, is California’s first net-zero energy library. (Photo by David Wakely)

And when it comes to green roofs in building plans, Brown answered, “When the city of Berkeley’s new animal shelter was built, a living roof was part of the design. Living roofs reduce stormwater runoff, provide a layer of insulation improving energy efficiency, reduce heat island effect and increase the longevity of the roof by protecting it from UV rays.”

When designing a living roof, she noted several factors need to be considered:

- drainage
- fire hazards and access
- safety
- wind uplift
- visual impacts
- maintenance

An irrigation system will be needed for fire suppression and to establish the plantings.

Solar panels, on the other hand, are becoming more cost effective with time. It may be quite difficult to add them to already existing buildings, given funding, but it is definitely worthwhile evaluating their use on new buildings. The energy savings over time will offset the investment costs.

When beginning to plan new buildings with green aspects, Brown advised, “Evaluate municipal code and work with the business community to make green buildings a requirement. We provide voluntary green building consultations to help improve projects. The city of Berkeley requires all major remodels or new construction of city

buildings to meet LEED Silver certification and new buildings or additions in the downtown area require LEED Gold or equivalent. Additionally, the city has a Building Energy Saving Ordinance that requires Berkeley building owners to complete energy efficiency opportunity assessments and publicly report the building’s energy efficiency information, which is required prior to the sale of a house or whole building.”

When wanting to build an environmentally smart building, one of the most common mistakes is not incorporating green building practices early enough in the planning stages of a project. For this reason, it is important early on to decide if the project is going to be LEED certified or not. ▶

Cities need to ask the following questions:

- Are you using an environmentally preferable purchasing policy?
- Does the project provide an opportunity to promote clean transportation options such as cycling, walking, transit, car sharing and/or electric vehicles?
- What elements did the design team include in the project to achieve energy and water efficiency and to minimize solid waste disposal, including construction and demolition debris?
- Does the project minimize the need for irrigation and, when irrigation is necessary, utilize water-efficient irrigation systems?
- What considerations were given to mitigating stormwater runoff?
- What considerations were given to how the project could be affected by the impacts of climate change, such as sea-level rise, water resource constraints and extreme heat events?
- How does the project minimize effects on natural habitat?

ON THE WEB



Check out Berkeley, Calif.'s action plan, ordinance and green building requirements via the following links:

www.cityofberkeley.info/EnergyOrdinanceUpdate

www.ci.berkeley.ca.us/Green_Building_Requirements

www.cityofberkeley.info/climate

- If the project involves leased space, how are the tenants and landlord encouraged or required to increase energy and water efficiency and solid waste diversion?

Now take a step back and look at how agencies in your city make plans that are going to take the environment into consideration in all their projects. Brown said, "Have a plan such as our Climate Action Plan and incorporate environmental impacts into council reports. All council reports now have a section that describes any environmental impacts. The city has a Sustainability Working Group, which is a multi-departmental team

focused on further integrating environmentally sustainable practices throughout city operations. Additionally, we have annual Environmental Achievement awards that recognize staff and projects that benefit the environment and encourage a culture of sustainability throughout the organization."

She added, "To make your community sustainable, you need vision from community leaders, dedicated passionate staff, local regulations and incentives to require and support green building and sustainability, and community members who want both the economic and environmental benefits of sustainable design." 

Dona Spring Municipal Animal Shelter sports a vegetative roof, a green feature that reduces stormwater runoff, adds a layer of insulation, reduces heat island effect and increases the roof's longevity. (Provided by city of Berkeley, Calif.)



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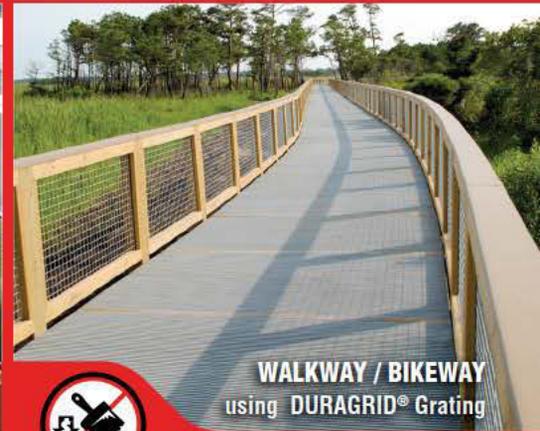
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Big savings expected from retrofitting projects



by ANNE MEYER-BYLER | The Municipal

SEVERAL CITIES ARE INVOLVED IN retrofitting old buildings and infrastructure to make them more energy efficient. East Rockaway, N.Y., was involved in several types of retrofitting by partnering with Johnson Controls, a company operating in more than 150 countries that works at energy efficiency over the lifespan of buildings.

Last spring East Rockaway upgraded 745 light fixtures to lower wattage LED lights. Additionally, they worked on seven municipal buildings, including sealing roof and wall joints; installing door weather stripping,

plus pipe and valve insulation; retrofitting lamps, ballasts and occupancy sensors for interior lighting; and installing energy-saving programmable thermostats. The infrastructure improvements are expected to reduce greenhouse gas emissions in an amount equivalent to 700 barrels of oil consumption per year.

“By partnering with Johnson Controls, the village of East Rockaway is guaranteed to save more than \$2 million over the 18-year term of the energy performance contract, the result of improvements we are making to our building envelope and infrastructure,”

said Mayor Bruno Romano. “I am excited to report that all the projects included in the contract are funded without cost to our taxpayers by the energy savings they achieve — savings that are helping the village lay a firm foundation for the future and meet our sustainability goals.”

Johnson Controls conducted the initial energy audit for work covered by the energy performance contract and is currently managing the various energy-saving projects. In addition to savings earned through the energy performance contract, the village will receive a \$32,000 rebate award for

LEFT: Town of Hempstead Supervisor Anthony Santino, Councilman Anthony D'Esposito and Receiver of Taxes Don Clavin are joined by Ricky Tripodo of Facility Solutions Group at a press conference regarding the town of Hempstead's LED lighting project and its partnership with FSG. The town of Hempstead plans on switching 50,000 of its streetlights to LED lights. The press conference was held on Hamilton Avenue in Island Park where it marked the 30,000th streetlight to be switched over to the new technology. (Photo provided by Facility Solutions Group)

“All the projects included in the contract are funded without cost to our taxpayers by the energy savings they achieve”



ABOVE: Several municipalities world-wide — like East Rockaway and Hempstead, both in New York — are switching to LED lighting — both indoors and outdoors — drawn by the energy savings and its longer lifespan. (Shutterstock)

energy-efficient lighting and lighting controls from PSEG Long Island.

Belchertown, Mass., used bonds to pay for the installation of roughly \$3.3 million worth of energy upgrades for town and school buildings in 2011, working with Siemens Industry Inc. The energy services company predicted that the upgrades will save the town \$256,000 annually for a period of 17 years. These savings are based on fuel and electricity prices for 2010. The comprehensive energy management services project was to reduce energy consumption by 20

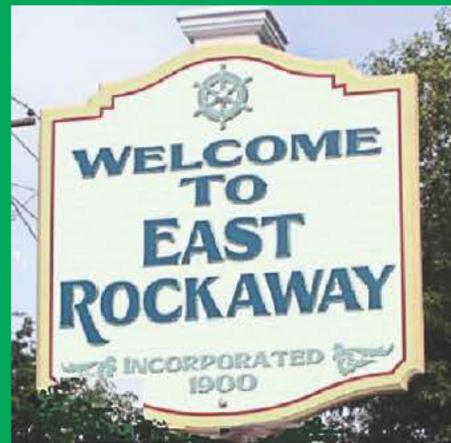
DID YOU KNOW

The new fixtures are 50 percent more efficient than those that are being replaced.



percent in the municipal buildings retrofitted: about seven school-related and eight other municipal buildings total. Jill Panto, town accountant, said, “The assessment is not yet available, but we are certain that we are seeing savings in energy usage.”

Better lighting with reduced energy is part of two projects for the town of Hempstead, N.Y. The town's 50,000 streetlights have been retrofitted with LED fixtures. They are paying \$17.7 million and plan to have a total net utility and operational savings of \$43.1 million ▶



Last spring East Rockaway upgraded 745 light fixtures to lower wattage LED lights. Additionally, the village retrofitted seven of its municipal buildings to reap energy savings. (Photo provided by city of East Rockaway)



As a part of its retrofitting, East Rockaway added pipe insulation in its boiler room. Pictured above is the before; below is the after. (Photo provided by Johnson Controls)



after factoring in all costs over a 20-year period. Private sector partner Facility Solutions Group is working with Hempstead work crews to replace the lights.

“Supervisor Anthony J. Santino has put together a trifecta in this streetlamp conversion project,” said Councilman D’Esposito. “The initiative saves taxpayer dollars, conserves energy and diminishes the town’s maintenance effort on the part of town workers due to the extensive lifespan of LED elements.”

DID YOU KNOW?

The infrastructure improvements in East Rockaway, N.Y., are expected to reduce greenhouse gas emissions in an amount equivalent to 700 barrels of oil consumption per year.



Pictured is one of East Rockaway, N.Y.’s programmable thermostats, designed to save energy. The village’s improvements are expected to reduce greenhouse gas emissions in an amount equivalent to 700 barrels of oil consumption per year. (Photo provided by Johnson Controls)

Santino observed the new fixtures are 50 percent more efficient than those that are being replaced. As a result, less greenhouse gases are created in producing energy to power LED lamps. Further, the LED units have a lifespan that is approximately 400 percent greater than high pressure sodium lamps, reducing the emissions that would be expended to manufacture replacement bulbs. Finally, a reduced carbon footprint by town vehicles and equipment will result from having to send out fewer crews for repair and maintenance calls, based upon LED’s longer lifespan.

Given the success of the outdoor streetlight project in Hempstead, Santino said



he intended to begin a project to retrofit indoor lighting in municipal buildings as well. The first phase of the supervisor’s indoor lighting conversion will witness 4,000 lamps being replaced at four town buildings — Old Town Hall, New Town Hall, The Receiver of Taxes Offices and a town office building in Merrick. Savings of \$200,000 over 10 years will occur at these facilities. Additional phases will offer further savings at other town buildings. **M**

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The greening of the roofs



This SPF roofing system was installed using rack-mounted photovoltaic systems on a metal roof deck. (Photo provided by SPFA)

Roofing considerations for cities

According to the earlier-mentioned RoofPoint Guideline, www.roofpoint.org, each section is comprised of components to take into consideration when deciding on a type of roof:

1. Energy Management: high roof systems; best thermal practices; roof surface thermal contribution; roof air barrier; rooftop energy systems; and rooftop daylighting

2. Material Management: recycled content; materials reuse; roofing waste management; and low-voc materials

3. Water Management: roof stormwater retention and roof-related water use reduction

4. Durability / Life Cycle Management: durable roof insulation system; roof drainage design; roof traffic protection; increased wind uplift resistance; hygrothermal analysis; construction moisture management; roof system durability enhancement; roof maintenance program; and project installation quality management

5. Environmental Innovation in Roofing: innovation in design and exemplary performance

by **BARB SIEMINSKI** | The Municipal

With all due respect to Kermit the Frog who does not consider being green easy, look for some municipalities to disagree due to the increasing implementation of conservational roofs over traditional black ones.

To Rick Duncan, Ph.D., P.E., and technical director of the Spray Polyurethane Foam Alliance, green roofs can mean different things to different building managers.

"To some, a 'green roof' can be one where a layer of soil is placed over the roof system and plants or grasses are planted in the soil," said Duncan, adding that he considered the former a "vegetated roof," rather than a green roof.

"To others, a green roof is one that has minimal environmental impact. There was a voluntary program called RoofPoint developed by the Center for Environmental Innovation in Roofing that was established a few years ago to help facility managers make environmentally sound roofing decisions.

"Unfortunately, it does not appear to have gained much traction with building managers. However, the criterion RoofPoint uses to score replacement roofing systems is excellent. Full disclosure—I participated as one of many technical advisors for its development."

Another type of roof, founded by Juan Carlos Pineiro Escoriaza, is called the White Roof Project, which involves a black roof covered with solar-reflective white paint. This type of roof, on a 90-degree day, can reflect up to 90 percent sunlight whereas the typical black roof can only reflect 20 percent of that. A black roof could be up to 180 degrees while a white roof might only be 100 degrees, resulting in up to 40 percent cooling costs.

There are many reasons why building managers should consider "green roofs." According to Duncan, energy savings, recyclability, water management, durability and environmental impact are all important considerations.

"In many cases, there is no additional first cost with some green roof systems," said Duncan. "If the first cost is even slightly higher, then it may be offset by energy savings or extended service life—all of which can be estimated by a life-cycle cost analysis."



