

THE MUNICIPAL

The Premier Magazine For America's Municipalities

January 2020

Maintenance & Operations



GREYSTONE
CONSTRUCTION



INSIDE:

GIS optimizes operations

**Mississippi River mayors
band together**

PRSR-T STD
U.S. POSTAGE
PAID
Bolingbrook, IL
Permit No. 1939

www.themunicipal.com

CMC 83HD+ BUCKET TRUCK OF THE FUTURE

Two Lifts For The Price Of One



Complete
Truck Mount
Up-fit + Lift
Available

MARYLAND PRINCE GEORGE COUNTY PARKS & RECREATION

The **MOST ADVANCED & VERSATILE** tracked aerial lift
for Municipalities, Tree Companies, and Parks Departments.

Work safer, faster, and more efficiently with superior productivity advantages. Replaces bucket trucks, climbers, and other lifts with ONE, more efficient and easy to use lift.

Other ARBOR PRO models available: 62, 72, 83, and 105 ft working height.

(978) 712-4950
allaccessequipment.com
sales@allaccessequipment.com



Get A Free Quote!



**ALL ACCESS
EQUIPMENT**

OMEGA

SAFETY BARRIERS & GUARDS



SAFETY BARRIERS



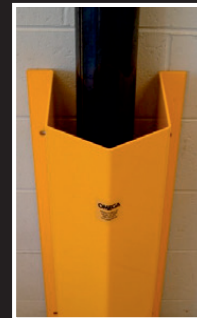
R·U·F PORTABLE BARRIERS



TRAK-SHIELD



QUIK-STEP STAIRS



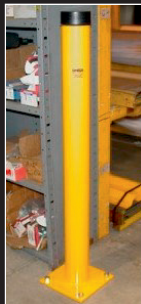
PIPE GUARDS



COLUMN GUARDS



CORNER SHIELDS



BOLLARDS



HANDRAILS & GATES



RACK GUARDS

Downspout Pipe Guards, HDPE Bollard Covers and many other safety products available.

The Nation's Leading Supplier of Safety Barriers & Guarding Products

Contact us today to find out more about how our products can keep your workers safe and secure.

Omega Industrial Products | www.omegaindl.com | 800-521-8272

**24****30****36****44**

17 Focus on Maintenance & Operations

18 Focus on Maintenance & Operations: GIS puts data at cities' fingertips

20 Focus on Maintenance & Operations: Proactive exercises ease winter operations for Lubbock

22 Focus on Maintenance & Operations: Worker shortage leads to street repair backlog

24 Focus on Maintenance & Operations: Mayors on the Mississippi join together

30 Focus on Maintenance & Operations: Fight or bite: Cities combat swarms after storms

36 Public Safety: Seattle Response Team keeps traffic flowing by clearing incidents

38 Streets, Highways & Bridges: Weather sensors give Niles, Ill., a winter edge

40 Streets, Highways & Bridges: Rose District sparks rejuvenation in downtown Broken Arrow

44 Building & Construction: Monroe returns to the river

ON THE COVER

Don't let winter weather catch you off guard with subpar salt and sand storage. Greystone Construction offers engineered fabric buildings that prioritize safety, efficiency and longevity. Optimize your winter snow removal operations with a structure that works just as hard as you do. Learn more on page 10.





INTERNATIONAL
CODE
COUNCIL®

People Helping People Build a Safer World®



FIRES.FLOODS.STORMS. EARTHQUAKES.

www.iccsafe.org

In recent years we have been reminded often of the important part building codes play in ensuring our communities can weather catastrophes. Around the world, our people, our economies, and even our health rely on the latest building and safety codes that incorporate innovative technology, best practices, and learnings gained from our diverse communities.

Strong, resilient communities start with adopting the latest I-Codes®, the most trusted and adopted building codes in America.

WE INVITE YOU TO GET INVOLVED! Work with your building and fire departments to be sure your community's construction codes are current. Encourage them to participate in code development hearings, in person or online (cdpACCESS.com). The time to get involved is now as the code development process continues for the 2021 I-Codes.

Visit iccsafe.org today to learn more about keeping your community safe.

Meet our Staff

publisher

RON BAUMGARTNER

rbaumgartner@the-papers.com



interim editor-in-chief

DEB PATTERSON

dpatterson@the-papers.com



editor

SARAH WRIGHT

swright@the-papers.com



publication manager

CHRIS SMITH

chris@themunicipal.com



senior account executive

REES WOODCOCK

rees@themunicipal.com



graphic designer

Mary Lester

mlester@the-papers.com



business manager

CARRIE GORALCZYK

cgoralczyk@the-papers.com

director of marketing

KIP SCHUMM

kschumm@the-papers.com

mail manager

KHOEUN KHOEUTH

kkhoeuth@the-papers.com

THE MUNICIPAL

PO Box 188 • 206 S. Main St., Milford, IN 46542

866-580-1138/Fax 800-886-3796

Editorial Ext. 2307; Advertising Ext. 2505, 2408 or 2489

WWW.THEMUNICIPAL.COM



The Municipal does not knowingly accept false or misleading advertising or editorial content, nor does The Municipal or its staff assume responsibility should such advertising or editorial content appear in any publication. The Municipal reserves the right to determine the suitability of all materials submitted for publication and to edit all submitted materials for clarity and space. The Municipal has not independently tested any services or products advertised herein and has verified no claims made by its advertisers regarding those services or products. The Municipal makes no warranties or representations and assumes no liability for any claims regarding those services or products or claims made by advertisers regarding such products or services. Readers are advised to consult with the advertiser regarding any such claims and regarding the suitability of an advertiser's products. No reproduction of The Municipal is allowed without express written permission. Copyright © 2020.

Departments

8 Editor's Note: *Rejuvenate your city this new year*

10 From the Cover: *Facility planning: Designing and building safe, efficient and long-lasting salt and sand storage buildings*

12 Unique Claims to Fame: *The Last Blockbuster, Bend, Ore.*

16 City Seals: *Lewes, Del.*

34 City Profile: *Spearfish, S.D.: A base camp for adventure in the Black Hills*

48 Conference Calendar

49 Product Spotlights

52 Top 10: *Best coffee cities in America*

53 Advertiser Index

Announcing the passing of The Municipal's Editor-In-Chief

Jeroldine Rae "Jeri" Seely,

79, Milford, died at her home Sunday, Nov. 17.

She was born July 26, 1940, to Jerry and Kathryn Bushong.

She married Durwood "Bud" Seely on

Sept. 11, 1960.

She graduated from Milford High School in 1958.

Jeri had worked for The Papers Incorporated since Aug. 7, 1961, and held the position of editor-in-chief most of her 58 years with the company.

She attended The Christian Church of Milford and was a member of Milford Lions Club, holding numerous positions locally, at the state and even international level.

She also has received numerous awards through Lions, the Hoosier State Press Association and the American Legion Auxiliary Golden Press Award in 1984 for America's Best Local Editorial.

She is survived by her husband, Bud; a brother, John, and his wife Leesa; and two nephews, Brandon and Scott.



TWO MACHINES. ONE GOAL ELIMINATE POTHOLES



KM T-2 Asphalt Recycler

Produces 4 Tons per Hour
Recycle millings or saw cut material
Meets plant mix specifications



KM 8000T Asphalt Hotbox

Maintain asphalt temps for 2 days
Reclaim excess or bulk stored asphalt
Reduce your dependence on cold patch

Available on these National Contracts

Schedule Your Winter Demo Now

HGACBuy
THE SMART PURCHASING SOLUTION

NCPA
National Cooperative Purchasing Alliance

800-492-1757 sales@kminternational.com
www.kminternational.com



Rejuvenate your city this new year



Sarah Wright | Editor

JANUARY'S THEME IS OFFICIALLY about maintenance and operations; however, as articles poured in, a secondary theme became evident: rejuvenation. Quite fitting for the new year, right?

Cities require constant rejuvenation to avoid stagnation, whether that is adapting to modern needs and tastes, improving in some operational capacity or completing projects like streetscapes, wastewater plant expansions or the addition of a new trail system. You'll see many cities in this issue that have met the challenge.

A group of mayors along the Mississippi River have come together through the Mississippi River Cities and Town Initiative to both improve the river and better mitigate the increasing number of weather events. With \$500 billion in annual revenue on the line, these mayors know all too well the importance of the river and

the infrastructure along it. Writer Denise Fedorow shares the MRCTI's mission and the benefits member mayors are finding through the organization, especially as their combined voices are heard at all levels.

Rivers can be invaluable to the cities nestled along their banks. Farther away in Michigan, the city of Monroe has tapped into a previously ignored resource, the River Raisin. This has included remediation after a heavily industrialized past and the building of outdoor spaces along the river bringing people back to it in a way that'd previously been underutilized. Writer Janet Patterson highlights Monroe's evolution and return to the river.

GIS can also spark transformations, particularly in how operations and maintenance are handled — improving efficiency in-house while also increasing residents' overall satisfaction rates. Writer Ray Balogh shares the numerous ways cities can implement GIS to its fullest while also spotlighting Beaverton, Ore.'s, and Waterloo, Iowa's, GIS programs — both of which have saved their respective cities copious amounts of time.

If your municipality has yet to invest in GIS or has only done

so lightly, definitely check out that lead article. GIS can be a beneficial tool for a variety of situations, whether it is monitoring noise levels surrounding an airport or monitoring the health of underground pipes to meet state mandates.

Also in regard to rejuvenation, I received a tip out of Farmington, N.M., to check out what Broken Arrow, Okla., has done with its downtown Rose District. I was not disappointed: The city has breathed new life into its downtown area, keeping it alive well into the evening. As more cities are focusing on their downtown areas versus urban sprawl and its shopping centers, it's worth checking out what Broken Arrow has accomplished.

We hope this issue provides plenty of inspiration for 2020 and encouragement to pursue projects that have been on the docket for a while. Keep your eyes peeled for potential funding opportunities; the stars just might align this year.

Happy New Year, everyone!



Over 5000+ units in service worldwide!



Proven & Affordable



UTV Fire & EMS Skid Units
Brush Truck Skid Units
888.546.8358
SALES@KIMTEKRESEARCH.COM



KIMTEKRESEARCH.com



When visibility is critical

Heated Wiper Blades help you see in the snow. Clearly.

Live behind the windshield?

Our premium heated wipers feature a heated frame and silicone blade that melt ice and snow on contact, instantly increasing your visibility and efficiency.



EVERBLADES



Heavy Duty LED-Lighted Switch
Each kit includes a heavy-duty Heat Control Switch for full On & Off control inside the cab.



Engineered For Tough Weather
High-quality silicone rubber compound and corrosion resistant framing last 3 times longer than normal wipers.



Heated Blade & Frame
Calibrated-heating elements radiate heat (230°F) throughout the silicone blade and metal frame.



Semi Trucks



Buses



Municipalities



Plow Trucks



Implements

46104 State Highway M26, Atlantic Mine, MI 49905
800-746-0428 | www.everblades.com

Sand waits to be used in a fabric building designed by Greystone Construction. (Photo provided)



Facility planning: *Designing and building safe, efficient and long-lasting salt and sand storage buildings*

Article submitted by GREYSTONE CONSTRUCTION

When snow flies and ice builds up on roads, will you be ready? Response time, safety and a sufficient supply of salt and sand is critical for winter road maintenance.

“The facility where salt, sand and equipment is stored can become an obstacle or an advantage for street crews during winter storm operations,” said Kevin O’Brien, president and CEO of Greystone Construction. “A salt shed should be designed for safety, efficiency and longevity.”

Greystone Construction, a general contractor, has built over 1,300 fabric buildings. The Greystone team has worked with hundreds of municipalities across the country over the past 20 years to design and build storage facilities using steel framed structures with a tensioned fabric roof, also known as “fabric buildings.”

“Fabric buildings have many advantages over traditional structures when it comes to salt and sand storage,” explained O’Brien. “When designed well, fabric buildings are cost-effective, low maintenance and quick to install — oftentimes our crews can install a building in just days.”

Greystone routinely works with municipalities and departments of transportation to understand their bulk road salt and sand

storage needs and can assist in designing a safe efficient building solution that will last for years.