Pictured is a spray polyurethane foam roofing system being applied over a primed commercial roof. (Photo provided by SPFA)

He added, "Currently, many building owners and designers are moving away from single-attribute assessment of a roofing system (e.g., high-recycled content or low emissivity) and moving towards using ISO-compliant life cycle assessments and environmental product declarations. LCAs and EPDs provide a 'big picture' view of environmental impacts, and enable the customer to easily compare different alternatives. SPFA has an industry-level LCA and EPD that can be used for credit under different sustainable-building programs like USGBC's LEED and GreenGlobes.

"Also, SPF roof systems require polymeric coatings to protect them from UV damage. One can use 'cool-roof' coatings to further improve energy efficiency of SPF roof systems in hot climates."

Duncan said, "Today, we are seeing a big emphasis on solar PV systems used on low-slope roofs to meet zero-energy goals. These seem to be getting more traction than green roofs. SPF roofing systems are ideal for use with PV systems, as SPF self-flashes around all ▶



PV supports and various roof penetrations. SPFA will be publishing a guidance document on SPF and PV later this year.”

Asked whether he could list any downsides to using green — not vegetated — roofs, Duncan said not that he knew of; that it was mainly a matter of product/system selection and design.

“Also, PV can have a high first cost compared to other roofing systems,” said Duncan. “These costs are often subsidized by federal, state and municipal programs, or by utilities. With the current cost of PV, payback periods can be 10-20 years in most of the country. Of course economic payback is not always a primary factor as clean energy production and energy independence are also considerations.”

According to Duncan, these PV systems are the very latest in roofing advances.

Shann Finwell, American Institute of Certified Planners and Environmental Planner for Maplewood, Minn. — population 39,765 — has long been involved in sustainable initiatives for a green city. However, her office building is presently without a vegetated green roof, but Finwell explains that Maplewood’s new Fire Station No. 1 was built under the city’s new Green Building Code and includes a solar-reflective roof and increased roof insulation.

“The code requires that all city-owned buildings be built to the green standards and encourages private building owners to participate,” she said.

Finwell states that, after one year in operation, Fire Station No. 1 had a decrease of 38 percent in natural gas use in 2015 compared to the other fire stations in the city. This energy reduction equates to \$5,000 in energy savings per year,” Finwell said.





ABOVE LEFT: Ramsey-Washington Metro Watershed District went with a vegetated roof that used native plants and sedums. (Photo provided by RWMWD)

LEFT: A worker applies spray polyurethane foam onto a metal deck roof. (Photo provided by SPFA)

ABOVE RIGHT: The vegetated roof over Ramsey-Washington Metro Watershed District's garage has required less than one hour of maintenance every year and captures at least a quarter of the rain that falls on it. (Photo provided by RWMWD)

RIGHT: Cactuses bloom on top of Ramsey-Washington Metro Watershed District's garage's roof. (Photo provided by RWMWD)



The Ramsey-Washington Metro Watershed District in Little Canada, Minn., had an extensive-style green roof installed on its garage, according to Simba Blood, natural resources technician.

"We considered other types of green roofing, but our intention was fixed on installing a green roof," Blood said. "This was an early green roof in the state, intended as a demonstration and a test of the technology.

"The roof is designed at a 3:12 pitch (the extreme limit of pitch recommended at the time) with a very shallow growth medium thickness of 2 inches. We installed about 50 percent Minnesota native plants and

50 percent sedums. With these rather extreme conditions, we had some difficulty getting good plant establishment initially."

He added, "Currently, the plants are doing well; the roof has required less than one hour of maintenance (weeding) every year for several years. The roof is functioning well; it captures at least the first quarter of rainfall that falls on it and helps keep the garage cool and comfortable in the summer. While we have not explicitly discussed what approach we would take with replacement — we expect to have another 15-20 years before this becomes a concern — we are very pleased with the roof's performance." ■

Cities continue to embrace solar energy



by LAUREN CAGGIANO | The Municipal

Through various partnerships, the federal government is pushing the use and integration of solar energy in communities across the United States as a means to enhance resilience.

David Morley, senior resource associate with the American Planning Association, is well versed in the topic. He works on applied research projects with partners to produce deliverables that help planners do their jobs better. Specifically, he said the APA partners with organizations that specialize in partnerships with “organizations to help communities grow and understand solar energy use.”

Case in point: APA is working with the International City/County Management Association, the National Association of Regional Councils and ICLEI—Local Governments for Sustainability on the SunShot Solar Outreach Partnership, an initiative of the U.S. Department of Energy. Through this effort, APA and its partners are providing outreach, training and technical assistance to local and regional governments to make it easier for residents,

businesses and property owners within their jurisdictions to use solar energy.

“The goal (of the SunShot initiative) is to make solar energy competitive by the year 2020,” he said. “The APA has taken the lead on residential community reliance and the role solar energy might play.”

The SunShot Initiative was launched in 2011 to aggressively drive innovation to make solar fully cost-competitive with traditional forms of energy by 2020. Through SunShot, DOE supports efforts by private companies, universities, and national laboratories to drive down the cost of solar electricity to \$0.06 per kilowatt-hour.

According to Morley, the APA has connected the dots between solar energy use and community reliance with three themes. First, local solar adoption has a potential to “reduce reliance on non-local fossil fuels.”

It can go a long way in reducing economic uncertainty, he added. Second, he said a solar energy surplus can play significant role in emergency response in the aftermath of storms and other natural disasters. Last is the long-range planning piece. Solar development can be instrumental in hazard mitigation and disaster recovery.

There’s also an environmental component, as Dr. Elaine Ulrich, program manager at the DOE, points out.

“Solar is sustainable because it creates no pollutants and requires no additional fuel when it generates power,” she said. “This means that it creates no pollutants like fine particulates, sulfur dioxide or nitrogen oxides, which all contribute to ground-level smog and exacerbate asthma and other health issues.”

In addition, unlike fossil fuel energy sources, solar produces no carbon dioxide pollution, which is a contributing factor in climate change. Finally, it demands less water use than conventional energy sources. According to Ulrich, the National Renewable

LEFT: Las Vegas, Nev., has installed a total of 6.2 MW of solar electric capacity on 37 public buildings, community centers, fire stations and parks, including a 3.3 MW generating station at the city's wastewater treatment plant. (Shutterstock)

RIGHT: Solar power reduces dependency on fossil fuels and does not produce carbon dioxide pollution, making it a popular option for many cities. (Shutterstock)

BELOW RIGHT: This photograph features the photovoltaic shade structure on the top floor of the Alfred A. Arraj U.S. Courthouse in Denver, Colo., that is the partial light-transmitting, building-integrated PV panels, cantilevered over facade. It is the first federal courthouse to get PV glazing. (Provided by the Department of Energy)



“Solar is sustainable because it creates no pollutants and requires no additional fuel when it generates power.”

Energy Laboratory recently released a report on the environmental benefits of solar and estimated that solar could save an estimated \$400 billion in health and environmental benefits by 2050.

While these project benefits are encouraging, there's no substitute for a track record or success stories. Morley points to the response after Hurricane Sandy as one example of resilience. There were microgrid pilot programs set up in Connecticut and Massachusetts that worked. He said there are other plentiful examples that hint at the potential of solar, but in his words, there needs to be “more of a concerted effort to make this a priority.”

Several U.S. cities have made solar a priority. Ulrich cited the “Shining Cities” report from Environment America, which lists the top 50 cities for solar overall. In it they also list examples of installations on public buildings. Among them, Las Vegas has installed



a total of 6.2 MW of solar electric capacity on 37 public buildings, community centers, fire stations and parks, including a 3.3 MW generating station at the city's wastewater treatment plant. Tampa and Raleigh have also installed large PV systems on city facilities. The city of Atlanta recently unveiled a new plan to install about 2 MW of solar power on 28 city buildings. New York City has committed to installing 100 MW of solar power on public buildings and spurring the installation of 250 MW on private buildings by 2025.

These examples are models of resilience, but what exactly does that term mean? According to Morley, adaptability to changing conditions is key. “As conditions change, the system must be as strong or stronger.” That can be a tall order. There's a lot of work to be done to fix the residential system. A resilient system is diverse. There should be no single point of failure or reliance on a single solution. Decentralization is the name of the game as well. ▶



“As adoption of solar energy increases then our power sources become more distributed, less centralized and less dependent on a central system,” he said. “With increasing local population, you have a decreased reliance on non-local fossil fuels.”

While this is a boon to our economy and environment, Morley is quick to point out the other side of the coin. One challenge is that the solar grid doesn’t accommodate a lot of a bandwidth. For this reason, solar power is not yet comparable to coal.

“Our electricity grid needs to get smarter,” he said.

Although we’re not quite there yet, Ulrich is optimistic about the future of solar, especially from an economic standpoint.

“In 2015, new U.S. PV installations were valued at \$16.3 billion — three times greater than the \$5.3 billion value of installations in 2010,” she said. “At the same time, solar jobs have grown 123 percent — adding more than 115,000 jobs. It currently employs 209,000 solar workers. By adopting policies that encourage and enable solar, communities can spur a home-grown solar industry as well as achieving resiliency and sustainability goals.” 

Shown is a rooftop system that was installed by Solar Energy Systems and funded by the U.S. Department of Energy through its Solar America Communities program. New York, one of the 25 Solar America Cities, is focusing on integrating photovoltaic systems throughout the city. (Provided by the Department of Energy)

For more information about solar as a means to increase community resilience, visit solaroutreach.org.



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- Thomas A. Edison



LEFT: A group of employees from Intertape Polymer in Danville, Ga., gathered outside their plant after a successful Energy Star Energy Treasure Hunt in 2014. The company was recently named an Energy Star Partner of the Year for sustained excellence, discovering over \$490,000 in energy savings and promoting the program in the community to other organizations. (Photo provided)

RIGHT: These California homeowners are testing out their new energy-efficient thermostat, provided through the HERO program and Renovate America. (Photo provided)

Cities lead the way to building efficiently

By DENISE FEDOROW | The Municipal

One of the best ways to encourage others to do what you want them to do is to lead by example. When it comes to being more energy efficient in a community, starting at the top — city government — is more likely to create an attitude of environmental consciousness in your city or town.

There are several programs in place already to help municipalities develop energy-efficient programs and incentives, and more are likely to come in the near future. Most of the programs are in agreement about two things: that energy efficiency is the fastest, most-effective way to conserve energy, save money and even create jobs and that focusing on efficient buildings should be the number one priority for municipalities.

Energy Star programs

Energy Star is a voluntary program developed by the Environmental Protection Agency that helps businesses and individuals save energy and money. Energy Star provides energy

efficiency ratings and certifications on products like light fixtures and appliances.

According to its website, www.energystar.gov, "state and local governments across the country are taking bold steps to protect the environment and cutting energy costs by adopting policies that leverage Energy Star."

Some local municipalities are adopting ordinances requiring Energy Star certifications, like Alpharetta, Ga., which enacted a Green Communities Ordinance in January 2009. The ordinance requires all new local government-owned buildings over 5,000 square feet to earn Energy Star certification or be certified under LEED-NC or Earth Light for commercial construction ratings systems.

The ordinance also has grants to expedite permitting and plan review processing and building sites. Additionally, Alpharetta has inspections for all new privately owned construction and major renovation projects who've earned the Energy Star certification.

In leading by example, the ordinance also has policies for city employees to turn off lights, power down computers and consolidate meetings, for example.

Atlanta, Ga.; Chicago, Ill.; Kansas City, Mo.; Minneapolis, Minn.; New York, N.Y.; Philadelphia, Pa.; and Westchester, Pa., have all enacted similar ordinances. The names of the ordinances, square footage requirements and other specifics may differ slightly, but most policies give the largest buildings in their cities a year to comply from the time the ordinance is enacted and two to three years for full compliance.

Energy Star tools and resources

Energy Star has tools available to help measure, benchmark and track energy use, water consumption, waste generation and greenhouse gas emissions of all buildings. This can be done securely online by using the Portfolio Manager. Benefits of the Portfolio Manager are one can use the results to identify underperforming buildings, set investment priorities, verify general efficiency improvements and receive EPA recognition for superior energy performance.

There's a quick start guide to lead one through the steps. Log onto www.energystar.gov/portfolio manager to add a property and answer questions about the property, including details such as operating hours, number of employees, etc. Information is then added



about water and energy consumption, waste materials generated and more. One can view results and progress with graphs and charts generated from the data given. The templates and reports section has several options, including energy performance and the ability to create a spreadsheet.

There's also an Energy Star Treasure Hunt Guide to help find energy savings at an organization, whether it be city properties, nonprofit organizations or commercial businesses. The Energy Star Treasure Hunt is an event that takes place over two to three days and engages employees in identifying low-cost energy savings opportunities from behavioral, operation and maintenance actions.