O’Brien elaborated, “Our process ensures our customers receive a high quality, engineered fabric building with a layout that allows for the greatest efficiency when snow falls and trucks need to be loaded with salt quickly and safely.”

O’Brien shared Greystone’s best practices for planning storage facilities using fabric buildings specifically for salt and sand storage.

“There are a number of factors that we take into consideration when designing a fabric building for salt and sand storage, including the project location’s (designing to meet local code requirements that meet the international building code), required storage capacity, site constraints, ventilation, reducing risk of corrosive damage, sufficient clearance to accommodate loading equipment and possible future expansion.”



Shown is a municipal fabric building in northern Minnesota, which was designed and built by Greystone Construction. (Photo provided)

Designing to meet local load requirements

Any building needs to be designed to meet local wind, snow, seismic and unbalanced snow loads. Fabric buildings are no different. A structurally sound building must follow current International Building Codes not just for safety, but for insurability.

“Greystone engineers its buildings to meet current IBC requirements. However, whatever manufacturer or general contractor you work with, make sure they are engineering your building properly for your site specific location.”

Capacity requirements

Greystone knows the density and angle of repose of deicing salt. Factoring this in with a customer’s storage capacity requirements and available footprint, its estimating team calculates the most economical building width and length.

“Fabric buildings can easily be expanded so in the future, when a customer requires greater storage capacity, Greystone can easily add additional building length,” O’Brien said.

Reducing risk of corrosive damage

Salt is a highly corrosive material and storing it properly is critical to maintain the integrity of a fabric building’s steel frames and components.

He added, “We recommend all building steel be hot-dip galvanized after production. This treatment achieves a much thicker and harder protective surface than in-line galvanizing. It also ensures that the steel trusses are coated both inside and outside after welding is completed. We also recommend a corrosion inhibitor in any concrete panels.”

Ventilation

Proper ventilation is key in reducing corrosion. “In the absence of moisture, corrosive materials would have little to no corrosive effect. You want air movement in your salt storage building to greatly reduce any condensation — this helps to prevent corrosion on everything in and around the building.”



This is an example of Greystone’s design for independent building foundations and pre-cast walls. (Photo provided)

Independent foundations and panels

O’Brien noted, “The combination of independent foundations engineered to carry building loads and pre-cast walls designed to carry commodity loads is often times more economical than cast-in-place poured walls designed to carry both building and commodity loads.

“This building design is also excellent to reduce corrosion because it keeps salt away from the steel trusses and base plates. It also creates the greatest possible air movement throughout the building.”

Sufficient clearance

Adequate clear height is a critical factor to ensure maximum storage capacity. More importantly, sufficient clearance is necessary for safe maneuverability of trucks and dumping equipment.

O’Brien concluded, “Proper building clearance is important to reduce the possibility of costly damages to the building from equipment use.” ^M

[Greystone Construction’s team of fabric building experts is prepared to assist municipalities with their salt, sand and equipment storage needs. Call \(888\) 742-6837 for a free consultation and quote. Visit \[www.GreystoneConstruction.com\]\(http://www.GreystoneConstruction.com\) to learn more.](#)

The Last

BLOCKBUSTER®

Bend, Ore.

Shutterstock photo

By RAY BALOGH | The Municipal

Photos provided by The Last Blockbuster

A well-known lateral thinking puzzle posits a wealthy book collector who purchases a rare edition for a quite princely sum. To maximize his investment, he takes the book home and immediately throws it in his fireplace.

The question is, “Why would he do that?”

The answer: There were actually only two copies of the edition in existence. When he incinerated his auction purchase, the value of the only remaining volume skyrocketed.

An analogous phenomenon occurred in March 2019 when the Blockbuster Video store in Sydney, Australia, shuttered its doors, leaving the Blockbuster in Bend, Ore., the last standing franchise in the world. On July 16, 2018, the Bend store had become the only one in the United States when the other two remaining outlets, both in Anchorage, Alaska, closed up shop.

Since then, hundreds of devotees from around the globe have descended upon the store in Bend to catch a reminiscent experience at the iconic chain.

“We really do not keep track of the number of people who come into the store as tourists only,” said Sandi Harding, the store’s general manager. “What I can tell you is that we have filled 16 guest books and



The Blockbuster Video outlet in Bend, Ore., became the last remaining franchise on Earth when the Sydney, Australia, outlet closed its doors in March 2019.

have opened more than 5,000 new accounts since becoming the last store. We are up about 30% in rental business.”

The municipality, population 97,590, has been “very supportive of our store and our newfound fame,” she said. “We do have a local tour company that has included us in one of their tours.”



The 6,000-square-foot Bend Blockbuster store has preserved the nostalgic look of rental videos, clothing, memorabilia, snacks and soda pop.

The 6,000-square-foot outlet was of average size during Blockbuster's peak year in 2004. "However, as stores declined, many of them downsized and we became one of the larger locations," said Harding.

The Bend location "started out in 1992 as a local mom-and-pop store called Pacific Video and franchised as a Blockbuster store in 2000," she explained. "Our owners still live in Bend about five minutes from the store. We love being a part of the Bend community and are very grateful for their support.

"If someone is planning on visiting us, I think they will be pleasantly surprised by how well we have preserved the iconic Blockbuster look. Just come prepared to take pictures and don't forget to sign our guest book.

"We have no plans on changing a thing and our hopes are to stay in business as long as possible. The store is currently doing great and we want people to continue to come in and support our efforts."

The Bend Blockbuster also sells branded T-shirts, hoodies, hats, stickers, magnets, games and other memorabilia. Partnering with a local comedy club, the store hosts monthly comedy shows and movie trivia nights. In 2018 the Blockbuster commissioned a local brewery to craft a special beer for a charity block party. Several bottles of the brew are displayed in a glass case amidst movie posters and other exhibits.

The store also maintains the unforgettable Blockbuster fragrance of "plastic and popcorn," said Harding. "We have the privilege of being next to a Papa Murphy's, so you can add the pizza smell in there, too."

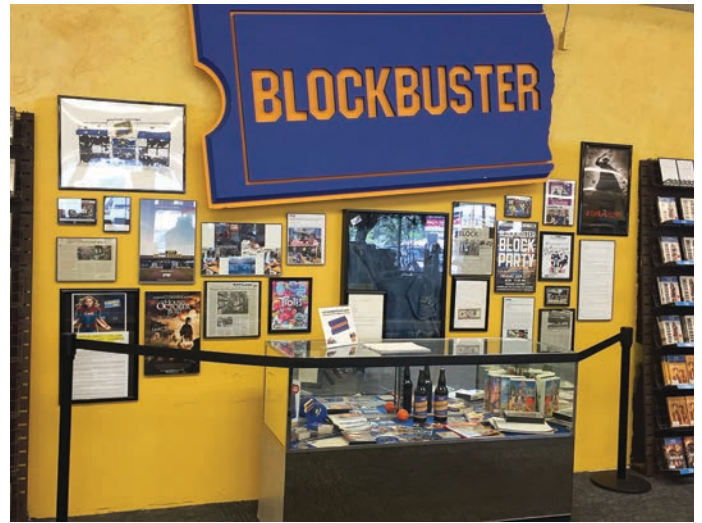
Theories abound to explain the gradual serial demise of Blockbuster's outlets, including changing technology, unfortunate financial and management decisions and a shifting demographic gravitating toward the convenience of accessing streaming videos.

But some things never change, and that accounts for much of the Bend store's continued success.

In his October 2019, 7,100-word online article, "Who Really Killed Blockbuster?" author Ben Unglesbee harkens to the nostalgic atmosphere of a venue people retreated to for solace in the wake of the tragedy of Sept. 11, 2001.

"I went to work at the video store thinking no customers would be there," he wrote. "Everyone, I assumed, would be rooted in their living rooms, eyes plastered to the news, waiting for the next bit of information to come through, for someone to satisfyingly explain what just happened, and when war would start and with whom.

"I was wrong. The store was nearly as busy as a weekend night ... crazily, impossibly busy.



An exhibit at the Bend Blockbuster includes samples of a name-sake beer locally crafted for a charitable block party in 2018.




Sandi Harding serves as general manager of the Bend, Ore., Blockbuster, the last remaining franchise in the world.

"At least one customer that night, a middle-aged man with a sad smile, said he came to the store to get away from the news, to take a break ...

"I was glad to be pulled away, to be around people, to be at the store. I had assumed everyone was there for the movie they would go sit in front of later. But I have to think — given my own relief — that a lot of them came for more than the videos. They also wanted to be around people on that day, in a friendly place. They wanted to be out, in the world.

"And at the time, the world very much included Blockbuster."

The Bend store is located at 211 NE Revere Ave. and is open 10:30 a.m. to 9 p.m. Sunday through Thursday and 10:30 a.m. to 10 p.m. Friday and Saturday. 

For more information, call (541) 385-9111 or visit www.facebook.com/lastblockbustermovie.



**TAKE CONTROL OF
YOUR ROADS.**



Contract #080114-MTE

WWW.MONROETRUCK.COM

LET'S BUILD

YOUR IDEAL STRUCTURE



SUPERIOR
BUILDING SOLUTIONS
FOR OVER
40 YEARS

INDUSTRY-LEADING WARRANTIES
ENERGY-EFFICIENT DESIGNS
EXPERT CONSULTATION
METAL AND FABRIC BUILDINGS

ClearSpan

www.clearspan.com
1.866.643.1010

SMP VALVE-OUT TOOL

FLANGE SPREADING & VALVE REPLACEMENT



Spread outside flanges & remove old valve



Prepare gasket surfaces



Reinstall new valve

VALVE-OUT TOOL WORKS ON FLANGES WITH BOLT HOLES FROM 3/4" TO 1-3/8" (STUD SIZES 5/8" TO 1-1/4")

CAN BE USED ON ANY VALVE WIDTH

REQUIRES NO GAP AND CAN BE USED TO SPREAD FLANGES AND REPLACE GASKETS

SAFER, FASTER, EASIER

SPECIALTY MAINTENANCE PRODUCTS, INC.
5711 CLAREWOOD DRIVE, SUITE A/B.
HOUSTON, TX 77081

EMAIL: SALES@SMPTOOLS.COM

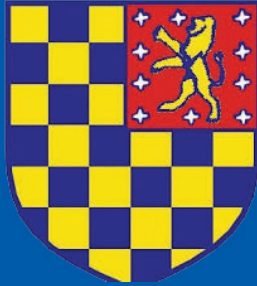
PHONE: 713-667-4402

WATCH THE VIDEO HERE



WEBSITE: [HTTPS://SMPTOOLS.COM](https://SMPTOOLS.COM)

Lewes, Del.



There is no mistaking the European heritage of Lewes, Del., in its city seal.

The seal prominently features a heraldic lion in rampant posture, an image common to several Dutch and English provincial and municipal flags.

The city, now boasting a population of 3,233, is situated on the Delaware Bay adjacent to the North Atlantic Ocean. Lewes has historically been an important seaport, whaling venue and trading post.

The area was discovered in 1609 by English sea explorer and navigator Henry Hudson and was first settled by a contingent of 32 Dutchmen in 1631.

The municipality underwent a series of starts and stops, some tragic, during its history:

- In 1632, one year after the original settlement, the 32 Dutchmen were massacred by a band of local Native Americans over a dispute concerning the Dutch coat of arms posted in the village.
- The area remained neglected and dormant until 1662, when a group of Mennonites established a colony, courtesy of a land grant by Amsterdam, capital of the Netherlands. That colony was destroyed the following year by the English.
- A new settlement gradually regrew but was attacked and burned to the ground in December 1673 by English soldiers from the colony of Maryland. The Dutch reclaimed the area that year but permanently ceded the land to the English six months later.
- The village was reorganized in 1680 by order of James Stuart, Duke of York, and a log courthouse was built for official administration. Also constructed on the site were a Church of England in 1681 and a Presbyterian church in 1682.
- In 1682 the colonies throughout Delaware were given by King Charles II to William Penn to pay a family debt. Penn renamed the county Sussex and the settlement—then known as Hoernkills—Lewes, in commemoration of namesake sites in England.

Lewes was established as the county seat of Sussex County until 1791, when it was moved to Georgetown, a more central county location.