The 31-page guidebook provides step-by-step guidance to help you organize and execute an energy treasure hunt. Individual examples from Energy Star partners are included, and organizational checklists are provided to illustrate practices and help implement the treasure hunt. The guide complements the EPA's Energy Star Guide for Energy Management. The idea behind the treasure hunt is to tap into employee knowledge; after all, who knows the equipment better than those who operate it on a day-to-day basis?

According to the guide, the focus of the treasure hunt is on low-cost efficiency service — finding opportunities for energy efficiency improvements and energy savings typically found in these four areas:

Operational: such as eliminating unnecessary use of existing equipment

Small Capital Projects: such as lighting upgrades

Large Capital Projects: such as building renovations

Procurement: such as renegotiation of utility supply contracts ▶



A southern California solar panel contractor installs panels on a home through the HERO program. The private-public partnership through Renovate America helps create jobs for local contractors such as this one. (Photo provided)

Renovate America creates opportunity

Another program that is gaining speed is the HERO and PACE program, developed by Renovate America. This program is a private-public partnership that began in the state of California and has since moved to Florida and Missouri with plans to launch in Nebraska.

HERO is an acronym for Home Energy Renovation Opportunities and PACE is the financing tool for Property Assessment Clean Energy.

Ellen Qualles, vice president for communications and public affairs with Renovate America, explained that PACE provides financing for up to 100 percent of the cost for energy-efficient upgrades to a home with no upfront fees and allows the homeowner to pay it back through their property tax assessment.

"We partner with city and state governments, and they adopt resolutions stating they will collect the payments through property taxes," Qualles said.

She said if a homeowner's air conditioner breaks and they need to replace it right away, rather than purchasing something cheap up front that will end up costing more in the future, they use the PACE or HERO program to finance the cost of a better energy-efficient system.

"It's comparable to a home equity loan but requires that it be used for the specific purpose and is spread out for a longer period — the useful life of the product — and cheaper than a credit card because the interest rates are better," Qualles said.

The program recommends licensed and bonded home contractors to do the work who won't be paid until the work is completed to the homeowner's satisfaction. There is no cost to the municipality or the taxpayers.

Qualles said the program has an economic benefit to the communities it partners with both in job creation and the boost to spending in the local community.

"For every \$100,000 we finance, .85 percent of a job is created; most are local home improvement companies — roofing, solar panels, etc.," Qualles said.

Plus there is the benefit of making the community a healthier environment by reducing emissions, saving gallons of water used, utility bill reductions and more. The software and data collection the organization does is another benefit to the private-public partnership. ■

For information, visit www.renovateamerica.com/hero-program or email info@renovateamerica.com.



Energy Treasure Hunts focus on operational savings; many of which will be low cost or no cost and energy efficiency empowerment.

“Energy Treasure Hunts sets a unique tone — more proactive and positive — by focusing on positive outcome and empowering day-to-day operations of existing equipment, versus energy audits and assessments, which employees often see as evaluations intended to pinpoint problems and poor performance,” according to the guide.

Any size organization can carry out a treasure hunt and it has lasting benefits beyond the event, including:

Optimization: improving the operation and efficiency of existing equipment before replacing, which, aside from saving costs, helps employees to consistently think of the most-efficient practices

Teamwork: engaging employees and helping educate to identify opportunities to reduce energy use

Ownership: involving employees creates a sense of responsibility for solutions

Repetition: conducting a treasure hunt two or more times a year.

A group of employees from Intertape Polymer in Danville, Ga., conducted an Energy Star Energy Treasure Hunt last spring. The company conducts two energy treasure hunts a year at this facility after being part of the pilot program to test out the treasure hunt guide in 2013. (Photo provided)



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The Treasure Hunt is in four phases focused on results:

Preparation: Schedule discussions with your organization or facility leadership and gain support. Gather current data on current energy use, equipment specifications and operating parameters. Begin this phase about four to six weeks prior to the planned event.

Pre-training: Meet with facility team leaders to compare roles and responsibilities and the treasure hunt agenda. Do this phase at least one week before.

Three-day onsite event: Teams identify and quantify energy savings at an onsite three-day event. They also summarize and present results for management review.

Follow Up: Develop a schedule for pursuing energy reduction opportunities identified during the hunt. This should be completed one to two weeks after the onsite event.

The energy hunt should examine both operation and non-operational periods. Sunday through Tuesday works well for most organizations.

One organization that has been used as a case study and who has tested some of the Energy Star programs is Intertape Polymer Group in Danville, Va. Philip Kauneckas, corporate energy manager, said they've facilitated about eight treasure hunts in their Danville facility and are about to conduct the ninth. They've also conducted the energy treasure hunts in other Intertape Polymer Group facilities. He said they were asked to host an event back in 2013 to test out the treasure

“Cities are leading the way to a more sustainable environment—they’re not waiting for state or federal governments to do something.”

hunt guide and its content. Kauneckas said a group from the Association of Energy Engineers came to Danville to learn how to do the treasure hunt.

“So I feel like we’ve taken the lead with this,” he said. They were also just named one of the Energy Star Partners of the Year in May for sustained excellence for both the Sarasota, Fla., and Danville plants for identifying over \$490,000 in cost savings and for creating an Energy Star network in Danville by promoting and facilitating the treasure hunts for other organizations.

To jump-start things in your community, consider sponsoring a city-wide competition for organizations, including city government, to hold an Energy Star Treasure Hunt. This might be an annual event around Earth Day, for example, with incentives and prize drawings for participating organizations and businesses. Such a competition could be the catalyst for a more energy-conscious city on all levels. ▶

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Other programs

Other energy saving programs are quickly growing across the nation. One pilot program, City Energy Project is a national initiative to create healthier and more prosperous American cities by improving efficiency of buildings. CEP is a joint initiative of the Natural Resource Defense Council and the Institute for Market Transformation and is funded by several philanthropic groups, including Bloomberg Philanthropies, Doris Duke Charitable Foundation and the Kresge Foundation.

Ten leading cities were chosen to partner with CEP to help craft an integrative framework of policies and procedures. Those cities include Atlanta; Boston; Chicago; Denver; Houston; Kansas City, Mo.; Los Angeles; Orlando; Philadelphia; and Salt Lake City.

According to CEP officials, "Cities are leading the way to a more sustainable environment — they're not waiting for state or federal governments to do something."

The focus is on more efficient buildings as they are the biggest consumer of energy in a city or town and are often the biggest carbon polluters, more than transportation in many cases. CEP is partnering with these cities for a three to four year period.

According to CEP, making buildings more energy efficient creates jobs at all skill levels, frees up money currently being spent on utility bills to enter the local economy. CEP partners also spark innovation. Innovators want to live and work in the best cities in the country.



Renovate America's CEP J.P. McNeill, right, is talking to a couple of San Diego homeowners about their solar panel installation. Renovate America is a private-public partnership that provides up to 100 percent financing to homeowners through the PACE — Property Assessed Clean Energy — financing through property tax assessments. (Photo provided)

Those innovators and others are purposefully looking to relocate to communities with "green" policies in place — shouldn't your city or town be one of them? 



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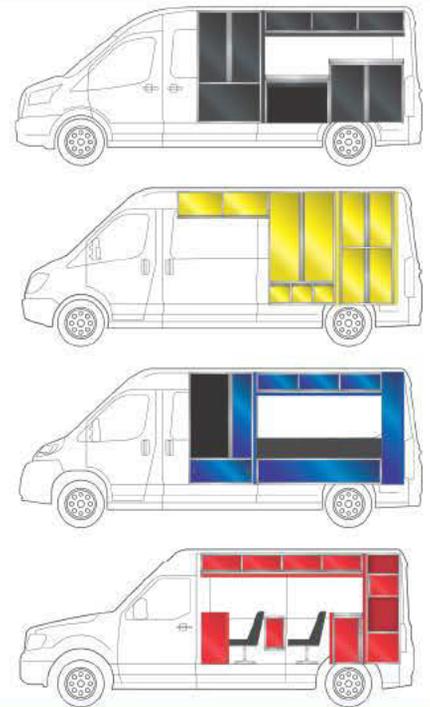


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Living up to core leadership principles



by SARAH WRIGHT and BRUCE RELLER JR. | The Municipal

Blue Ash, Ohio, Police Chief Paul Hartinger has been in law enforcement for 32 and a half years; he began his law enforcement career with the Lockland Police Department, where he worked from 1984 until 1989 — when he tested for and was hired by the Blue Ash Police Department.

“I like the service aspect. I like the people I work for,” Hartinger said. “I like the interaction with the community. I like being a police officer in these challenging times.”

He said he got into this line of work because he knew several police officers when he was a teenager and into his early college days. “Their job was very exciting, and I really liked what they did,” he noted. “It excited me, so I decided that’s what I wanted to do.”

Hartinger has worked as a patrol officer, detective, undercover drug investigator, traffic safety supervisor, crash investigator, patrol supervisor, administrative and patrol lieutenant during his time on the force. He then moved into the role of police chief in May 2013.

“What led me to take that position involved several factors, but the most prevalent was that I recognized that our employees were thirsting for an administration that lived up to core leadership principles,”

LEFT: Hartinger, left, and a fellow Blue Ash Police Department officer remind drivers to watch for students as area schools go back into session. (Photo provided)

“Our focus is to help support the community and improve our relationship with all residents.”

Hartinger said. “Policing can become very autocratic and have such a concrete hierarchy. I wanted to offer our employees a better way of doing business by empowering them and flattening out the structure.”

And the timing to do so worked perfectly as the department’s entire command staff retired, allowing Hartinger to rebuild it with other senior supervisors. “It was the perfect time to come in and effect changes and build upon the already great department we had by opening up opportunities for all of our employees to be a part of the organization,” he added.

The position also opened at the right time in Hartinger’s career, with him having prepared himself by attending as many administration and supervision courses as he could; additionally, he had attended the FBI National Academy in 2011. Finally, Hartinger said he had a good support system, both personally and professionally, with people who encouraged him to seek the position.

Having worked for the prior administrations, Hartinger said he learned a lot from them, including what worked and what could be improved; what employees wanted but had not been accomplished yet; and what was needed to make the department a good place to work.

“I learned from my own mistakes and failures and worked hard to make sure all my fellow employees knew me well and that I stayed true to my ideas so in this position I could grow that relationship and keep the organization moving forward,” Hartinger said.

That has also meant developing a wider network of support from all levels within Blue Ash’s city administration and mending some issues that existed between the police department and city government. Hartinger said, “I saw it as a chance to repair some of the relationships both internally and externally that had been ignored. I saw it as a chance to live up to some of the leadership principles I was teaching to others in supervision classes.”

Hartinger had numerous goals when he became chief with some of the bigger ones aiming at improving communication and trust while also building relationships. “One of the main goals was to get the department to act as a team and to reintroduce mid-level managers and patrol-level officers and employees to the concept of taking on responsibility for the bulk of tasks and function of the department,” he said.

Also, Hartinger wanted to reintroduce the idea of a meaningful mission statement all employees had a hand in creating, which would then allow for the instillation of core values and the meaning of said mission to permeate daily operations. “We formed a team,” he explained, “involving a large number of department members who took it seriously, and in less than four months, we implemented a department-wide effort to make it not only a statement, but a philosophy that we all live and breathe every day.”



ABOVE: Developing strong ties with the community has been a major goal for Chief Paul Hartinger. Here, he poses with a potential future recruit during a fundraiser at a local restaurant. The fundraiser was for a scholarship program the Blue Ash Police Department is involved with to help teens, particularly those who live in the Hazelwood neighborhood, attend UC Blue Ash. (Photo provided)

BELOW: Blue Ash Fire Chief Rick Brown, left, and Hartinger test out their new Segways. (Photo provided)



He has also built up communication with the city administration, meeting with all city department leaders and council members when he took the position to let them know he was about to change things.

“From day one, I attended all city council meetings and any special functions of the city, and made sure to establish and maintain the notion that the police department is an important function of the city,” Hartinger said.

That presence has extended to the county and region, with Hartinger being a member of several regional professional associations, including the Hamilton County Association Chiefs of Police, Ohio Association Chiefs of Police, Hamilton County Police Association and its training committee, and the FBI National Academy Associates. He regularly attends these organizations’ meetings and serves as a voice for the Blue Ash department on important issues while also reporting back information. ▶

Hartinger, left, helps Officer Todd Stewart and his canine, Cash, with a community talk about Blue Ash's K9 unit. (Photo provided)



BLUE ASH POLICE DEPARTMENT MISSION STATEMENT



"With courage, integrity, and compassion we serve, safeguard, and educate our community by providing superior services that sustain a safe environment and high quality of life."

Building a strong rapport with community has been another major goal of Hartinger's, which has come to fruition. "This was accomplished through a very strong media and social media campaign and reinvigorating the department to make it a priority," Hartinger said.

He noted the department has established a tight bond with a small community group called the Hazelwood Community Association. Hazelwood was originally predominately made up of African-American families in the late '40s and started to experience major redevelopment in the late '80s; however, Hartinger noted many of the older families from that original era still live in the neighborhood and continue to promote its heritage and culture, even as the area's homes and racial makeup change.