Lewes was visited during the latter 17th century by Captain William Kidd and his band of pirates and suffered a cannonball bombardment by British naval vessels during the War of 1812. The attack was ineffectual, but one cannonball is lodged in the foundation of the building now used as the town's maritime museum.

As the first settlement in Delaware, the inaugural ratifier of the U.S. Constitution, Lewes hails itself as "The First Town in the First State."

Some of the town's structures are more than 400 years old. The Zwaanendael Museum features many exhibits about the history of Lewes.

For more information, visit www.ci.lewes.de.us or www.lewes.com.



TASK. TASK. DONE!

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

Our line of Compact Drills cover widths from 5' to 10' and are rated for tractors 35 to 100 HP or more. Whether your responsibilities are roadsides, agriculture, food plots, or green spaces, we build one that is just right for you.

Find your local dealer at landpride.com and ask for a Sourcewell quote.



OVER 350 PRODUCTS
TO FIT YOUR LIFESTYLE

www.landpride.com



LP CONSISTENTLY LEADING THE WAY...

Focus on: Maintenance & Operations

CITY HALL

\$500 billion

The annual revenue that the Mississippi River creates. Mayors along the river are banding together to ensure its and their communities' continued good health.



Discover their efforts on page 24.

10-40 hours

Beaverton, Ore., went from overtime workloads that stretched 200-300 hours a year to overtime

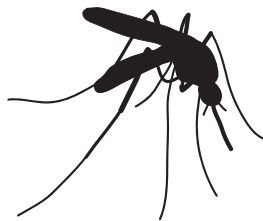
workloads of about 10-40 hours per year thanks to its enterprise GIS system improving efficiency.



Learn more about how other cities are using GIS on page 18.

\$4 million

North Carolina Gov. Roy Cooper had ordered this amount of funding toward mosquito control efforts in counties affected by a massive outbreak following Hurricane Florence in 2018.



Cities grapple with a pesky foe on page 30.

\$100,000

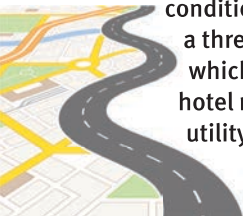
Grand Rapids, Mich., entered a contract worth up to this amount for sidewalk-clearing service, using local Lavelle's Lawn Care & Snowplowing.

Source: www.mlive.com/news/grand-rapids/2019/11/routes-set-for-grand-rapids-sidewalk-snow-removal-pilot.html



\$1.2 million

Pendleton, Ore., is studying ways to raise an additional \$1.2 million to bring its streets up to good condition. The council has decided on a three-prong approach: a gas tax, which will require voter approval; a hotel room fee; and an increase in the utility fee.



Source: www.mycolumbiabasin.com/2019/11/26/city-council-will-act-on-ways-to-fund-street-repair/

80-90%

Omaha, Neb., has always operated at this percentage of public works employees to budget, but with a good economy, retention has been challenging, with drivers holding commercial driver's licenses leaving to work for private companies.

Read more on page 22.

GIS puts data at cities' fingertips

By RAY BALOGH | The Municipal

The world's urban population is expected to increase 60% in the next 30 years, and it would behoove municipal leaders to start planning for that now.

Many municipalities are currently grappling with the challenge of maintaining infrastructure and an acceptable level of services in the face of shrinking budgets and personnel cutbacks.

The prospect of accommodating more people — and their attendant necessary accoutrements like living spaces, utilities, vehicles and recreational amenities — can be daunting for city planners.

Riding to the rescue: GIS systems and their mind-boggling array of applications, made more affordable in recent years through the exponential advances in technology.

The basic procedure of using a GIS system for maintenance of city equipment, services and amenities is to:

- Collect accurate and meaningful real-time data from various sources, including fixed monitors, department personnel and citizens and visitors through apps on their cellphones and computers
- Upload the data into the city's computer system
- Selectively retrieve the data and apply algorithmic calculations or superimpose various layers of data on maps to compare and integrate the information
- Analyze and interpret the data
- Apply the findings and make and implement decisions to maximize efficiency and cost savings

The usefulness of the process is founded upon the concept of digital twins, where the GIS system generates a virtual — often 3D — model of the city and its processes. The digitized duplicate's parameters can be manipulated to simulate physical conditions, allowing analysis of the effects and aiding in preparing for prevention or mitigation of damages.



Shutterstock photo



Since its implementation in 2002, Beaverton, Ore.'s, enterprise GIS has moved city departments from a siloed environment to a system of shared data. This has saved time and allowed the city to meet state mandates. (davidkrug/Shutterstock.com)

For example, maps detailing permeable and nonpermeable parcels of a city can be interfaced with an algorithm simulating various amounts of rainfall to detect where water runoff will be most severe. Zoning departments can use that information to tailor their permitting process to minimize the dangers of erosion, and public works, street and parks

departments can work to shore up vulnerable areas.

GIS maps that measure roof pitches can be interfaced with a program detailing the sun's path at the city's latitude to determine the optimum placement of solar panels.

One web mapping application maintained by Los Angeles is dedicated to airports and

displays information on their locations, influence areas, safety zones, noise contours and other information useful for planning departments and prospective citizens looking for a place to make their homes.

The information can literally be used in hundreds of ways, such as scheduling maintenance; focusing city resources where the greatest need is indicated; notifying the public of road and bridge closures; planning vehicular and foot traffic for large events; permitting the public to reserve amenities such as park pavilions; and preparing for natural disasters such as floods and earthquakes.

The cities of Beaverton, Ore., and Waterloo, Iowa, are forerunners in implementing an “enterprise GIS system” to standardize and unify the availability of information among departments.

Beaverton’s enterprise GIS system, implemented in 2002, “got us out of a siloed environment to a system of shared data,” said Eric Meyers, business analyst/programmer for asset management with the city. “That is key and the return on investment is massive.”

The city’s database management systems have largely replaced the cumbersome field work of taking information, writing reports and manually thumbing through potentially thousands of documents to make optimal decisions about scheduling maintenance and repair of the city’s variegated infrastructure, such as water mains and sewer lines.

In short, GIS has replaced clipboards with iPhones and tablets and has eliminated countless trips back to the office to pore over reams of paper pulp records to glean information. All that work can now be effectuated on-site with just a few keystrokes.

Beaverton has installed closed circuit TV monitoring systems to conduct video inspections inside sewer and stormwater pipes and relay real-time data to the city’s GIS database. The system carries a special import for Jesse Wilson, public works manager with Beaverton’s sewer and storm maintenance department. “All my work is mandated by the state,” he said. “We have to clean a certain amount of pipe in a certain time frame. The video system tells me what pipes to clean in schedule and reveals non-routine issues such as roots, breaks and cracks to be taken care of out of schedule.”

The enterprise GIS system has slashed Wilson’s staff overtime workload from 200 to 300 hours a year to 10 to 40 hours, “if that,” he said.



Waterloo, Iowa, aimed to eliminate thousands of sheets of paper from the workflow through its GIS program. Currently, the city is focusing on sidewalk maintenance utilizing GIS. (Shutterstock.com)

“We can see the information live and adjust our crews to address the issues.”

Ben Wagner, GIS project manager in the engineering department of Waterloo, Iowa, which won a Special Achievement in GIS Award in 2019, hailed an “incredible” return on investment in rolling out an enterprise GIS system.

Before he assumed his position with the city seven and half years ago, “eight or nine” of the city departments were “using GIS on their own. It was very disconnected.” So he “started championing an enterprise approach under single account holder.”

He spearheaded the project and spent “a solid year combing through” individual department records. “We had data everywhere, some duplicated, and some departments didn’t have the current version. We set up a GIS steering committee with representatives from the different departments that were using GIS. We met monthly during that year.”

Wagner added, “Our goal was to eliminate thousands of sheets of paper from the workflow,” citing the digitization of streetlight records previously compiled in a “three-ring binder five inches thick. We experienced immediate savings on the labor side of things.”

Waterloo’s sidewalk maintenance is a target in process with the GIS system. The city’s walkways are divided into 10 sectors, with one sector being inspected and maintained each year. The GIS program will maximize efficiency in deploying maintenance and repair crews.

For municipalities seeking to implement an enterprise GIS system, Wilson cautioned one obstacle may be “getting buy-in” from the various pertinent departments.

“We purchased the software and developed everything in-house,” said Wilson. “The buy-in wasn’t there at the start for some groups. But once we started using it, other groups saw the capabilities and said, ‘We can do that.’”

Meyers recommended frequent “core team meetings” from the beginning of the planning process. “We now meet once every couple months,” he said. “We discuss what we are doing now and plan to do in the future, and the meetings are a forum for any issues that come up.” He said the meetings are a way to “build trust and respect.”

Wilson said the GIS system accelerates the “turnaround time for work and requests by the public.” **M**

Proactive exercises ease winter operations for Lubbock



By KATHLEEN MORAN | The Municipal

Taking the time to prepare for winter during ideal weather conditions maximizes success when the real weather threats strike. On Oct. 16, 2019, various agencies and departments across the city of Lubbock, Texas, came together to participate in an annual winter weather exercise.

According to Lacey Nobles, public information officer for the city of Lubbock, “Training takes place as residents are coming out of summer and very few are thinking about the upcoming colder weather.”

The winter weather training actually began two to three days prior to the annual meeting when the National Weather Service in Lubbock distributed mock weather reports to each department. Updates related to weather development were provided periodically throughout the days leading up to the in-person meeting. It should be noted that the forecast provided for the exercise was

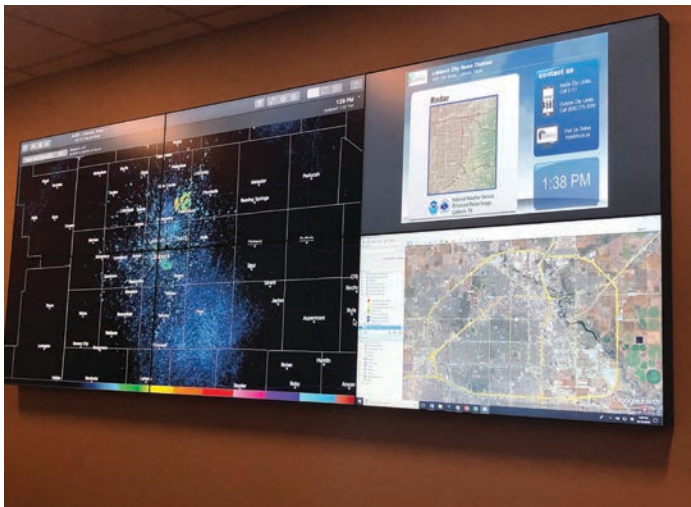
authentic to the area, having occurred only a matter of years ago.

On Oct. 16, participants met at the emergency operations center, or EOC. Each team met in its designated multimedia room. For instance, the department heads congregated in one room while the PIO’s from the different departments came together in the joint information center, or JIC. Decision-making is the responsibility of the executive policy group, which also met in a room of its own. All rooms are equipped with monitors and provide access to chat rooms and maps that feature updates in real time.

ABOVE: Lubbock, Texas, completes a winter weather exercise each year, testing out strategies and communications. (Photo provided)



Participants met at the emergency operations center, with each team going to their designated multimedia room. All rooms are equipped with monitors while also providing access to chat rooms and maps that feature updates in real time. (Photo provided)



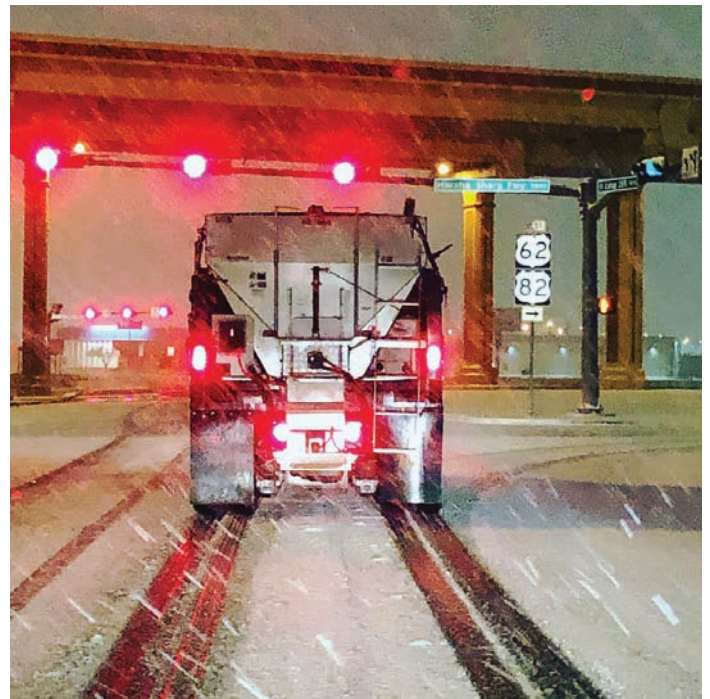
The winter weather exercise uses mock weather reports that are authentic to the area. (Photo provided)

“While very important and serious in nature, these trainings are fun because participants are given the opportunity to implement procedures and protocols that were not necessarily a planned part of the previous year’s preparations,” indicated Nobles. For example, shortly after 2018’s annual training, the city of Lubbock was forced to deal with 10 inches of snow rather than the anticipated 1 inch. This means some procedures were put into action in 2018 during actual events that were not thought of in advance at that year’s annual meeting.