"Our focus is to help support the community and improve our relationship with all residents there," Hartinger said. "Through this interaction our group has founded a scholarship to help potential college students with college tuition at UC Blue Ash, with priority given to candidates from Hazelwood."

Additionally, Hartinger noted the department has embraced professional and robust training thanks to a budget that sustains continual advanced training. Some of this training has included legal updates with the city legal department, CPR and first-aid training, use of force issues, agitated chaotic events/crisis intervention and other relevant or current topics. Regular department meetings have allowed employees to hear the same message from Hartinger and the command staff.

"I also produce a bi-monthly newsletter to the department, which contains issues of concern and enlightenment," he added. "Keeping everyone informed and on the same page has greatly improved relationships, communication and lessened the rumor mill."

"I hear over and over again the 'open door policy' concept, and I live up to that as much as possible. It works great and helps people feel that there is not a separatist attitude within the command staff. It's only detrimental when I forget the chain of command, but it makes people feel like I am approachable, and that I listen to them and I can relate to them."

When he is not busy at his job, Hartinger enjoys spending time with his family, and his hobbies include backpacking, enjoying the outdoors and kayaking.

"I like high pointing, visiting the high point of every state," he said. So far, he has 29 under his belt. "I was able to talk my children into visiting the Indiana high point, just over two hours away from home. While it's not very high and it can be reached by car, it was a fun trip that helped reintroduce the adventure with the family. I plan to do many more as time permits. It's a great way to see this great country." ■

Blue Ash Police Department reaches out to community

Chief Paul Hartinger wanted to give community members and Blue Ash officers a chance to have positive interactions, so after becoming chief, he helped launch the Citizen's Police Academy and start an annual open house for the department. Both events are now marking their third year.

"It's been very successful," Hartinger said of the Citizen's Police Academy. "When I made police chief, it was something I wanted to do and at the time a captain was looking for something to do." That captain organized both the first and second year for the academy; this year, however, Hartinger stated it will be delegated to a supervisor.

Different officers teach different segments of the academy, giving citizens a chance to see different facets of the department. Through the citizen's academy and the annual open house, which is held in September each year, Hartinger noted they have gained some ardent supporters in the community and local government.

"We do a lot of stuff," Hartinger said, noting the department tries to have a presence at as many community events, such as the Blue Ash Bike Rodeo, as possible.

"Although our efforts started long before the events in Ferguson, Mo., which created a national mantra for improving community-police relations, we redoubled our efforts after these events and our entire department focused much time and energy on maintaining an already great relationship by making great strides to find ways to build and improve all relationships no matter the size or scope," Hartinger said. "We are leaders recognized by the state of Ohio's Collaborative Advisory."



Chief Paul Hartinger of the Blue Ash, Ohio, Police Department speaks at a safety press conference. One of his goals since becoming chief has been to improve relationships between the department and the community. (Photo provided)

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Finding common ground:

Transcending police fleet politics

By JODI MARLIN | The Municipal

PEOPLE TEND TO USE THE PHRASE “playing politics” distastefully; maybe that’s because anytime rank, title and concerns about the “greater good” come up in a conversation, you know the job’s about to become difficult. But managers of centralized municipal fleets feel the burden of political considerations in a particularly acute way, because they have to be added to an already lengthy list of priority qualifications that includes the department’s number of spares,

first responder status, impending weather, uniqueness of the vehicle and technician availability just for starters.

Law enforcement and fleet management work toward a shared goal of serving the common good, believes Mario Guzman, general services manager, city of West Palm Beach, Fla. Fleet departments recognize that police are passionate about their mission and have an expectation of performing their duties in a safe and fully operational vehicle. The role of the fleet manager in that relationship is to

meet the expectation and ensure preventive maintenance has been carried out in a timely manner. Another significant consideration is that police organizations are inherently militaristic in their structure while fleet management is usually structured like a business: The fleet manager has to factor in financial stability and liability levels, and with each passing year, sustainability moves higher up the list of organizational values as well.

At NAFA’s annual Institute and Expo in April, Guzman and fellow fleet professionals



ABOVE: Determining what's mission-critical and finding common ground where both departments' goals are being met goes a long way toward making fleet determinations and preventing the appearance of "playing politics." (Photo by Jodi Marlin)

LEFT: Changes in administration can signal changes, even reverses, of law enforcement vehicle policies. Fleet administrators are on the front line of such decisions; in NYC that has meant diverging from a model alternative fuel vehicle program. (Shanti Hesse/Shutterstock.com)

“Law enforcement and fleet management work toward a shared goal of serving the common good.”

Jeff Jeter, fleet manager for Chesterfield County's Department of General Services in Virginia, and Robert Martinez, deputy commissioner of the Support Services Bureau, New York Police Department, discussed the intangible aspects of managing a centralized fleet that includes law enforcement. Truly understanding the role of law enforcement, the role of each officer within it and the dynamics that take place within the department took Guzman and Jeter a long way toward providing vehicles and service that police, the city finance officer and the fleet department could work with, they said. DUI units, counterterrorism, canine units, active shooter and hostage units carry different amounts of equipment and require different performance from their vehicles. Learning the details of those differences can take a fleet manager a long way toward meeting their vehicle needs with minimal conflict.

A moment when the conversation turned grueling in Chesterfield, Jeter said, was in regard to a 2013 switch to fueling police cruisers with propane. "Anything and everything" was wrong with the 13 alternatively fueled vehicles that finally hit the road, some patrolmen said.

"But now, it's going well. It's actually growing, and we're getting ready to put some of the new police Interceptors on propane. In the sheriff's department we've got nine of its vehicles running on propane — on biofuel, so it's unleaded and propane. So the politics there, it was kind of rough; but we're here as the fleet manager to work with the police department ... we're here as a partnership." ▶

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Failing to stand up for that mutual mission—even in the interest of preventing conflict—can sometimes wind up creating a more undesirable, even life-threatening situation, noted Jeter. What has worked for him is making a concerted effort to let law enforcement know how dedicated fleet is to the shared-mission notion. He also makes it known that input is welcome, and that mutual consideration is expected.

In West Palm Beach, where the fleet services department is responsible for parks and public works vehicles as well as police, being sympathetic to law enforcement's preferences and expectations translates into holding police vehicles to an elevated standard of preventive maintenance. Tires that are patched or plugged on the former are replaced on police vehicles, which are also on a different preventive maintenance schedule.

Because fleet policies also change with administrations, figuring out which objective to prioritize can feel like driving in a traffic circle.



In one Virginia municipality, a decision to save money on a police vehicle air compressor turned potentially deadly when he attempted to serve a warrant and the compressor kicked on, making noise and alerting the occupant of the house—who fired on officers. (Wally Stemberger/Shutterstock.com)



Among the challenges for fleet managers in charge of law enforcement vehicles is understanding the variety of things that officers with different divisions need to transport. (Shutterstock photo)

New York City, for example, is now taking a step back from its pole position in the race to acquire alternative-fuel vehicles after current Police Commissioner William Bratton called on fleet to buy more luxuriously appointed but gasoline-only SUVs.

Policies can even change with the evening news. After a few NYC detainees escaped out the rear door of a police cruiser, a commissioner ordered that all back door locks on the vehicles be disabled. Fast-forward three years to a new commissioner and an officer trapped under gunfire in the back seat during a three-man patrol, and the door handles in all 2,000 vehicles were ordered reconnected.

In most cases, balancing law enforcement's expectations and concerns with the considerations that go into managing a centralized fleet come down to finding the common point at which both departments' goals are being met. Determining what's mission-critical helps Guzman make the determination, and in NYC twice-yearly vehicle committee meetings are designed to allow for vehicle-related feedback and for questions that will continue to shape the relationship.

"Ultimately, I think you just do everything in your power to decide on that common goal," Martinez said. "That's the point from which you can build a good working relationship." **M**

The skirmish over propane

In response to a question from the audience at NAFA's Institute and Expo, Guzman, Jeter and Martinez also discussed the successes and challenges they've had while converting their police vehicles to propane.

Although propane tends to reduce maintenance costs by extending the maintenance schedule of a vehicle, convincing officers of the tank's safety continues to be a challenge. Chesterfield took to disseminating a video showing officers using various weapons to fire directly at a tank. Only the assault rifle pierced it, provoking gas leakage but no explosion of the tank. In the same jurisdiction a propane-powered Crown Victoria involved in an accident flipped and rolled multiple times with zero damage to the tank or its connections.

West Palm Beach, on the other hand, currently opts not to strive for sustainability in pursuit-rated vehicles. "We look at what's mission-critical..." said Guzman. "We have to be cognizant that, in case of emergency, your first priority is to respond to the needs of the people."

The drop-off in mileage that some entities report with propane wasn't severe for Jeter, whose fleet is a propane/unleaded fuel hybrid. With normal driving the difference was minimal—an average of 3 miles per gallon—but "the response was unbelievable. They hit the accelerator and those cars were gone. And it's automatic changeover (from unleaded to propane, once the cars hit operating temperature) so you barely feel anything." Chesterfield also enjoyed a cost savings of \$33,000 that was able to be put back into the operating budget.





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Snow and street readiness:

Have best practices in place this winter



by **BARB SIEMINSKI** | The Municipal

Though the temperatures may be fair now, we're betting it won't be long before a different four-letter word will crop up as a major part of your vocabulary — at least for some members of our readership.

Yep, we're talking about "snow" and September is often the month for winter preparedness: meaning it's time to check equipment and supplies and have best practices in place. R. Mark DeVries, APWA Winter Maintenance Committee chair, offers some valuable information and reminders to get started, and later we will have a list of equipment to consider when stocking up.

"In situations where agencies are faced with harsh or extreme winters with numerous callouts or events, de-icing material supplies may become low and resupply may be difficult due to demand and weather disruptions," said DeVries who is also lead

consultant — Transportation Weather Consulting Group at Vaisala Inc.

"The best approach for any public works agency is to always have a full season's worth of materials (salt and liquids) on hand prior to every winter season if possible. In conjunction with that, instituting all the best practices and taking a pro-active approach to winter will always help minimize the amount of de-icing materials needed," DeVries said. These practices and materials could include anti-icing, pre-wetting, treated materials; computerized dispensing systems; calibration of equipment; treatment recommendations; weather forecasting services;

A snowblower and county truck work together to remove large drifts following a blizzard in January 2014. (Provided by APWA Winter Maintenance Technical Committee)

pavement temperature detection equipment; and training.

"In harsh situations public works agencies need to consider what actions to take in order to give a safe and reliable network and conserve the remaining materials or introduce some alternatives," DeVries said.

According to him, the first thing agencies can do is evaluate what the most critical roadways are in the system and adapt a new level of service to the non-critical areas.

"This will vary from agency to agency, and it will be important to inform the public of these changes and the reason for them," he said. "It will also be important for an agency to optimize the use of the remaining



Having best practices in place can reduce equipment damage and driver fatigue during winter storm events. (Provided by APWA Winter Maintenance Technical Committee)

“We focus our ice and snow control program on enabling our residents’ safe access and travel to work and school.”

de-icing materials by implementing best practices and applying only when the chemicals are most effective during the highest pavement temperatures.”

DeVries noted, “Additionally, agencies can implement the use of abrasives to give temporary traction. This may require purchasing these non-de-icing materials (such as sand, grit, cinders, etc.) and recalibrating the equipment to apply them. It also means a cleanup plan to remove these abrasives so they do not impede the stormwater systems or infiltrate water systems.”

James Dean’s—superintendent of Orangetown Highway Department in New York—staff has won two out of three National APWA awards, once in 2011 and then again in 2016. With two prestigious awards, the Orangetown staff is definitely doing something right.

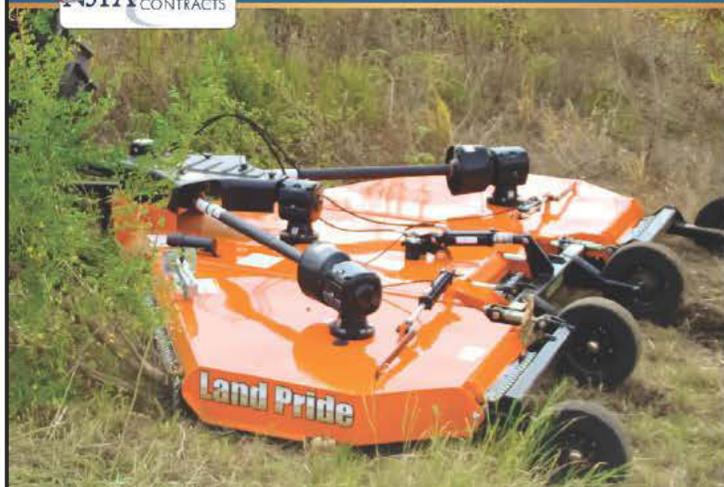
“I think we won because we put a great deal of emphasis on protecting the environment as well as protecting the public,” said Dean, whose position is an elected one. “We focus our ice and snow control program on enabling our residents’ safe access and travel to work ▶



**ASSORTMENT OF SNOW AND ICE SUPPLIES:
IS YOUR DEPARTMENT PREPARED FOR THE
2016–2017 WINTER SEASON?**

Mark DeVries suggests checking out the excellent list of “Top Ten Activities that Constitute a World-Class Program of Winter Maintenance” by the American Association of State Highway & Transportation Officials. The list can be viewed at sicop.transportation.org/Pages/Top-10_Project.aspx.

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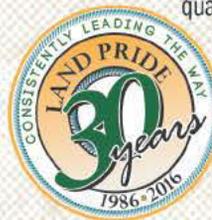


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CONSISTENTLY LEADING THE WAY...



Trucks open a road, following a blizzard in January 2014. During such large events, it is important to evaluate which roads are most critical and to keep the public informed. (Provided by APWA Winter Maintenance Technical Committee)

and school." It's always a balance for funds available and how bad the winter is going to be, so determining whether one has ordered enough materials to deal with the circumstances in the area is challenging. Orangetown is just north of New York City, said Dean, "and we can have a winter with 12 feet of snow or 90 feet of snow, with the understanding that if we have a hard winter, we can go back to the board and explain that we need additional funds. If we were to base our budget on a worst-case scenario then we would basically be overcharging our customers. It would make us look good because we would never be over budget. But it wouldn't be fair to the taxpayers."

Dean added, "And yes, there have been times when we have not had an adequate supply of salt, and that is a supply issue that we do

have sometimes in the northeast, but we have always been able to order more; and if we go over budget, that's easily explained to the board so when we have a higher demand, we may be going over our materials purchase."

A partial list of the winter equipment and preparations that many public works departments will need to address before the first snowfall include shovels; brooms; barricades and warning lights for traffic control; snow markers to mark fire hydrants, abutments, etc.; rock salt; sand calcium chloride; chemical ice melts; cinders; brine; ice chippers; snow blowers; pre-winter servicing of all snow/ice removal equipment; hand tools for removing icicles that present a hazard to pedestrians; snow fencing; reflectors; and various other items.

"We manufacture our own salt brine, which works well for us for when most of our storms come between 32 and 20 degrees. We were one of the first in the metropolitan northeast to do that, which we began in 2004," said Dean, who has been a member of his department for 60 years and the superintendent for 14 years.

"Another thing that worked well is the use of rubber snowplow blades, and they have been a great benefit for us in three ways:

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A McHenry County driver empties his remaining salt into a conveyor pit following a snow event. (Provided by APWA Winter Maintenance Technical Committee)



A McHenry County driver fills his truck with enhanced salt brine prior to an event. (Provided by APWA Winter Maintenance Technical Committee)

reducing equipment damage, reducing injury and fatigue for our motor equipment operators and in helping us preserve our roads by reducing the amount of scraping and stone that gets removed from the road surface by the heavy snowplow blades," said Dean, adding that Orangetown has a very high standard of bare roads, which was one reason they won the national awards.

"Our standard snowplow is 12 feet wide and weighs over 2,000 pounds so the rubber is able to maintain that weight and clean the road without damaging the road surface."

As for another component, Dean said, "A key part of the success of our operation is the caliber of employees that we have; most of them live right here in town so there is a lot of community spirit. We have received many expressions of gratitude for the dangerous work we do, including transporting people to the hospital — in fact, once we had to get a pregnant lady to the ER for an unexpected delivery in a raging snowstorm!" **M**

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Free college tuition for high school graduates

By BARB SIEMINSKI | The Municipal

*“School is a building with four walls, with tomorrow inside”
- Lon Watters*

ACTUALLY, IT'S NO PIPE DREAM. THE REALITY IS THAT SOME CITIES stand to benefit from local programs that pay for the college education of their high school students, if they attend nearby public universities or community colleges.

Janice Brown, former superintendent of Kalamazoo Public Schools, pioneered The Kalamazoo Promise in 2005 with a startling announcement to the community: that anonymous donors were promising to foot the bill for every student who graduated from the district's high schools.

That dream-come-true message predictably brought tears to parents' eyes, especially those who might not otherwise have been able to send their offspring to an institution of higher learning. Their children now had a brighter future and a chance to make something of themselves with a college degree in hand.

The Kalamazoo Promise is universal to graduates of KPS who have been in the district for at least the four years of high school. The minimum benefit is 65 percent; full scholarships are awarded to students who have attended Kalamazoo schools since kindergarten and graduated there. No regard is given to family income level, students' grades or their disciplinary/criminal records, making TKP the most inclusive scholarship program in the country.

The benefits of universal college scholarship programs include greatly improved college graduation rates, educated job applicants and local retention of college-educated students. College graduates usually pay

more taxes, have high employment rates and are less likely to use social service programs; they are also more likely to volunteer and be involved in community activities.

“I think of The Kalamazoo Promise as a transformation of students and the community,” said Brown, adding that Promise scholarships have been established in other cities as well.

“In the last 10 years, more than 40 cities have developed Promise-like programs, fashioned in some way like TKP. The two after us were the El Dorado Promise in Arkansas and the Pittsburg Promise. We're a close group and get together frequently to share ideas. We call ourselves Promise-Net and hold our meetings every year in Kalamazoo.”
Currently executive director emeritus of The



“A post-secondary educated community is essential to ensure the prosperous future of our cities.”

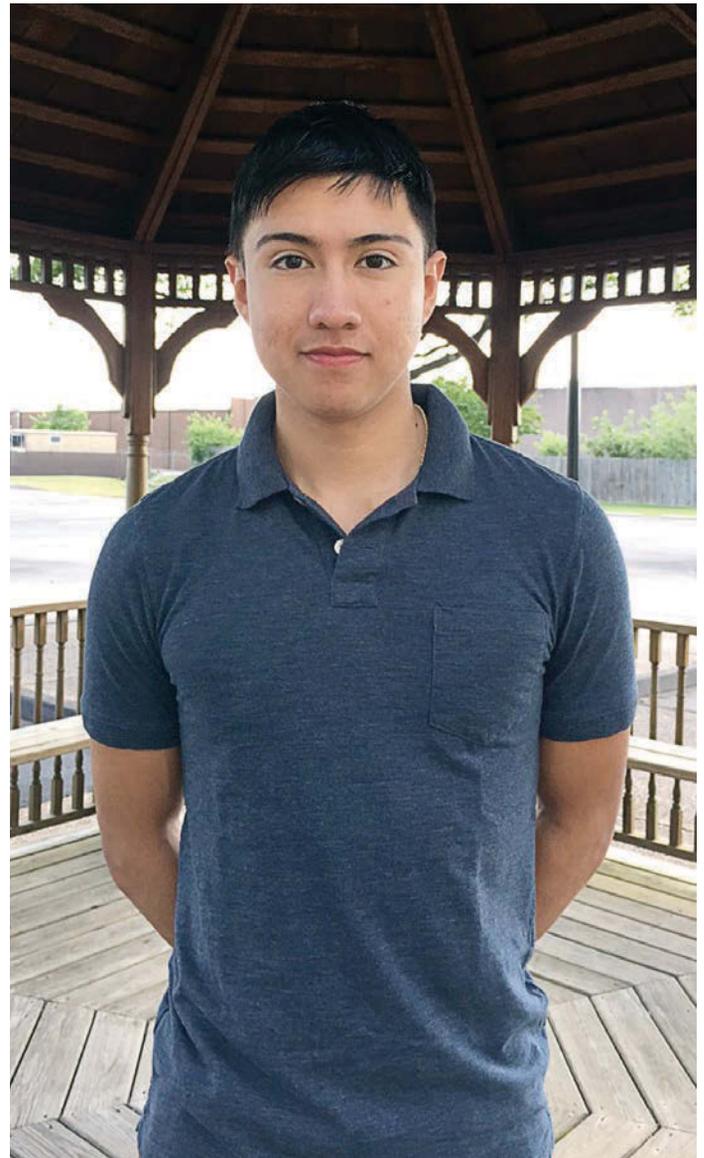
Kalamazoo Promise and the initiative's trustee, Brown has been a teacher, consultant, principal, visiting professor, state administrator and central office administrator. She was named the Michigan Superintendent of the Year and received the national ATHENA Leadership Award, the Women of Achievement and the Glass Ceiling Award for outstanding leadership. The Wall Street Journal, USA Today and New York Times have all featured her as

A Grand Valley State University graduate and Kalamazoo Promise recipient. (Photo provided)



ABOVE: Kalamazoo Central High School's 2010 graduation ceremonies featured special guest President Barack Obama. (Photo provided)

BELOW: Many of the graduates of Kalamazoo Central High School now go on to higher education, adding value to their Michigan community in a number of ways. (Photo provided)



Cesar Sanchez is a Tennessee Promise recipient. (Photo provided)

have national TV broadcasts “The Today Show,” “Good Morning America,” “The Katie Couric Show” and CNN.

“I worked exclusively with the donors during the development of the Promise,” said Brown. “Executive Director Von Washington Jr., worked for Kalamazoo Public Schools prior to coming to the Promise as principal of Kalamazoo Central High School. He’s a fabulous community man and is always a child advocate. He was the principal of K Central when President Obama made his first high school speech ever to Kalamazoo Central High School grads.”

The Tennessee Promise

The Tennessee Promise operates with three partnering organizations — tnAchieves, the Ayers Foundation and the Regional Economic Development Initiative. According to Jackie Hartman, director of operations of tnAchieves, her organization facilitates all the non-financial components to the program — such as volunteer mentoring, community service and the required team meetings.

The mission of tnAchieves is to increase higher education for Tennessee high school students by providing last-dollar scholarship with mentor guidance, which means that it will cover tuition and fees not covered by Pell grants, the Hope scholarship or state student assistance funds.

“One of our favorite Memphis students is Cesar Sanchez,” said Hartman. “He’s a first-generation student from Memphis who is currently pursuing an automotive technology degree at Southwest Tennessee Community College. Born in California to a single mother, Cesar began working at age 14 to provide additional financial support. He says he never ‘saw himself in college until Tennessee Promise.’”

Sanchez, who is beginning his second year this August, is grateful to his volunteer mentor.

“I would especially like to thank Ms. Lynn Smith, my mentor, for pushing me forward because she could see it in me; and also because she didn’t mind helping me, including her patience answering all those questions I had to ask her,” said Sanchez. ▶

“I think of The Kalamazoo Promise as a transformation of students and the community.”

The Pittsburgh Promise

Lauren Bachorski, director of communications of The Pittsburgh Promise, offered her view on why and under what circumstance a city should get involved in promoting college to its kids.

“Central to the work of The Pittsburgh Promise is promoting academic success and encouraging our students and their communities to dream big and work hard toward high aspirations and hope,” said Bachorski. “A post-secondary educated community is essential to ensure the prosperous future of our cities. While it is the job of our public school systems to ensure that students graduate ready to pursue a post-secondary education, cities should do whatever they can to promote a positive post-secondary culture in their communities.”

Since the program’s inception, high school graduation rates in Pittsburgh Public Schools have risen from 63 percent in 2007 to 74 percent in 2014. “We hope to see these rates grow to 95 percent by 2028,” said Bachorski.

‘Promised’ dividends

“There are so many individual students who have great careers now—I often see them about town,” said Brown. “They’re teachers, scientists, in medical schools, wind turbine experts, marketing experts, engineers, tradesmen and trades women; one is a scientist for NASA specializing in Mars research. They come from all walks of life.

“The most significant statement, which I hear often, is ‘The Promise has changed my life.’ I call the Promise the hope of it all. Students in Kalamazoo Public Schools have changed their goals and dreams because of the Promise. In my opinion, we are changing a community culture, along with individual Promise Scholars’ views of themselves ... There’s a story every day.” ■



“The most significant statement, which I hear often, is ‘The Promise has changed my life.’”

Former Kalamazoo Public Schools Superintendent Janice Brown pioneered The Kalamazoo Promise in 2005 with a startling announcement: that anonymous donors were promising to foot the bill for every student who graduated from the district’s high schools. (Photo provided)

The Pittsburgh Promise: *more details*

“The Promise provides scholarships to Pittsburgh’s city students in an endeavor to not only strengthen the city, but the region as a whole,” said Lauren Bachorski, Pittsburgh Promise director of communications. “We believe that a region is only as strong as the city at the heart of that region, and a city can only thrive if its public school system is excelling. We also believe that education can transform the lives of individual students.