Thus, some of the procedures that proved to work well in 2018 made their way into the 2019 training. In the case of the department of communication and marketing, new practices include issuing warnings to residents such as avoiding certain overpasses or staying home and safely indoors. Importantly, citizens will be notified days in advance of imminent weather via social network platforms. Furthermore, the city manager’s office is tasked with evaluating city facilities and streets for potential closures and alerting the public to this information via various radio interviews. The examples previously described provide just one way of highlighting the various routes by which information will be communicated to the public.

“With every experience and training comes the occasion to involve more departments and agencies to ensure collaboration and effectiveness in order to maintain the safety and well-being of all involved,” stated Nobles. Admittedly, many departments and agencies that are crucial to the overall operations readily come to mind such as animal services, utilities, fire and rescue, police, health and water. As Nobles explained, the finance department “is equally important in instances when money needs to be freed up should extreme situations warrant.”

Equally relevant, an assessment of the training event and exercises takes place one to two weeks later and is referred to as a debriefing or after-action review. Various topics are discussed from what worked — and what did not — to new techniques and procedures that were tried and whether they should be added to an official checklist or scrapped. Moreover, consideration is given to the “quick fixes” with regards to issues that unexpectedly came up and how they were handled. And, of course, there is always room for continued improvements, which is a recurring theme at these meetings.



Pictured is a snowstorm that struck Lubbock in 2018. (Photo provided)



Sand trucks are ready to respond when winter weather calls for it. (Photo provided)

Fortunately, the 2019 training went well, especially considering the city of Lubbock was forced to confront an ice storm about a week later. It is the culminating efforts on the part of the office of emergency management, city manager’s office and the National Weather Service that these winter weather training events run as smoothly and effectively as they do. Preparation for success is the motivation for this annual exercise, with improved communication between the departments and public being the ultimate goal.

All in all, Nobles summed up the event well when she noted that “proactivity is necessary for minimizing mistakes ... after all, weather can change very quickly.” M

Worker shortage leads to street repair backlog



By **BARB SIEMINSKI** | The Municipal

With a population of 446,970, Omaha, Neb., is the most populous city in the state. With that many people paired with harsh winters guess what else is plentiful in Omaha?

Give yourself a gold star if your answer was thousands and thousands of potholes; it's a challenge faced by many cities nationwide. The circumstances are made more challenging with the public works department facing a shortage of staff. And yet, that is exactly what it is struggling to overcome.

"We've always operated at 80%-90% employees to budget," said Austin E. Rowser, P.E., street maintenance engineer for Omaha. "This is not a recent realization; it has been a fact of life in our organization that we manage every year. We attribute this shortage and retaining such help to very low unemployment and a scarcity of regional workers to fill this type of position. The local contracting community is also struggling."

According to Tony Burkhalter, president of the city employees' union, AFSCME Local 251, one contributing factor in the hiring process would be retention of employees.

"Admittedly, employees do leave for better opportunity elsewhere and some leave due to negative experiences with management," noted Burkhalter. "Omaha has a low employment rate as a whole; however, in certain areas such as North Omaha, you have an unemployment rate of 12.5%. So the recruitment process should also be looked into. Contractors are capable of coming in and hiring employees to do contracted work at an alarming rate, and they have produced the employees."

The hiring and onboarding of new employees is in accordance with the Omaha municipal code and the labor agreement between the city of Omaha and Local 251.

The city is continually taking steps to hire and has again posted for positions, said Rowser, adding a recent new hire class has begun. The city spent so much time patching potholes in 2018-19 that it got behind in sealing cracks in the streets.

ABOVE: Being named one of the best small cities in America by Resonance Consultancy, Omaha, Neb., offers plenty of culture, nightlife, dining, shopping and attractions. On the list, it ranked No. 1 in economy and standard of living. (Stephanie Le/Shutterstock.com)



With a 20-employee shortage, Omaha, Neb.'s, public works department has fallen behind on road repairs. It is routinely receiving work orders to patch potholes. (Photo provided by Tony Burkhalter)



Omaha is Nebraska's largest city and has experienced not only population growth but also nine straight years of tourism growth. A total of 13.1 million visitors traveled to Omaha in 2018, a 6% increase over 2016, the last time research was conducted. (Shutterstock.com)

One of the major reasons that public works is facing a depletion of street repair workers is after training its drivers for a commercial driver's license, these drivers then get lured away by other companies instead of staying with the city. The public works street maintenance department currently needs 25 more workers on staff. Some of the street department employees have requested a transfer to other divisions of public works or even to other city departments.

"We have about 185 full-time employees currently," said Rowser, "and we add based on annexations. We budget in April, and I'll evaluate the annexation package prior to budget and determine how many we'd like to add."

In dire situations, Rowser will use other city employees to "fill in" for help in road repair, saying that he does use their help periodically. He often has to hire private contractors, which often charge 75%-150% more than what his own employees would charge if they had to.

Asked if he was aware of a similar staffing issues being experienced by other street departments, Rowser answered yes, but it varies based on the local market.

Burkhalter's union represents a total of 13 municipalities/counties and only one is having a hiring shortage of employees — and that is Omaha.

"The city has taken steps to be more receptive to the employees," said Burkhalter. "They just entered into a memorandum of understanding to give the employees \$3.60 for shift differential. Previously, it was 65 cents. They recently did a rodeo and lunch for the employees. I believe this shows a willingness to acknowledge that change needs to take place. Some employees have even been told 'thank you' for all the hard work they have done. In other ways, the same issues exist. Example: If we have a retention issue and a one-year employee puts in two weeks' resignation and then decides to retract it, the city has the right once an employee resigns to (not only) accept or deny the retraction but to place an employee on probation; (it) is counterproductive — will this make the employee more likely to stay?"

The employees going beyond their regular work hours are compensated at time-and-a-half, said Burkhalter. Because the city couldn't entice enough workers to fix the streets the public works department sought more help from private contractors. The council gave it a \$1.1 million contract with a contracting business — Midwest Coatings Company — to seal 108 lane miles of city streets by Nov. 23.

"This is the only area in which we have had serious concerns with retention and hiring, especially when it comes to excessive workloads, and we have thousands of work orders come in for potholes and we have a shortage of staff," said Burkhalter. "This is the worst department with a shortfall; there are other departments that are short of staff but not to this extent."

A late-September meeting with the city council, Local 251 and the public works staff took place to see if all three groups could come to an agreement to get the street repairs moving budget-wise and with contractors.

Frustrations were voiced during the meeting as well, with all three entities vexed by the lack of progress in hiring and retaining public works employees to repair and plow the streets.

To keep those streets cleared this winter, the Omaha World-Herald reported on Nov. 26 that a proposal was being considered that would pay street maintenance workers about \$3 an hour more for shifts. The paper notes, "The increase would represent a 12% to 18% pay bump for people earning \$18 to \$25 an hour."

The hope is that such a pay increase will keep workers with the city. As of The Municipal's press time, this proposal has not been approved by the city council yet.

When it comes to hard issues, Burkhalter concluded, "For union leadership, focus on your bargaining group. If you have a complaint and frustrations run high, utilize all resources to find the issue. If you have the capability to work it out with management, by all means, meet first and resolve it. If that doesn't work, exhaust all remedies but most of all represent your bargaining unit to the best of your ability." **M**

Mayors on the Mississippi join together

By DENISE FEDOROW | The Municipal

There's power in numbers. That's the idea behind the Mississippi River Cities and Towns Initiative, a coalition of 95 mayors from 124 mayor-led cities on the Mississippi River. A vast majority of mayors are in the association, and the mayor members are finding numerous benefits from being part of this initiative.

The MRCTI formed in 2012. Executive Director Colin Wellenkamp said it has a sister group of mayors on the Great Lakes, which has had great success.

"I got inspiration from that," he said. "The push was the record-breaking 2011-2012 year where we had a 500-year flood event, a 50-year drought and Hurricane Isaac all within a few days so we thought, 'Let's do it now; we're getting our teeth kicked in.'"

One of the main goals of the MRCTI is making the Mississippi River corridor more resilient.

"We've had significant climate impact with storms unprecedented in duration and severity," Wellenkamp added, "This is the new normal now."

He said, "These events are too large and too frequent for a mayor to just wall off his city — but as an association they can work together."

Importance of the river

Many of us, even those living along the Mississippi, may take this mighty river for granted.

"The river is incredibly important on a global scale," Wellenkamp said, noting 40% of the world's food comes out of the Mississippi River basin, and 40% of native agricultural products move on the river.

"It's an incredibly important ecological asset and critical natural asset," he said.

There's been an increase in container movement along the river as well, especially from Baton Rouge to New Orleans, La., and MRCTI is working on increasing that up the river to Memphis, Tenn., and St. Louis, Mo. According to the MRCTI's website, the mayors have built a coalition of major stakeholders such as FedEx, Home Depot, Inland River Port and Terminal Association to restore container movement on the river. It's been made an official project with the United States Department of Transportation under the U.S. Maritime Administration highway program.



Mississippi River Cities and Towns Initiative Executive Director Colin Wellenkamp speaks to the mayor members at the annual meeting held this September in Memphis, Tenn. (Photo provided)



The Helena's Mississippi River Bridge connects Arkansas to Mississippi. Mayor members of the MRCTI have discovered they share a lot in common thanks to the Mississippi River, which creates similar concerns. (Photo provided)

The river cruise business is booming on the river, too.

The Mississippi River creates nearly \$500 billion in annual revenue, provides drinking water for more than 20 million people and directly supports 1.5 million jobs. The MRCTI addresses matters of concern, including river water quality and habitat restoration; state coordination around river management and improvement; more impactful water conservation measures; sustainable economies; and the celebration of river culture and history.

MRCTI's work is divided into five program areas:

- Clean water
- Sustainable economies
- Climate disaster resilience and adaptation
- International food and water security
- River culture, heritage and history

Infrastructure-wise, the MRCTI is working to pass a resiliency revolving loan fund.

"It's the first of its kind on a federal level," he said.

The fund is to address resiliency projects, and it has flexible spending, according to Wellenkamp. The fund is not just for floods but also tornadoes, straight-line winds, snow events and wildfires. He said it has passed out of the House Committee and onto the House floor, and MRCTI is now working on a presentation for the Senate.

In 2018, MRCTI came up with a habitat restoration plan. Wellenkamp said, "That enabled us to determine the best areas along the

river to restore back to nature — to give us the best bang for our buck whether through the restoration of forests, wetlands, etc.”

Then in 2020, MRCTI is launching a recovery bond pilot program that would work like the Build America bonds did in 2009, which raised \$180 billion investment in the U.S. They are creating a pilot program for recovery work along the Mississippi River.

As for future weather disasters, Wellenkamp said, “I don’t see them letting up — I see them becoming more severe.”

The MRCTI is also encouraging natural infrastructure for any development along the river. The group has recently given a presentation where the presenter gave an example of someone wanting to build a convention center along the river and was advised not to rip up marshes and wetlands but instead augment them.

“Use the natural infrastructure to buffer — it’s cheaper with less maintenance costs,” Wellenkamp said attendees were told. When banks are endorsing augmentation of natural resources, he added, “They’re trying to reduce the risk to their investment.”