“Since our launch in 2008, The Pittsburgh Promise has been successful in meeting the challenge of providing scholarships to over 6,400 urban youth and empowering them to envision and achieve a promising future. An example of this is a young man named Shakir, who attended the University of Pittsburgh with a Promise scholarship and graduated with a degree in information technology. This was especially significant for his family because Shakir’s brother, who attended college before The Promise was established, was unable to finish his degree as a result of financial hardship. Shakir now lives in Pittsburgh with his wife and child and works at PPG Industries.

Pittsburgh Promise operates a number of workforce development initiatives that connect Promise scholars to local employers:

CAREER LAUNCH: An annual high-touch networking event that connects scholars to available internships and jobs at over 70 participating companies.

CTE INITIATIVE: Early Promise funds given to high school students who pursue career and technical education credits while they are still in high school. This program underscores the fact that a high school diploma is just not enough, but a four-year degree is not always necessary. This workforce development initiative aligns with the demands of employers so the region’s manufacturing, energy, health and other growth sectors have well-trained workers who can contribute to their success and the region’s economic vitality.

EXECUTIVE SCHOLARS & EXECUTIVE EXPERIENCE:

Pittsburgh Promise facilitates connections between employers and high school students, as well as Promise scholarship recipients. The Executive Scholars program builds a relationship between high-performing Promise scholars and Promise corporate donors. This program creates a named scholarship for companies or individuals that support The Promise at a minimum level of \$1 million. Executive Experience matches high school seniors at Pittsburgh Science and Technology Academy with field-based projects offered by local employers. Executive Experience helps students develop real-world skills and provides an authentic work experience in the science, technology, engineering and mathematics fields. ■

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Learning to lead

by JOHN DAVID THACKER | The Municipal

Congratulations! You've just been elected to city government. Now what?

Your first weeks in office can be intimidating. You have new responsibilities, unfamiliar laws to follow and complicated procedures to implement. How do you learn to effectively serve in your new job?

If you are in Iowa, you sign up for the Municipal Leadership Academy. After each election cycle, the academy provides 400-500 newly elected mayors, city council members, city clerks and city administrators with a comprehensive overview of Iowa municipal government. It is presented by the Iowa League of Cities, the Institute of Public Affairs at the University of Iowa and the Office of State and Local Government Programs at Iowa State University Extension and Outreach.

Mark Tomb, director of membership services for the Iowa League of Cities, explained the need for the MLA. "The goal is to really expose elected officials, and certainly newly elected officials with the kind of issues and the rules of the road, and to give them a good overview of their responsibilities in their new positions. And for those that are incumbents, it can be a good reminder as well."

The Leadership Academy is divided into three sections. Iowa holds municipal elections in November of odd numbered years, and part one is offered soon after, before newly elected officials take office in January. The academy offers the four-hour training in several cities around the state, covering topics such as budget and

finance, effective city councils, municipal operations and ethics.

Part two is an online class offered once newly elected officials take office and covers topics like city budgets, planning and zoning, and strategies for success in office. Part three offers more in-depth training on economic development, community development, and strategic planning and goal setting.

The final part of the Municipal Leadership Academy takes place at the Iowa League of Cities' annual conference and exhibit. Participants who complete the required courses are awarded the Certified Elected Municipal Official designation at the conference.

The MLA provides elected officials with the legal and technical knowledge they need to legally fulfill their duties. Amy Nielsen, mayor of North Liberty, Iowa, is a current participant in the academy. "My first elected position was as mayor," said Nielsen, "and so the basics of how to run a meeting, the open meetings laws, rules and responsibilities

LEFT: Newly elected mayors, city council members, city clerks and city administrators gain an understanding of budget and finance, effective city councils, municipal operations and ethics at a Municipal Leadership Academy Part One session in Atlantic, Iowa. (Photo provided)

BELOW: Cindy Kendall, Iowa State University Extension and Outreach/Iowa League of Cities, presents a MLA Part One session on city budgets in Storm Lake, Iowa. (Photo provided)



of various positions — that was incredibly helpful. One of things I think they do a really, really good job of teaching is TIF, tax increment financing, because it is so multi-layered and you think you've learned it and then all of a sudden they throw in a 'Oh, no, and then there's this.' And so they do a really good job of teaching you the basics little by little and adding it on. And then also bringing in people who work with it every day. At Leadership Academy Part Three, we had a guest speaker that works with finance — TIF finance — every day, and he did a really good job of getting into the weeds, so I feel like there's always an opportunity to learn what you need on day one. Even if you are a seasoned elected official, there's opportunity for you to learn from the League's various workshops."

In addition to legal matters, some workshops cover topics like relating to the public. "There was one workshop that was all about how to handle 'customer complaints,'" Nielsen said. "And the way that it was presented and the information that was given was just so perfect. They talked about 'C.A.V.E. people' — Citizens Against Virtually Everything. No matter what you do there's always going to be someone who's unhappy. They really gave us good tools to deal with that, because it is hard when you're trying to make the best decision for 18,000 people. They're not all going to agree on what the solution is, and so being able to not take the criticisms personally, and to put yourself in their shoes, but still be able to relate to them and let them feel like they've been heard and that they've had a chance to participate is important. I really think that was probably — other than the technical stuff — one of the most helpful workshops."

Tomb said that the benefits of the Academy extend beyond the material presented in class. "We do this on a regional basis," he said. "So, for Part One, it's going to six locations so newly elected officials and other elected officials learn from their neighbors, too, and the networking opportunities — it's hard to overestimate that power or that benefit because people are dealing with the same kind of budget constraints, environmental regulations, building projects, you name ►

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the issue. Get them in the same room and start talking about it, and they can share lessons learned. There are laws and rules of the road that we all need to be aware of, particularly with open meetings and open records and fraud and abuse cases that have occurred and what elected officials can do about it, so it really empowers elected officials to do their job more effectively.”

Miranda Kulis, a council member in Newton, Iowa, values the relationships she has forged with her peers in city government through the MLA. “I’ve found that having this network has given me the confidence that, if I don’t have an answer or I’m not exactly sure what to do, first of all, I have a network of other people that I have physically met from other cities of a similar size that I can reach out to for assistance. But also there’s the fact that I have a huge treasure trove of online information available to me that I can reach out to as well.”

Nielsen recommends the Municipal Leadership Academy to all those taking office for the first time. “I think that if you don’t take it, you’re just missing a big piece of being an elected official,” she said. “I would highly recommend it to everybody. I think it’s very much worth the time and the investment to better serve your citizens. We’re really lucky to have that kind of resource here for us to use.”



ABOVE: MLA participants receive a crash course in property classes and tax increment financing. Newly elected city officials not only glean useful information, but make invaluable connections with other officials at MLA sessions. (Photo provided)

BELOW: Chris Myres, economic development specialist with Sioux City, presents a MLA Part Three session in Cherokee, Iowa, on economic development. (Photo provided)



THE WHOLE GAMUT

Beyond forming invaluable relationships and having access to beneficial resources, Iowa’s Municipal Leadership Academy addresses many important topics, including:

- City finance and budgeting
- Meeting procedures
- Municipal operations
- Economic development
- Ethics and fraud prevention
- Nuisance abatement
- Personnel issues
- Land use and zoning



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Location, location and transportation: Sikeston, Mo., scores Orgill Distribution Center



by JULIE YOUNG | The Municipal

WHENEVER A COMPANY decides to establish itself in a new community, its leadership tends to adhere to the general rule of real estate: Location is everything. Of course, location means different things to different entities depending on their personal needs. For a small mom-and-pop shop, it may be an empty storefront on a bustling street corner, but if it is one of the largest distributors in the Midwest, transportation matters as well.

When Orgill Inc. decided to consolidate two of its distribution centers into a single facility, company officials needed to find a space with enough land to accommodate the sprawling operation, plenty of interstate access and a community committed to road maintenance. They found the perfect place in Sikeston, Mo., a city of 16,500 in the southwestern portion of the state.

“When we came here in 2009, we had a very extensive search to find a location for our Midwestern distribution center,” said Denny Koonce, division manager of the Orgill Distribution Center in Sikeston. “Being able to reach our customers who are located throughout the Midwest is very important to us.”

Giving credit where it is due

It’s easy to see why transit is so important. As the world’s largest independently owned hardlines distributor, providing hardware and home improvement products to retailers throughout the U.S. and in more than 60 countries around the world, Orgill has sales in excess of \$1.84 billion annually. Naturally, with that much at stake, the company has to have its centers located in areas that enable it to reach its customers wherever they happen to be. The Sikeston location covers parts of 17 Midwestern states, employs 300 people and has a tremendous impact on the local economy.

“It really was the perfect storm that brought them here,” said David Wyman, a Missouri Department of Transportation engineer who works out of the district transportation office next door to the Orgill facility. “Although there were a lot of people who had a hand in Orgill coming to Sikeston, one of the major players was former Mayor Jerry Pullin who owns a trucking company himself and always has transportation on the forefront of his mind.”

Another key figure was Sikeston economic developer Ed Dust, who played a role in the early discussions with Orgill. According to Wyman, the company was impressed with

LEFT: *Orgill’s move to Sikeston, Mo., saw positive economic impact for the city, bringing 300 jobs and increased spending in the area. Orgill will soon be expanding again, opening the way for about 70 more jobs. (Photo provided)*

RIGHT: *With a desire to serve 10–12 states from its new location, Orgill picked Sikeston for its 75,000-square-foot facility, largely swayed by the city’s well-maintained roadways. (Photo provided)*

the community’s road maintenance efforts, even during a recession that hamstrung most municipalities.

“It’s a good place to be headquartered, especially when you have an economic developer who has lived here all his life and knows the trends of everything that is happening. I give him a tremendous amount of credit in starting the discussions that led Orgill to the area,” he said.

Local impact

In a MoDOT video posted on YouTube, Dust explained how Orgill decided to make Sikeston its new home.

“When Orgill was looking for a site ... they wanted to serve 10–12 states from this location ... we had the site and everything they wanted but the best thing we had going for

“If communities don’t take care of their roads, they won’t be able to attract new companies to their areas.”

us was that we had the highways ... If you don’t have a good transportation hub, people are not going to look at you. If people can’t get their product in and out. It’s just a matter of fact, they won’t be there,” he said.

Orgill’s 75,000-square-foot facility is conveniently located at Interstates 55 and 57, having a direct link to Chicago as well as Highway 60, which goes to Springfield, Mo.; Joplin, Mo.; and beyond. The center is also right next door to the district MoDOT office, which will always have Orgill’s back when the roads get rough.

Dust said that in the six years that Orgill has been in Sikeston, the company has hired over 300 people in the community, and the money invested in local talent turns over three to five times before it leaves.

“That’s a tremendous amount of money being spent in the area,” he said.

Koonce said the match has been a good one for Orgill as well, and after six years of being in Sikeston, the company is expanding its operation to nearly 1 million square feet, which will lead to a 10 percent increase in business and approximately 70 jobs. One of the things that makes the Sikeston center so unique is its worldwide sourcing department. This department is dedicated to merchandising that has been sourced overseas and imported so that Orgill customers can compete with Lowe’s, Home Depot and other major retailers.

“We bring product in in containers that have ... come up from Memphis, and we bring them by truck to Sikeston and then send them out to our other distribution centers ... so the transportation element is very important,” he said.

One big picture

The decision to make transportation a priority is not an easy one, especially when budgets have to be slashed to the bare minimum, but in his video, Dust said if communities don’t take care of their roads, they won’t be able to attract new companies to their areas. And if by chance, they are able to get something, but people can’t get to work, municipalities won’t have the employees necessary to keep the businesses running.

“It’s all one big picture,” he said. “We have to all pitch in ... we have to keep the roads up to keep Missouri going the right way.”

“Ed has done a great job. He is humble in the way he approaches things and he’s been good at talking to companies and marketing the city of Sikeston. He has been very successful in bringing in companies that have resulted in a lot of jobs,” Wyman said. 

ON THE WEB

To view MoDot’s video on Orgill’s move to Sikeston, visit www.youtube.com/watch?v=zbkyp27SE.