These types of presentations are a benefit to the mayor members involved. “They get to put solutions on the table. To have an impact, (you) need to be inventive. The same ole, same ole is not cutting it anymore,” Wellenkamp said.

Mayor’s experience

The Municipal spoke to mayors in Baton Rouge, La.; Bettendorf, Iowa; and Helena-West Helena, Ark., about how the association has benefited their respective cities.

Mayor-President Sharon Weston Broome of Baton Rouge and Mayor Robert Gallagher of Bettendorf are also co-chairs of the executive committee. They were named co-chairs in September, and it’s a two-year term.

Broome, who is in the third year of her term, said when she became mayor-president, she had a lot of organizations she could have joined, but “I was extremely interested in the MRCTI for a variety of reasons — one being the focus on the Mississippi River.”

Broome said in Baton Rouge the Mississippi River is one of the most dominant parts of the city and state.

“We’ve had our share of disasters in the last decade with \$200 billion in losses — \$100 billion in the state of Louisiana with the longest period of flooding 275 days — that broke all previous records,” she said.

“MRCTI allowed me an opportunity with a coalition of mayors to look at innovative ways to address issues,” Broome said, adding backwater issues and issues of resiliency are a common thread.

Broome was a victim of the flooding as well. During the year she was campaigning, she said, “My home was flooded and it was a year and a half before it was fully restored. So that’s personal for me and our community. Others dealing with the flood are still in recovery.”

The mayor said she was excited about two recent events: a speaker at the last conference who spoke about innovative financing options and the partnership with Rotary International. “Rotary is a huge network of over 1 million members. Their overall mission is to grow local economies and the development of critical water infrastructure. Their mission seems to align with ours,” she said.

Both she and Gallagher were excited about the environmental economic impact bonds.

Gallagher agreed, “It would be great to have a city deploy so they could use it as a pilot.”



Members of the executive committee of Mississippi River Cities and Towns Initiative are shown at the annual meeting held in Memphis this past September. Shown on the far right is Baton Rouge, La., Mayor Sharon Weston Broome, who was elected co-chair of the executive committee along with Mayor Robert Gallagher at that event. (Photo provided)

MRCTI would look at the program applications and choose two so they could begin construction in the spring, according to Gallagher. “The project need not be specific in the river,” he noted. “It could be border cities with tributaries, rainwater, creeks or streams.”

Many of the river’s issues relates to backwaters and wetlands lost. Gallagher said, “If we could reclaim the places where the water used to go, it would help eliminate the same problems.”

He added, “The Corps of Army Engineers has over \$12 billion in projects they’d like to complete, but they’re not appropriated. They’ve not done any restoration because the funds are not appropriated. That’s where an association like ours can help. We have 10 states, 31 congressional districts and 95 mayors working on a nonpartisan basis to solve problems.”

For as young as an organization that MRCTI is, the amount of momentum it has been able to pick up “is fantastic — not just in DC but also financially,” according to Gallagher.

MRCTI is working to reduce plastic waste in the river with local companies and is also working to control nutrient load.

“We’re working with all kinds of folks to secure actions in each of the 10 states on the river. We’re building partnerships on the state, federal and local level and with farmers for more sustained farming practices like crop rotations and buffer zones,” Gallagher said.

He added they’re also working on the “end game so companies like General Mills and Walmart will say to their suppliers it’s important for them to know all the ingredients are sustainably produced.”

Asked whether the mayors changed any of their operations since the association, Gallagher said in his city there’s been no specific policy changes, but because of the association with other mayors he’s learned a lot about best practices — specifically with public works — and he’s opened his mind to how he can help his neighbors. “I think a little differently,” he said.

Broome said her conversations with other mayors on the front end of the Mississippi show they’re concerned about what takes place on ▶

their end and that what happens on the south end of the river also matters to them. Members are working to change certain cultures and habits, especially with plastics, starting with city staff.

Mayor Kevin Smith of Helena-West Helena was elected mayor in January 2019, but his predecessor had joined MRCTI in 2015 and had also recommended him for the executive committee, which is made up of about 12 members.

Smith said, “The Mississippi River is a pretty big thing to have facing your town. It’s an extremely important resource but also challenging with the threat of flooding.

“It’s a pretty amazing thing to have and the reason we’re here in the first place. The association gives us a chance to work together on common issues — and there are a lot of common issues — economic development, stormwater and water and sewer.”

There are also common environmental issues, with Smith stating, “Everything ends up downriver so it’s important to be friends with the people upriver.” He added, “The biggest thing is nitrogen runoff from farms. We’re a highly agricultural community — the bread box of the area — down here cotton and rice are big crops and very intense nitrogen crops.”

Smith noted, “Education is important. One thing this organization does very well is coming up with win-win solutions between cities and businesses. I’m very impressed with how they do that. They’re very progressive on environmental issues and are unafraid to say so while taking industry and agriculture along for the ride, realizing that we all need to work together because this affects their business, too.”

He added, “When I see what Colin (Wellenkamp) and the association are doing on environmental and economic issues, I’m real encouraged.”

In the Delta region, Smith’s city and those nearby are amongst the poorest in the country, and he said at times they feel they’re the embarrassment of the state.

As far as changing operations, Smith is looking at the environmental economic impact bond because of the group. He said, “We had a presentation on it, and I wasn’t familiar with it at all. We might or might not make this round, but we are looking at it more proactively.”

Smith also wants his city to participate in the plastic reduction initiatives that MRCTI is promoting. As the others have stated, Smith said the collaboration with other mayors has been a bonding and learning experience.

“We’re all divided by artificial political and geographical boundaries. I have more in common with mayors across the river because of the river than in other parts of my state.”

He shared that his city supplies emergency services across the river in the state of Mississippi where a casino and hotel are located.

“Purple” association

The mayors in the association are Democrats, Republicans and Independents, and they work on a bipartisan basis.

Wellenkamp said they were “fiercely bipartisan.” He added, “We try to see both sides and have something for both sides. If we want to address climate change, we have to show the benefits and how it will create jobs and grow the economy. You can’t leave people behind.”

MRCTI has partnered with a company to create an economic profile of the Mississippi River so it could answer the question of jobs.



Pictured is the Arkansas Welcome Center, located at the entrance of Helena, Ark., from the Mississippi River Bridge access. The Mississippi provides an economic boost to cities along it. (Photo provided)

“To have that information has been a game changer. It quantifies to Congress and the private sector that this is what we lose if we don’t come around this. Having those numbers altered the conversation and created billions of spending dollars we wouldn’t have otherwise.”

Focusing on impact and economics allows for common ground between people with different ideas.

Wellenkamp said, “You’ve got to bring the problems home to people’s jobs and backyards and demonstrate the economic impact. Everyone will have a conversation about making more money and creating more jobs and spending as little on recovery as possible. No one wants to go to FEMA for a billion dollar bailout; they want to take care of it at home. So we want to shift the focus from recovery being the most expensive to the six times cheaper mitigation. Everyone is willing to have that conversation.”

Gallagher said he didn’t even know Broome’s political party. “We’re 95 mayors led by Colin Wellenkamp. We work hard as a team, and that brings us significant support on Capitol Hill but also locally.”

Broome said, “I agree with that. We have a shared common denominator — the Mississippi River — that unites us across party lines. As a nation, we should be more focused on common issues.”

Both Broome and Smith have past experience in Washington, D.C. Smith said, “Through groups like this, (we) have to be a part of the solution — working at the local level on common sense governing. Companies are coming to the table, realizing they do have to be part of the solution. It’s real encouraging.”

“Some readers may wonder why not move away from the river? But rather than trying to make the river change for us, we have to adapt with it,” Wellenkamp said, adding the river has so much economic, outdoor recreation and tourism potential. “Our mayors want to capitalize on the river, and they know to do so they have to take care of it and take care of their cities.”

According to Smith, the association has “really made an impact on me.” He advised other mayors to join or create similar groups. “Regionalism is the only way to go. We’re not influential by ourselves. More and more regionalism is the answer. As a small city, we’re only one voice but working together we have a pretty big voice.” M

Liquid Ice Control Equipment



When it comes to liquids, go with experience, innovation, and service. Go with *Frost!*

Frost Inc.

1-800-621-7910
Email: info@frostserv.com

THE COMFORT YOU WANT
THE SAFETY YOU NEED



PROVEN PERFORMANCE
PROVEN RESULTS

STUMPER
GOSTUMPER.COM (906)-487-7002

NATIONAL
RENT-A-FENCE®
800-352-5675
rentnational.com



A STRONGER FUTURE



wwett[™]20

CONFERENCE: **FEBRUARY 17-20**
MARKETPLACE: **FEBRUARY 18-20**
INDIANA CONVENTION CENTER

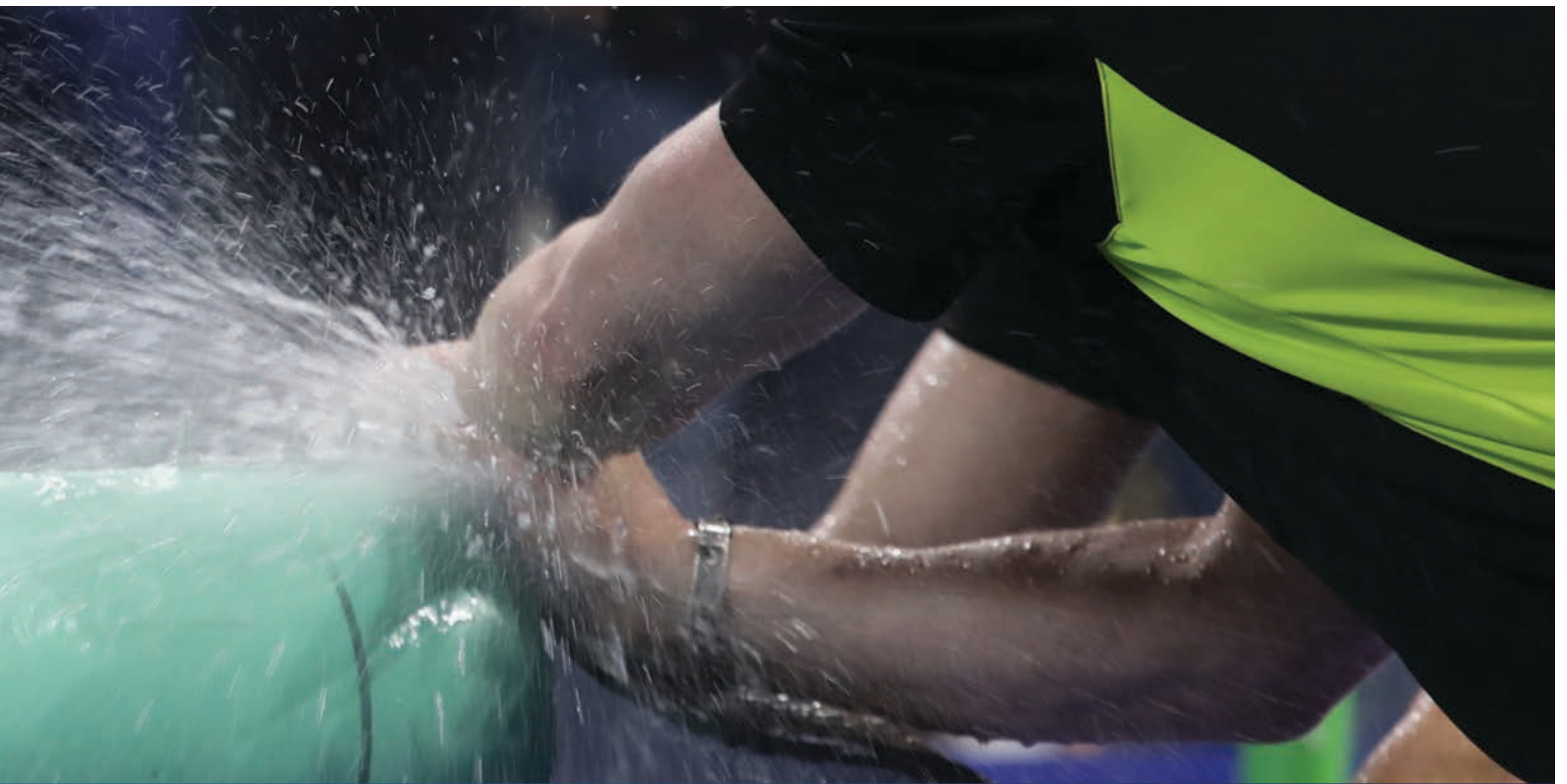
JOIN THE COMMUNITY
REGISTER NOW

LEARN MORE at www.wwettshow.com

   @wwettshow

Proud Member of:





E STARTS AT WWETT

You're the lifeline for customers. The unsung heroes of keeping systems safe and clean so customers can get back to life as usual. Just as you're there to help support your customers, the WWETT Show is here to help and support you and your business.

- ✔ Surround yourself with other wastewater and environmental service professionals who understand your daily challenges
- ✔ Uncover the most effective treatment processes through educational insights, innovative techniques and groundbreaking tools
- ✔ Learn best practices for sustaining and growing your business so it can continue to serve your customers for generations to come



Shutterstock photo

Fight or bite:

Cities combat swarms after storms

By JULIE YOUNG | The Municipal

Although they are not included in the 10 plagues of Egypt, post-storm mosquito infestations can pose problems of biblical proportions for communities that must combat them. While climate change has brought about an increased frequency of adverse weather events, which has led to an uptick in post-storm mosquito populations, there is also an increased potential for the transfer of vector-borne viruses such as Zika, West Nile, chikungunya and eastern equine encephalitis.

“There is always something to stay on top of,” said Carl Doud, Ph.D., director of the Midland County Mosquito Control in Sandford, Mich.

An integrated approach

Midland County Mosquito Control serves several communities around Lake Huron whose topography is flat and provides the

perfect breeding ground for mosquitos. In 2017, the area endured a historic flood that resulted in unusually large numbers of mosquitos when long-dormant eggs were finally hatched after lying years in wait.

“They took full advantage of the situation, and that was a real problem for us,” said Doud.

Another problem has been the recent rise in cases of EEE. Transferred to humans through the bite of an infected mosquito, the Center for Disease Control says cases are relatively rare with an average of seven human cases occurring annually. However, in the fall of 2019, Michigan reported 10 cases with a survival rate of 50%.

“EEE is similar to West Nile, but (due to the way it is transmitted) we don’t usually notice its presence; however, some years it can be worse than others. It can be abundant in the bird population and in horses, which makes humans more susceptible if bitten by an infected mosquito,” Doud said. “It is the most deadly, and while there is an EEE vaccine for horses, one has not been developed for humans as of yet.”

In order to combat the yearly mosquito outbreaks and guard against any byproducts



After Hurricane Florence, Wilmington, N.C., residents were harassed by a species of mosquito with striped legs; they have been described as being extremely aggressive. (Photo provided)



An adult mosquito and mosquito pupae are shown. (Photo provided)



Midland County Mosquito Control in Sandford, Mich., uses an integrated approach to mosquito control, including the application of insecticides at the larval and adult stages. (Photo provided)

of infestation, Midland takes an integrated approach to the fight. The department employs methods such as personal protection, biological controls and pathological study, as well as the judicious application of insecticides at the larval and adult stages.

“It’s always better to combat them before they become a public nuisance,” Doud said. “We will cover 60,000 acres with insecticide that is specifically designed to kill mosquitoes without harming any other ecosystem, and we do fogging in the evening at peak mosquito time, and we are always looking at the biology of mosquitoes in order to make sure we are using the most effective techniques to protect the public.”

Mega mosquitos

When Hurricane Florence made landfall in Wilmington, N.C., Sept. 13-14, 2018, it not only resulted in days of rainfall that led to 28 counties being declared disaster areas, but it also led to an onslaught of “mega mosquitoes” across the state. The species featured striped legs, were two to three times the size of a traditional mosquito and were so

aggressive, they caused some to wonder if they were really wasps or the lead villain in a bad science fiction movie.

North Carolina Gov. Roy Cooper ordered \$4 million to fund mosquito control efforts in counties that were affected by the outbreak, and while this was welcome news to those living in the hardest hit areas, Stephanie Richards, MSEH, Ph.D., with the Environmental Science Program at Eastern Carolina University, said there is more work to be done.


“There haven’t been a lot of long-term solutions when it comes to mosquito prevention,” she said. “In 2011, the pest management section was cut from the state budget so there has been a need to reorganize our efforts.”

The Centers for Disease Control and Prevention says local governments and mosquito control programs should adopt a cohesive approach to control mosquito infestations and keep their communities safe. They can conduct mosquito surveillance and take steps to control mosquito populations before they get started. They can remove places where mosquitoes typically

lay eggs while controlling the insects at the larval, pupae and adult levels. Above all, they need to monitor control programs in order to judge their effectiveness.

“For example, if an insecticide did not work as well as predicted, professionals may conduct additional studies on insecticide resistance or evaluate the equipment used to apply insecticides,” the agency says on its website.

As president of the North Carolina Mosquito and Vector Control Association, Richards said she is encouraged by the presence of Mike Doyle, the state public health entomologist and NCMVCA 2018 vice president, who has been working to develop programs that will help study the issue and create workable insect solutions that will benefit everyone.

“We have yearly conferences and training workshops, and we have gotten some universities to help as well. There is also a legislative session set up to talk about these issues and determine how we can be more proactive and more organized when storms occur.” 

ON THE ROAD • ON THE FARM • ON THE JOBSITE

USTarp
Covering America

WE GOT YOU COVERED!

TARP SYSTEMS FOR ANY APPLICATION

RECYCLING & REFUSE • CONSTRUCTION & LANDSCAPE • AGRICULTURE & SPECIALTY

US TARP • 1425 KALAMAZOO ST. SOUTH HAVEN MI • (800) 249-0297 • USTARP.COM

MEANGREEN
ELECTRIC MOWERS



NEW EVOLUTION SERIES LITHIUM POWERED ELECTRIC COMMERCIAL EVO-74"

- 74" Deck
- Up to 8 hours of runtime
- Touch Screen Display
- 13 mph
- Side Discharge or Rear Discharge Mulching Deck
- 48 HP
- Michelin Tweels (front)
- 78 dB(a)
- Rapid Height Electronic Deck Lift System With Foot Pedal
- High/Low Blade Speed Control
- Dual Support Anti-Scalp Wheels
- 6000-9000 Mowing Hours of LEM Battery Life
- Comfort Suspension Seat

THE FUTURE IS **GREEN**

Find a Dealer at:
www.meangreenmowers.com

Maintenance-Free Solutions



WITH STRONGWELL FIBER REINFORCED POLYMERS (FRP)

No need for constant painting or upkeep. Provides long-term, cost effective solutions with lower life cycle costs.



Learn More at strongwell.com/advantages



The World Leader in Pultrusion and Pultruded Fiberglass Structures & Shapes

Proudly Made in the U.S.A.

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

Spearfish, S.D.:

A base camp for adventure in the Black Hills

By MAGGIE KENWORTHY | The Municipal

Nestled into the Black Hills, Spearfish, S.D., is a top destination for adventure lovers. Despite being a town of under 12,000 people, attractions in the area estimate that 160,000 people visit the town between May and September each year.

“We are described as a base camp for adventure in the Black Hills,” said Brian Gebhart, director of public relations and digital marketing at Visit Spearfish. “We have hiking, biking, mountain biking, rock climbing, a lot of access to those outdoor adventure situations as well as scenic drives. Spearfish sits at the mouth of Spearfish Canyon, which is arguably one of the most scenic drives in South Dakota. It’s gorgeous, there are waterfalls and different hiking trails throughout.”

But what makes Spearfish unique from surrounding towns is the fact that the town has activities to offer year-round.

“Tourism and hospitality is one of the biggest industries in Spearfish,” said Gebhart. “One thing that’s special about Spearfish is that we don’t close. We are a year-round destination. There are a few communities within the Black Hills that they’re only seasonably open, but a lot of our attractions or things to do are open year-round.”

And the popularity of the town shows when it comes to numbers. As of November 2019, Spearfish’s hospitality tax was up 6% while the overall sales tax was up 8% over 2018 year-to-date.

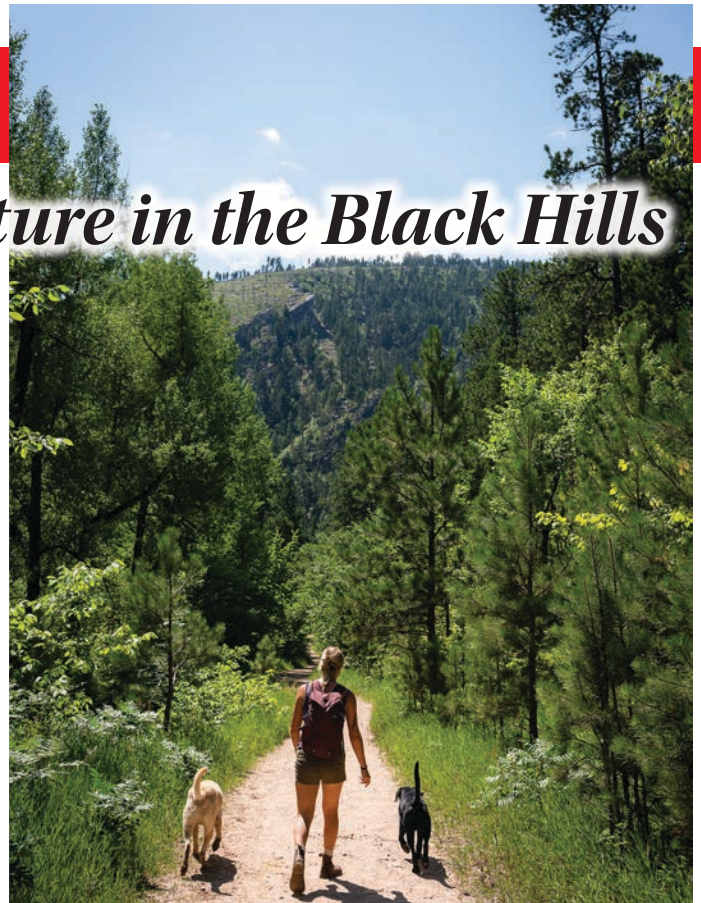
“We’ve seen continued growth since Visit Spearfish has been open, which has been since 2009,” said Gebhart. “Some years, we only see a little bit, like maybe a 1% growth or so, but this year, it’s trending very well.”

To keep that growth trending upward, the town is creating more outdoor recreation opportunities for both residents and visitors.

One such project is the expansion of the city’s current recreation and bike path. This 7 1/2-mile recreation path runs along Spearfish Creek and is frequently used by bikers and joggers. The path connects to many focal points of the town, including several parks, Black Hills State University and Spearfish Canyon.

But the city recently saw the need to expand the path to connect even more people to these amenities.

“In the last 10 years, we have seen tremendous growth in the Exit 8 area,” said Tyler Ehnes, Spearfish park and recreation director. “Five different subdivisions have been developed, and we have seen the need to create a safe, alternative means of transportation for the residents living in these areas. This path will also connect those on the outskirts of town to our existing path system, which will connect them to the heart of our community.”



Recreational trails in Spearfish are used by residents and visitors alike, four-legged friends included. (Photo courtesy of Visit Spearfish)



Matthews Opera House and Arts Center is just one of the many art attractions in this otherwise outdoor recreational-themed town. (Photo courtesy of Visit Spearfish)

The expansion adds 2.7 miles to the path and consists of two project phases. Phase one will begin in spring 2020 with the second phase beginning in the fall of 2021.

The total estimated project cost is \$1,500,000, which the city has budgeted for from 2019-2021. But, Spearfish has already been awarded a \$100,000 Recreation Trails Program grant by South Dakota Game, Fish and Parks. The city is also currently waiting to hear back



Pictured is Main Street in Spearfish, a city with a population of 12,000 people that sees a large number of visitors wishing to experience outdoor recreation throughout the year. (Photo courtesy of Visit Spearfish)



Mountain biking is just one of the many popular outdoor recreational activities enjoyed in Spearfish. (Photo courtesy of Visit Spearfish)

on a \$400,000 Transportation Alternative Grant and is planning on applying for another \$400,000 grant for phase two.