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SEPTEMBER

Sept. 14–16 Michigan Municipal League 2016 Convention

Grand Hotel,
Mackinac Island, Mich.
www.mml.org

Sept. 22–24 Illinois Municipal League 103rd Conference

Hilton Chicago Hotel, Chicago, Ill.
conference.iml.org

Sept. 24–28 Water Environment Federation Annual Technical Exhibition & Conference

Ernest N. Morial Convention Center, New Orleans, La.
www.weftec.org

Sept. 25–27 Society of Fire Protection Engineers North American Conference & Expo

Denver Marriott City Center, Denver, Colo.
www.sfpe.org

Sept. 25–28 ICMA Annual Conference

Kansas City Convention Center, Kansas City, Mo.
icma.org/en/icma/events/conference

Sept. 25–28 International Economic Development Council Annual Conference

Cleveland Convention Center, Cleveland, Ohio
www.iedcevents.org

Sept. 26–28 F.I.E.R.O. Fire Station Symposium

Sheraton Ridge Raleigh Hotel, Raleigh, N.C.
www.fierofrestation.com

Sept. 26–30 Emergency & Municipal Apparatus Maintenance Symposium

Ohio Fire Academy,
Reynoldsburg, Ohio
www.oaevt.org

Sept. 26–28 Midwest Green Fleets Forum & Expo

Greater Columbus Convention Center, Columbus, Ohio
www.cleanfuelsohio.org

OCTOBER

Oct. 3–7 EMS World Expo & World Trauma Symposium

Ernest N. Morial Convention Center, New Orleans, La.
emsworldexpo.com

Oct. 4–5 Sustainable Cities Network Growing Sustainable Communities Conference

Grand River Center, Dubuque, Iowa
www.gscdubuque.com

Oct. 4–6 Indiana Association of Cities & Towns Annual Conference & Exhibition

French Lick Springs Hotel, French Lick, Ind.
www.citiesandtowns.org/ac

Oct. 4–6 Pennsylvania Municipal League 117th Annual Summit

Lancaster County Convention Center, Lancaster, Pa.
www.pamunicipalleague.org

OCTOBER

Oct. 4–6 American Road & Transportation Builders Association National Convention

JW Marriott Tucson Starr Pass Resort, Tucson, Ariz.
www.artba.org/news/training-events/national-convention

Oct. 4–6 2016 Indiana Association of Cities & Towns Annual Conference & Exhibition

French Lick Resort, French Lick, Ind.
www.citiesandtowns.org

Oct. 4–7 Kentucky League of Cities Conference & Expo

Hyatt Regency, Lexington, Ky.
www.klc.org

Oct. 5–6 Location-Based Social Media Conference (Latitude)

Navy Pier, Chicago, Ill.
geofeedia.com/latitude-2016

Oct. 5–8 National Recreation & Parks Association Annual Conference

America's Convention Center, St. Louis, Mo.
www.nrpa.org/conference2016

Oct. 6 Third Annual Public Works/Parks/Building & Grounds Expo

Konkel Park, Greenfield, Wis.
www.ci.greenfield.wi.us

Oct. 9–11 Virginia Municipal League Annual Conference

Virginia Beach Convention Center, Virginia Beach, Va.
www.vml.org

Oct. 9–12 National Procurement Institute Annual Conference & Products Exposition & 21st Annual Achievement of Excellence in Procurement Awards Presentations

Antlers Hotel, Colorado Springs, Colo.
www.npicconnection.org/development/conference.asp

Oct. 13–16 Association of Fire Districts of the State of New York 45th Annual Fall Workshop & Vendor Expo

Hilton Hotel & City Center, Saratoga Springs, N.Y.
firedistnys.com/cms/?q=conference/fall

Oct. 14–19 64th Annual International Association of Emergency Managers Conference & EMEX

Savannah International Trade & Convention Center, Savannah, Ga.
iaemconference.info

Oct. 15–18 International Association of Chiefs of Police Annual Conference & Exposition

San Diego Convention Center, San Diego, Calif.
www.theiacpconference.org

Oct. 17–19 Fire Department Training Network Live-Fire Training Camp

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www.fctraining.com

Oct. 17–19 Fleet Technology Expo

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2017 Outlook

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Right place, right time for Anuvia Plant Nutrients

Waste becomes wanted and byproducts become primary products with the recent opening of the first Anuvia Plant Nutrients Corporation fertilizer production facility near Zellwood, Fla.

The unique Anuvia process is designed to recycle materials from a variety of organic waste sources into an enhanced efficiency plant nutrient product line. Anuvia products set a new and higher standard for organic material-based plant nutrients.

“Our patented process creates homogenous, dry granular, multinutrient, high-value fertilizers that are more slowly released into the soil,” says Jeff Burnham Ph.D., Anuvia founder and senior vice president, Research and Regulatory Affairs. “The slow release allows more uniform uptake by the plant, resulting in less loss by volatilization and leaching. Best of all, our products and the process are

economically, environmentally and socially sustainable. We use organic materials from different waste streams to create products that are environmentally sound; helping people, plants and the planet thrive.”

The Anuvia process creates a pound of high-value fertilizer for each pound of organic material used. The process is designed to make use of a wide variety of organic materials, including food waste, animal waste and industrial and municipal organic waste streams. Traditionally, these organic materials are considered of low or limited value, and many end up in landfills or are land-applied. The Anuvia process optimizes the intrinsic

value of these organic materials, turning them into valuable products for both the turf and agricultural industry.

Recycling organic materials back into the land is a model for the much sought-after circular economy, in which resources are continually cycled — much like what happens in nature. “Prior to Anuvia, use of organic materials for fertilizer was limited by their low nutrient value,” says Burnham. “Our process creates a high-nutrient content product, and thus, economic value to the end product.”

The novel Anuvia process is a closed-loop system that protects air and water quality while eliminating off-site odors. Scrubbers and filters capture and recycle odor-causing particulates and other volatiles. Water removed during granulation and drying, and excess heat produced by chemical reactions,

LEFT: Anuvia will start producing SymTRX 16-8-0-16S, a homogenous, enhanced-efficiency plant nutrient formulated specifically for agricultural markets, later in 2016. (Photo provided)

RIGHT: Anuvia's facility in Zellwood, Fla., started production in April. (Photo provided)

BELOW: GreenTRX 16-1-2-17S-3Fe, currently in production, represents a sustainable solution for the turf industry. (Photo provided)



are redirected and used in other steps within the process. Methane gas produced at one stage is used as fuel in another. Every step is designed to enhance the efficiency and economics of the process while reducing the environmental load.

"Our manufacturing process is a proprietary, multistep, organic resource processing system," explains Burnham. "It puts the organic material through a reaction process that creates an Organic MaTRX; a novel, slow-release delivery system that is natural and intuitive unlike any other."

Currently Anuvia produces GreenTRX 16-1-2-17S-3Fe, intended for use in the golf, professional turf and lawn care industries. It will add SymTRX 16-8-0-16S for agricultural use later this year. The balanced rates of nitrogen and sulfur in both are designed to fit the needs of the growing plants. Soil scientists recognize the growing need for higher levels of sulfur, increasingly referred to as the fourth macronutrient.

Anuvia products contain 16 percent organic matter with fast- and slow-released nitrogen, phosphorus and sulfur. The turf product also contains iron, which promotes greening without excessive growth.

When field-applied, free nutrients, which make up about two-thirds of the total nutrients in the granules, are released in the first two to three weeks, coinciding with the heavy nutrient needs of emerging and rapidly growing plants. The Organic MaTRX breaks down over the next six to eight weeks, slowly releasing bound nutrients, amino acids, peptides and other compounds that benefit soil biology and adding carbon-based organic matter to the soil — thereby contributing to soil health.

Anuvia is in the right place at the right time. The ability to turn organic waste

streams into high-value, high-efficiency fertilizer couldn't be more timely. Industry ARC, a research and consulting firm, projects the global fertilizer market will increase from \$116.7 billion in 2014 to \$151.8 billion in 2020. Meanwhile, UN projections of population growth and demand for a higher standard of living in many parts of the world by 2050 will place unprecedented demand on food production.

The need for plant nutrients is growing at the same time that environmental concerns over leaching and volatilization of nutrients are also increasing, with state and federal restrictions being proposed or put in place.

As a result, the slow-release fertilizer market is currently growing at 8 percent per year. Crop producers, landscapers, groundskeepers and other fertilizer users are seeking plant nutrient products that meet environmental concerns while encouraging plant health and growth. Anuvia's Organic MaTRX meets these concerns.

"Our process and our products are perfectly positioned to help meet the growing need for plant nutrients, and to do so in a way that will improve soils, produce healthier plants and protect the environment," says Burnham.

Anuvia Plant Nutrients help the environment in another way. Organic matter that makes up 16 percent of each granule feeds soil microbes, contributing to improved soil and root zone health.

"If you want better soil structure and water infiltration, you need a healthy biological system," says Jerry Hatfield, laboratory director and supervisory plant physiologist, National Laboratory for Agriculture and the Environment. "Bio-based fertilizers can help with that because they are more complete fertilizers."



Hatfield points out that conventional fertilizers are usually blends of specific macronutrients. However, fertilizers that use organic materials as a base ensure the presence of a wider variety of nutrients needed by the soil biology and plants.

"There are a lot of macro and micronutrients available in any biologically based fertilizer," says Hatfield. "Their slow release is important for crops as it ensures that these nutrients continue to be available as grain fills and matures. They 'plump out' the grain, and that is when the grower gets the most profit."

The slow release means that nitrogen is released as plants can utilize it. Excess nitrates in the soil are subject to leaching as well as volatilization due to denitrification. Preventing this is growing in importance, notes Hatfield.

"We are seeing lawsuits over nitrates in the Des Moines, Iowa, drinking water and growing concern over the impact of excess fertilizer on the hypoxia zone in the Gulf of Mexico," says Hatfield. "Agriculture is working hard to improve fertilizer efficiency and reduce its environmental impact. There is a lot of interest in how a biological fertilizer can fit into the current system." ■



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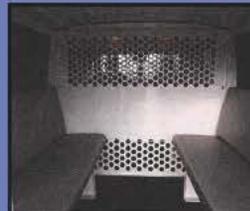
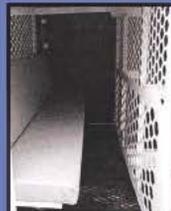


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Calhoun Super Structure and Natural Light announce joint venture

TARA, ONTARIO, CANADA— Calhoun

Super Structure was pleased to announce a joint venture with Natural Light Fabric Structures April 20 at the eighth annual Dealer Conference at Niagara-on-the-Lake.



This alliance expands the Calhoun product line to include Natural Light fabric buildings.

The joint venture was a natural fit for both companies. For over 20 years, Calhoun, a Canadian-based company, has crafted the strongest, most reliable engineered fabric building on the North American market. The team of Natural Light Fabric Structures, based in Minnesota, offers decades of experience in general and fabric building construction, steel fabrication and manufacturing engineering. The alliance with Calhoun will enable easy, cross-border access to both product lines and allow for the sharing of design and engineering expertise.

“Calhoun dealers can now offer customers the largest product line in the fabric building industry. Products will be manufactured in the USA and in Canada and bring together the strengths of both companies,” said Jeremy Calhoun, owner, Calhoun Super Structure.

Calhoun and Natural Light have been considering this partnership for several months given their well-aligned business strategies. The importance of engineering, attention to detail and customization made both companies well-suited to work together. Natural Light products are available to order now through authorized Calhoun dealers throughout North America. 

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.

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Dennis A. Randolph, P.E. | Guest columnist
*Director of Public Works,
city of Grandview, Mo.*

GRANDVIEW, MO., IS A FIRST-TIER SUBURB OF KANSAS City, Mo., with a population of 25,290. Grandview is also an environmental justice community; with all its census tracts designated EJ either by income or demographics. I-49, part of the NAFTA Trade Corridor, runs north/south bisecting the city into eastern and western halves. Creating I-49 and the resulting geography are important because they have shaped our city and caused some significant negative impacts. Moreover, the negative effects from having a major highway dividing a community are not unique to Grandview.

Earlier this year, Transportation Secretary Anthony Foxx spoke at the Center for American Progress on “Bridging the Divide: Connecting People to Opportunity.” Secretary Foxx discussed the damage to communities resulting from highway construction over the past century. He spoke of his concern — and the need — for reconnecting people and communities. While Secretary Foxx mentioned several large cities and communities, smaller communities have also suffered, often disproportionately, and this is the case for Grandview.

Similarly, in 2015, Emily Badger wrote in the Washington Post about how railroads, highways and other artificial lines racially divide America’s cities. Her article argued that even before people planned the roads Secretary Fox discussed, railroads set the stage for disrupting communities by later highway construction. One effect of the rail and highway construction through Grandview was that much of the city ended up on the “wrong side of the track.”

As Badger points out, being on the wrong side of the tracks has long-term, continuing effects. For Grandview, the long-term disruption of our community fabric brought about by “transportation improvements” that have benefited the “greater” regional, Midwestern and national “good,” but has resulted in serious social, health and economic consequences for Grandview and all its citizens that needed addressing.

While upgrading I-49 holds great promise for metro Kansas City’s economic development, it has also heightened long-term challenges for the city of Grandview related to community cohesion, economic development and livability. The major action of designating I-49 signaled that Grandview’s citizens were destined to continue to “suffer” disproportionate negative effects for the “transportation” benefit of others.

Grandview also suffered the problems many first-ring suburbs have experienced, expanding second and third ring communities into greenfield areas. For first-ring communities, this is the mother of all unsustainable activities.