In addition to offering transportation alternatives and recreation opportunities, the rec path expansion will also include an art path.

A local art group, Art Central, is collaborating with the city to install art kiosks along the new section of the path. These kiosks will promote local artists and their work.

Speaking of art, the Rec Path isn't the only location in Spearfish geared toward creativity.

"We do have a really rich arts community," said Gebhart. "We have the Spearfish Arts Center and Matthews Opera House, which does a lot of community art projects and they put on performances as well as bringing in live entertainment... There's constantly art galleries going on."

Another large project underway to increase outdoor recreation in the area is the creation of off-highway vehicles and utility all-terrain vehicle trails. The Black Hills consists of 3,650 miles of roads and trails, and with this project, 707 miles will be specifically used for OHV and UTV recreation.

"OHV and UTV have kind of been trending up and more people are looking for that type of adventure," said Gebhart. "And there has been an increase in usage of those types of trails within the Black Hills as a whole."

The U.S. Forest Service is handling this large project. Before the designation, riders could use their OHV and UTV vehicles anywhere that wasn't posted. According to the Forest Service, there are currently 21 designated motorized trails of varying difficulty and lengths.

"The Forest Service realized that while we are still not overcrowded, we wanted to be able to keep people coming back and exploring more things," said Gebhart. "Growth in adventure activities is always a positive."



With varying trail lengths and difficulties, outdoor enthusiasts of all ages can visit the town's highlights, like pictured Spearfish Canyon. (Photo courtesy of Visit Spearfish)

All of these projects are so much more than just the efforts of the city of Spearfish and the Forest Service.

Spearfish is home to many community organizations and non-profits that work together to ensure everyone can enjoy the city's recreational opportunities. A few examples include the Grooming Alliance of Spearfish, which grooms trails to make them accessible for everyone; the Ridge Riders, which concentrates on the mountain biking trails; and the Nordic Ski Club that helps with grooming areas for cross-country skiing.

"It's a great partnership through all those entities," said Gebhart. "It takes a village, everyone pitches in." **M**



Seattle Response Team keeps traffic flowing by clearing incidents

By NICHOLETTE CARLSON | The Municipal

In order to help with the flow of traffic and limit delays following an accident or incident, Seattle, Wash., publicly launched a response team in October 2018 designed to improve the handling of these issues.

Following an incident on a state road in March 2015, the idea of a Seattle Response Team was born. This incident involved a driver overcorrecting and a semitractor-trailer carrying salmon rolling over and blocking the road. It took nine hours to clear. The city hired consultants in May 2015 to review traffic incident management best practices across the nation and then evaluate the city's practices and provide recommendations.

Previously a group of engineering emergency laborers would assist with emergency response and pothole filling evenings and overnight as part of the maintenance operations division of the Seattle Department of Transportation.

"In the weeks after that collision, MOD switched to a 24-hour-a-day response operation by adding staff to provide additional incident response capacity and slowly started implementing changes to enhance the Seattle T.I.M. program," Sonia Palma, customer service, dispatch and incident response manager, explained. The emergency laborers have since become known

as incident responders with the Seattle Response Team.

"Washington State Department of Transportation's incident response team has provided incident response on state highways for years," Palma continued. "Yet Seattle is one of only a few American cities to provide these services on city streets." The SRT's primary focus is assisting with incidents on the city's busy arterial roads.

In order to maintain the best practices, the SDOT transportation operations center now also operates 24 hours a day, seven days a week. Palma explained, "The TOC operators are the eyes and ears of the SDOT and sometimes spot an incident before anyone else, leveraging the city's intelligent transportation system Technology."

When the TOC spots an incident, it coordinates with radio dispatchers to inform SRT. The Seattle Police Department dispatchers also communicate any incidents, collisions and stalls with both the TOC and the SRT radio dispatch center. All of the city's partners work together to follow the unified T.I.M. goals of responder safety,



Fluorescent pink signs are used by the SRT to signal an incident ahead to drivers. Pink was chosen as a way to show motorists a difference between the incident scene ahead and a familiar orange construction zone sign. (Photo provided by Seattle Department of Transportation)

LEFT: After being launched to the public in October 2018, the Seattle Response Team has grown to nine full-time members and five trucks. Pictured are eight of the SRT members surrounded by their fleet. (Photo provided by Seattle Department of Transportation)

RIGHT: A member of the SRT displays the various tools that they use in order to keep traffic moving when an incident occurs. Each member must undergo training so they know how to properly use this equipment. (Photo provided by Seattle Department of Transportation)

safe and quick clearance and prompt, reliable and interoperable communications.

Tools of the trade

As a member of the SRT, specialized training is given in order to complete the requirements of the job. This special training includes a four-hour, in-person, traffic incident management training; Washington State Patrol defensive driving training; basic and intermediate chainsaw training; hazmat awareness level training; national incident management system training; and traffic control supervisor training.

The team has five trucks, each of which has a large, retractable variable message board to provide vital information to drivers. The trucks also include fluorescent pink signs, which symbolize an incident ahead. The Federal Highway Association chose pink to differentiate between the traditional orange construction zone signs. The thought is that when drivers see pink, they will think of compassion.

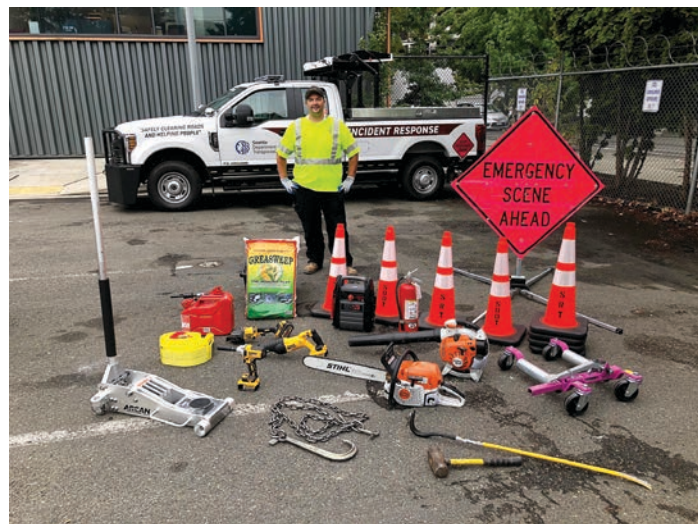
Trucks are also equipped with battery jump starters; gasoline; tow chains and ropes; traffic cones; various saws; a sledgehammer; crowbar; leaf blower; spill absorbent material; fire extinguishers; jacks; and a GoJak. The GoJak allows a single person to lift a car's tires off the ground in order to push the car out of the way.

What services do they offer?

Since its public launch in 2018, the team has grown from five to nine full-time responders. It has also added an additional radio dispatcher and hired a national expert, Patricia Westsik, as supervisor over the SRT and dispatch center. All of these additions allow the team to provide 24-hour-a-day service. The team has two trucks working the day shift, two trucks working the afternoon shift and one truck working the overnight shift. When necessary, the SRT can deploy more trucks and team members in order to keep traffic flowing.

The responsibilities of the SRT members are to clear city streets by responding to vehicle collisions, hazmat spills and street debris; removing stalled vehicles from traffic lanes; coordinating SDOT heavy equipment and sweepers to clear larger incidents; and filling potholes on an emergency basis. The response team provides roadside assistance to drivers by jumping car batteries, changing flat tires and providing gasoline to motorists who have run out of it. They also confirm reports of malfunctioning traffic signals.

Members work with partners in the fire and police departments to set up traffic control devices such as cones and signs so the



One minute of traffic backup can equal a four- to 10-minute delay for drivers. Therefore, each SRT truck is equipped with a retractable variable message board to communicate delays and backups to motorists. The primary goal of the SRT is to clear incidents and keep traffic flowing. (Photo provided by Seattle Department of Transportation)

departments can focus on their responsibilities. The unified command partnership between these departments and the SDOT is also supported by the SRT when the SRT is able to act as an on-scene incident command representative for the SDOT. SRT members are also responsible for providing the traffic operations center with incident statuses to pass along to the public and city leaders.

Seattle has approximately 3,954 lane miles of street within its limits, with an average of 874,376 vehicles traveling those streets each day. One minute of traffic backup can equal a four- to 10-minute delay for drivers, and one accident can cause other secondary collisions. Therefore, the SRT's primary job is to guide traffic around these incidents and accidents in order to reduce the backups and traffic delays.

When it came to increasing the SRT, the around-the-clock services it has provided have proven to be a cost-effective investment for the city to help the transportation system run effectively. **M**

Weather sensors give Niles, Ill., a winter edge



Winters in Niles, Ill., located in the Chicagoland area, are unpredictable, which has led it to invest in technology that helps cut down accidents. Pictured is the Village of Niles Municipal Building. (Public domain photo via Wikimedia Commons)

By LAUREN CAGGIANO | The Municipal

Old Man Winter can be unpredictable, but that doesn't mean municipalities have to concede to uncertainty. Instead, a few cities and towns have taken matters into their own hands to identify and respond to bad weather conditions before roads become hazardous.

The village of Niles, Ill., is among them. In 2018, they installed high-tech snow sensors and have implemented an award-winning program to help them to take a proactive approach and stay ahead of the curve.

Robert Pilat is assistant to the director of public works department at the village of Niles. He's been with the village for a few decades, so he's a bit of a veteran.

However, experience doesn't mean there are no surprises on the job.

"There's never an 'average winter,'" he said. "We always have a lot of different variables. Sometimes we have snow early in the season like this year. In fact, we had snowfall last week (in November 2019), Wednesday and Thursday, which is unusually early for us. And we also had snow in April of this year, which is really late in the season. So sometimes snow starts up early, or it's a mixed bag. Like last year, December, was fairly mild, as far

as winters go for the Chicago area, and then we got extreme cold temperatures down to as cold as -25 degrees."

Extreme cold and precipitation don't mix, which is why the village invested in \$11,000 worth of technology to help it reduce the risk of accidents. Pilat said the sensors, installed at the beginning of last winter, have been a game changer. They are strategically placed in two locations in town, one on the northern end and the other on the southern, both high-volume roads. They have a service agreement, which allows them to get the data from the hardware and act accordingly.

Speaking of data, Pilat said prior to the sensors the response process was clunky and not streamlined. It was a hurry-up-and-wait scenario. Today, they are an integral part of the village's response program.

"We might wait for hours to get a phone call from our police department to determine that we need to go out and start snow removal efforts," he explained. "The sensors, however, allow us to set different

“It gives us an advance warning that we need so that our crews are mobilized before it actually happens or before the ice forms.”

parameters, most notably the road temperature, and whether there’s different types of precipitation falling or if there’s an ice warning, if there’s water on the pavement and (if) the temperature fall(s) below a certain number.”

The technology can also alert on-call supervisors that action might be needed on their part. So, in this way, he said, “It gives us an advance warning that we need so that our crews are mobilized before it actually happens or before the ice forms.”

For example, he said last month a supervisor got a notification that there was a threat of ice and was able to save some time and energy.

“So, he was able to go out and determine how bad it was,” he said. “And because we have some areas in town — like bridges that need to get special attention — we want to make sure that we’re staying on top of things. He was able to mobilize crews earlier than we would have, had he waited for the phone call from the police department. It’s a proactive approach instead of a reactive approach.”

That’s not the only application from which they’ve derived value. Pilat said the sensors have helped them evaluate how they’re responding to a storm, both in real time and on an ad-hoc basis. They also can rest a little easier knowing there’s likely less damages to vehicles and, most importantly, fewer accidents.

The functionality also allows for customization. For example, an individual can tailor his or her alerts by type, and there’s also the ability to have group alerts pushed out.

“You can customize it based upon the weather conditions, road temperature, air temperature, wind speed, you name it,” he said.

It’s also useful in the summer months, because it can provide a warning about severe thunderstorm or windstorm so his team can act appropriately.

Speaking of response, Pilat said the community has had positive feedback about their snow and ice control program. And on a professional level, his department earned some positive press. The department was recognized by the American Public Works Association and received the Excellence in Snow and Ice Control Award in 2019. It was among three agencies in North America recognized with this award, Pilat said.