Yet despite, both the long-term history and recent transportation actions that have harmed the people of the Grandview community; denied them good health; handicapped their ability and their liberty to move freely within their own community; and forced them to use what scarce funds they have to pay for excessively high health and travel costs rather than to engage in the pursuit of happiness, the Grandview community did not give up hope that it could correct the injustices that have been imposed on it. Since 2008 the city of Grandview has made great strides towards making Grandview not only a place again,

but a place made of many places.

Key to this recovery has been following the basic precepts of environmental justice; that is involving our citizens in the projects affecting their

“The Grandview community did not give up hope that it could correct the injustices that have been imposed on it.”

community. In addition, the process we have followed has involved several planning and development approaches; each in itself provides positive benefits to a community, but when done with each other, compound their benefits. These include developing “complete streets,” providing for “walkability,” developing sustainable and green infrastructure, and “making places” around our city. These approaches incorporate a key component of the environmental justice mantra ... considering people first and seeking to shape projects by considering the ideas and thoughts from the people most closely affected.

Grandview, Mo., has reinvented itself by adopting new thoughts and ideas, including complete streets, sustainability, place making and walkability. The city of 25,290 is also an environmental justice community. (Photo provided)

For developing infrastructure projects, in particular, this holistic approach has not meant a lowering of engineering standards — as some have worried would be the case — but rather, has allowed the city to demand better, higher quality work from builders because the work being done is clearly creative and innovative to the point where builders want to be involved. This approach has also not necessarily meant an increase in life-cycle costs. Because principals of good engineering are followed, builder's better understand what is going on, and there is increased completion by builders.

By bringing together many of the ideas that currently populate the infrastructure business, the city has developed an approach to infrastructure development that has had many benefits for the city, especially for its social and environmental fabric. Now, for the first time in over 30-years, the city is experiencing rejuvenation and a reinvigoration that reflects improved livability and its recognition as a good place to raise a family and run a business.

In the end Grandview has seen improvement and its reinvention because it has adopted new thoughts and ideas, such as complete streets, sustainability, place making and walkability, with the understanding that while on one hand these ideas address particular problems, in the broadest sense these ideas all seek to preserve — and make better — the world and its environment so humankind can continue long into the future.

In developing such a holistic approach to infrastructure development and how it has addressed problems inherent in an environmental justice community, Grandview has been able to overcome the challenges of 35 years of inertia. As a result, we have seen our main street produce increasing sales taxes and add new businesses. Two of our three 1950s era shopping centers have redeveloped, and the

city is recognized as being on the move again. This has all happened because as a community:

- We dreamed
- We planned
- We built
- We have become experts in reuse
- We have not been afraid to lead with infrastructure spending
- We have remembered our past and use themes to help us build a new place
- We have used our economic development tools wisely

Above all, we have been positive about our future and have been careful not to mortgage it away. Most importantly, we have told our story to whoever we can, because we are proud with how our work has succeeded in making Grandview a vibrant place again, and we encourage other communities to take such a holistic approach to community improvement. 

Dennis Randolph is in his 46th year as a local government engineer. Currently director of public works for the city of Grandview, he is also an adjunct instructor in construction engineering at the University of Missouri — Kansas City. In 2015 he was selected as one of the American Public Works Association's Top 10 Public Works Officials. He currently takes part on a number of technical committees and is a member of Environmental Protection Agency's National Environmental Justice Advisory Council.





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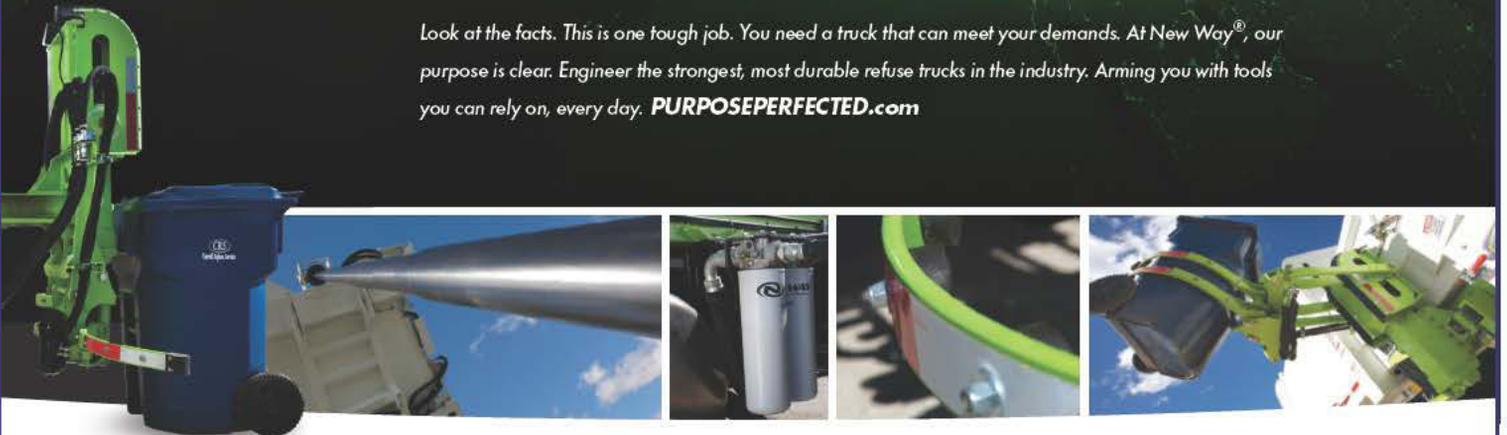
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TOP 16

Complete Streets superstars

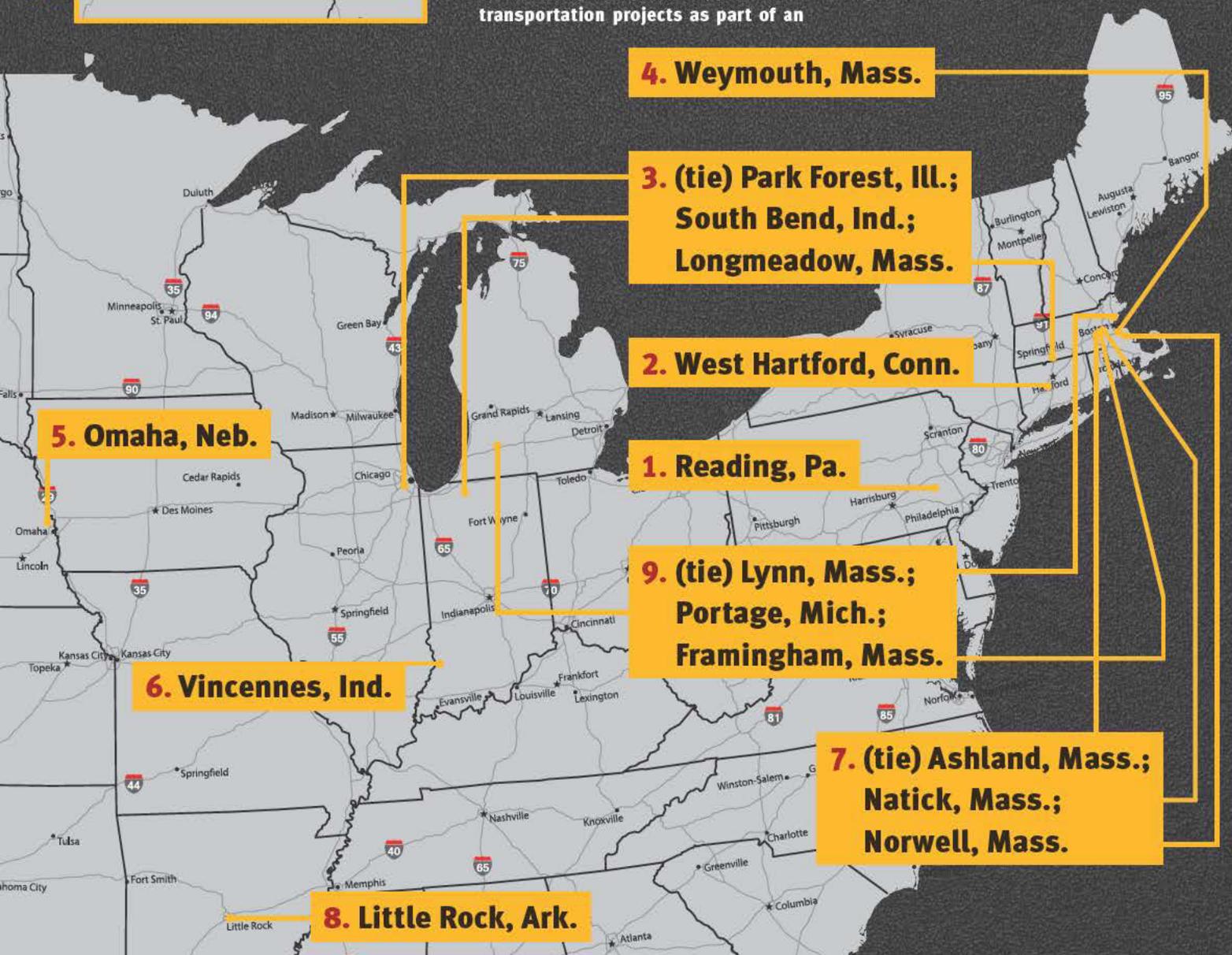
According to Smart Growth America's National Complete Streets Coalition, there are currently 899 Complete Streets policies in place in the U.S., including 664 in municipalities. Just a decade ago there were only 32 such policies.

Among these widespread efforts to reevaluate city streets for accessibility and multi-modal opportunities are a handful of cities that have really nailed the concept. These communities created designs that account for the needs of elderly residents and those with diverse abilities and interests; as an entity, they are "approaching transportation projects as part of an

overall network rather than as single segments," according to municipal planning thought leader Next City.

In April, Next City posted a list of cities that Smart Growth America believes have developed the best Complete Streets policy, based on effectiveness at providing and encouraging safe access for all. What's maybe a little surprising, but very encouraging, is that all but three are small- to mid-size cities with populations of less than 100,000.

Those 16 cities with outstanding Complete Streets policies are:



4. Weymouth, Mass.

**3. (tie) Park Forest, Ill.;
South Bend, Ind.;
Longmeadow, Mass.**

2. West Hartford, Conn.

1. Reading, Pa.

**9. (tie) Lynn, Mass.;
Portage, Mich.;
Framingham, Mass.**

**7. (tie) Ashland, Mass.;
Natick, Mass.;
Norwell, Mass.**

8. Little Rock, Ark.

5. Omaha, Neb.

6. Vincennes, Ind.

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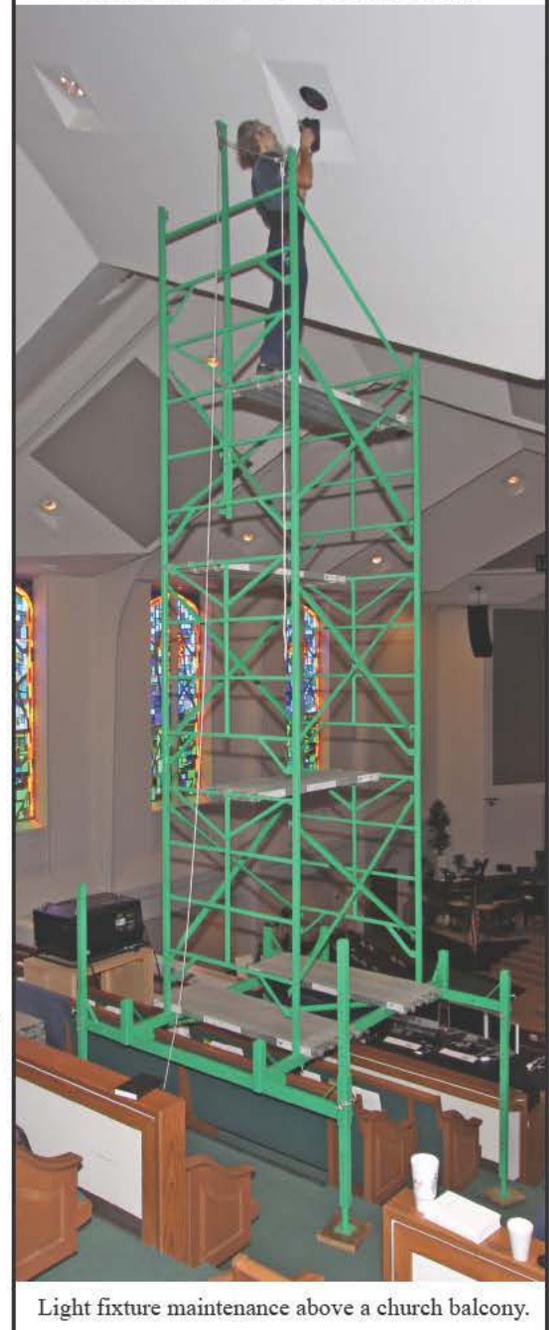
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