Niles is in good company with its technological approach to incident response. Nationwide, public transportation agencies are looking to drones as solutions, according to a May 2019 survey by the American Association of State Highway and Transportation Officials. For example, in Utah, officials from the state’s department of transportation are using drones to hover near avalanches to monitor snow.

Whatever the approach, Pilat said being proactive is a boon to operations and residents: “It’s another tool in the toolbox, especially if you want to move your program to the next level and you want to be proactive and respond to a storm before the fact.” **M**



Pictured is one of the weather monitor sensors installed in the winter of 2018 by the village of Niles. It relays weather conditions, meaning the public works department isn’t reliant on a call from the police department when conditions are bad. (Photo provided)

Rose District sparks rejuvenation in downtown Broken Arrow



Road dieting was a major component of Broken Arrow’s Rose District streetscape project. Downtown was taken from four lanes to three lanes, slowing traffic and creating a more pedestrian-friendly environment. (Photo provided)



The Rose District Plaza hosts the local farmer’s market. The land was donated by Arkansas Valley Bank, with another portion of the land being used to construct the Broken Arrow Museum. (Photo provided)

By SARAH WRIGHT | The Municipal

Broken Arrow, Okla., was a city with a plan, and with good timing and funding, its goals have been realized with the Rose District, a streetscape project that has reshaped its downtown.

“The Rose District streetscape is a direct result of the downtown master plan adopted by the city and our city council in July 2005,” Farhad Daroga, Broken Arrow’s placemaking manager with the Department of Community Development, said.

To craft the plan, the city formed a citizen committee of 15 to 20 people in 2003-2004 to study the downtown. A consulting firm — Clarion from Denver, Colo. — was hired to help the committee formulate the plan. Also involved throughout the process were the local chamber of commerce and business owners.

Daroga noted, “With the help of city staff and the consulting team, the committee met for approximately one year and presented the downtown master plan to the city council and the public and the Main Street merchants and business owners. After many meetings and hearings, the downtown master plan was adopted on July 5, 2005. The plan was to revitalize and rejuvenate Main Street and the old downtown of Broken Arrow.”

As a part of that rejuvenation, Broken Arrow turned to road dieting, converting Main Street from four lanes to three while allowing for wider sidewalks. To further placemaking efforts, landscaping, including the inclusion of rose flowerbeds; special lighting with decorative poles/fixtures; and mid-block crossings were included in the plan.

Narrowing the street hasn’t been a problem for Broken Arrow, according to Daroga. “With the four lanes, traffic moves faster. With three lanes, traffic slows down and gives drivers an opportunity to interact more with their surroundings.”

This, he added, has been beneficial to downtown businesses in addition to pedestrians since it promotes walkability and safety.

“There is a perceived complaint that there is not enough parking,” he said, noting there is actually quite a bit, just not necessarily directly off Main Street. “They might have to walk half a block to find it.”

The city has bought land on the west side of the Rose District for parking and there is also parking at city hall, which is on the east side of the Rose District on First Street. In the case of special evening events, downtown visitors have used private parking lots while the businesses or banks are closed.

During the roadwork, downtown sidewalks were widened and mid-block crossings were added, furthering walkability. “Not all communities like mid-block crossings, but they have been successful for us,” Daroga said, noting it has not only promoted pedestrian

use but safety with their design and use of lights. “We designed the crossings with the right dimensions. You can’t just put paint down. They also have flashing lights that automatically flash when there is a pedestrian out there. It works pretty well.”

Broken Arrow also welcomed its very first bikeway. Daroga said, “The Main Street Bikeway from the Rose District south to Washington Street is complete and has been a success. The second phase, going south, will be done in the near future to New Orleans Street. This bike trail, which is a part of the regional GO Plan, will be extended south to the Creek Turnpike. This will be done in phases and will be funded partially by federal, state and local funds.”

When it came to the streetscape’s components, he said, “The streetscape plan (for landscaping, sidewalks, lighting, etc.) was done by another local architectural firm (R.L. Shears Company) around 2011-2013. The Arkansas Valley Bank donated land for the (Broken Arrow) history museum and part of the farmer’s market.”

In addition to the farmer’s market, a host of other events, both new and old, are hosted in the Rose District, including Rooster Days; the Christmas parade; Night Out Against Crime; Holiday Tea Off; Shamrock the Rose; Chalk It Up; Wine, Eats and Easels; car shows; and more. In June there are also live bands at the farmer’s market pavilion.

The special lighting installed by Broken Arrow only adds to the atmosphere. The lampposts have built-in speakers through which music can be played in addition to misters, which keep hanging baskets looking nice during spring and summer. There are also electrical outlets, where people can plug in during events for temporary electricity.

“The overall general response from residents, visitors and businesses has been tremendously positive,” Daroga said. “This plan and the project have been recognized with awards and recognitions, locally and regionally.”

It is unsurprising this boost in traffic has brought more development to Broken Arrow’s downtown. This has included the removal of an old gas station at Main and West Kenosha streets, with it being replaced by a new barbecue restaurant. Other developments and changes are coming to other parts of Main Street, too.

“The city adopted a new downtown residential overlay district (DROD) plan (at the end of 2017), which is part of our zoning ordinance, which has promoted and brought a lot of new residential construction into the downtown area,” Daroga said. “A new four-story, mixed-use project — Milestone — is under construction, expanding the streetscape one additional block. This project will have several new restaurants, shops and over 90 apartments in 2020.”

Ground was officially broken on the project Sept. 14, 2018. Located on the north end of the Rose District, Milestone will be an additional fifth block to the currently four block district. The south end is book-ended with the Broken Arrow Performing Arts Center, which was built in 2009. It brings in concerts, Broadway tours and other speciality shows and events while also serving as the official location for Broken Arrow Public Schools’ fine arts program.

With all of these additions and existing businesses, Broken Arrow has witnessed an increase in sales tax, business activity and pedestrian traffic.

Daroga shared an anecdote about the Rose District’s success. “I have worked here on the east side of the Rose District for years and have attended a lot of community meetings and city council meetings.



The lights come on during Holiday Tea Off, which is organized by the Main Street Merchant Association. During the event, visitors can explore downtown shops while also enjoying refreshments, entertainment, gift vouchers and more. 2019’s event was held Nov. 14. (Photo provided)



Pictured is one of Broken Arrow’s mid-block crossings, which have successfully improved pedestrian safety. (Photo provided)

It used to be that I’d go home after the meetings at 7 p.m., 8 p.m. and would just drive home. There would be no cars after 6 p.m. Now if you are leaving here, you’d better watch out. There are a lot of pedestrians.”

He stressed the importance of investing public funds into such a project, which in turn sparks private investment.

“Overall the success came from using multiple funding sources (federal, state, local) with the time being right,” Daroga said, noting it has been a project the city has wanted to launch earlier, but it didn’t have the necessary funding available. “We had the master plan ready. If we had funding and no plan, it wouldn’t have worked and vice versa.” He added, “That kind of investment in public money and the subsequent private money investments really turned downtown around.” **M**

Advanced, comprehensive and affordable truck scanners



A special truck scanner to meet all your needs

- 1) Fast, easy-to-use, simple interface
- 2) Scans in seconds
- 3) Save fleet maintenance costs
- 4) Anti-glare 10.5" HD touch screen
- 5) Industrial quality WIFI/Bluetooth
- 6) One-click online updates
- 7) Remote help via Team Viewer
- 8) Wireless diagnostics
- 9) All software preloaded, works independently
- 10) Covers all truck, off road equipment & cars
- 11) Diagnostic and bidirectional functions
- 12) Cloud print diagnostic report
- 13) Internet capabilities (email, google etc)
- 14) Pre/Post scan report
- 15) Meet your municipal facility budget

FCAR HD Scanners covers over 100 manufacturers of all major trucks, cars and off-road equipment. 1992 to current. Full diagnostic coverage and bidirectional functions for:

Allison	Duramax	John Deere	Sterling
Bendix	Eaton	Isuzu	Volvo/Mack
Caterpillar	Freightliner	Kenworth	Voith
Cummins	Hino	Mitsubishi Fuso	Western Star
Detroit	International	Peterbilt	Wabco
		Powerstroke	More vehicle makers

Scanning all engine, transmission, brake, chassis and body control for all trucks and off-road equipment, and computer control systems on cars, including hundreds of reset and bi-directional functions, (ie. calibration and actuation test, cylinder cut out, DPF forced regeneration, injector coding, cylinder power balancing, and compression test).



Wired or Wireless HD Scanners

Automatic AC service machines

The AC machine recover, recycle, evacuate and recharge both R-134a and HFO 1234yf with improved 97% efficiency. It has automatic refrigerant refill and oil drain/inject – putting A/C lubricant back into the system.



- ✓ Cover R134a, 1234yf refrigerants
- ✓ Auto tank filling
- ✓ Auto recycling and recovering
- ✓ Auto vacuum
- ✓ Auto recharge

“ The FCAR scanner has been a major asset to the Town of Kent in its ability to diagnosis our full line of equipment. It covers passenger cars all of our emergency vehicles and the Police departments variety of vehicles from Chevrolet to Ford and heavy duty equipment including Mack plow trucks and Refuse trucks. Full line of international trucks and all our off road equipment. Cat loaders and backhoes, bobcat excavators and skid steers to mention a few. We are able to see fuel rail pressure and ABS signals for accurate repairs. The Mack truck functions are proven to be useful and money saver in forced regeneration which in the past had to be towed back to the manufacture. What a time and cost saving tool. Not only are drivability concerns diagnosis but transmission ,body modules controlling HVACs functions and brakes have a broad coverage. The tool is so user friendly and is powered by the vehicle or equipment you are plugged into. Bidirectional capabilities make it useful as an OEM tool. I have already substantiated my ROI. The customer service and support team makes the experience a completely satisfied one and you are not forgotten after the initial sale. Great job and great product. I highly recommend to add this to your tool box! ”

-----Nicholas Mancuso, Service Manager, Municipal Repairs Town of Kent



FCAR TECH
Truck Diagnostic and Beyond

Contact us:

Support Tel: 443-380-0088

Tel: 844-322-7872

Web: www.fcarusa.com

EASY-TO-USE
3-IN-1 MOISTURE METER

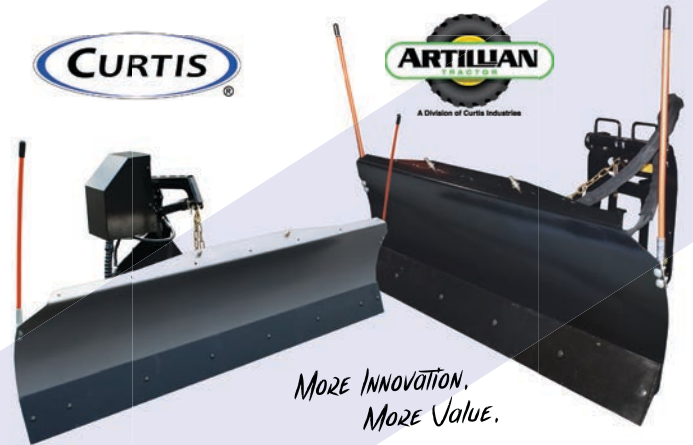
QuickNav

PIN & SCAN MODE +
THERMO-HYGROMETER



- » Define areas affected by moisture in drywall, insulation, wood, concrete, and plaster
- » Measure RH with fast acclimating thermo-hygrometer
- » Monitor restoration progress and verify the structure is dry

DELMHORST
INSTRUMENT CO.
WHEN ACCURACY IS THE POINT.



*MORE INNOVATION.
MORE VALUE.*

FULLY HYDRAULIC UTV PLOW

BY CURTIS INDUSTRIES

Custom Mount Kits Available for:

John Deere Gator XUV 615, 625, 815,
825 & 855: 2011+

JD Gator XUV 835, 865: 2011+

Polaris Ranger XP900: 2013+

Kawasaki Mule Pro FX/DX, Pro FXT/DXT

Club Car XRT 1551 2004+

HYDRAULIC ANGLING TRACTOR PLOW

BY ARTILLIAN

Requires Artillian Fork Frame

JDQA or SSQA (not included)

JDQA fit 1-, 2-, 3- & 4-series sub-compact tractors or equivalent

SSQA fit any Universal or Skid Steer Quick Attach loader meeting SAE J2513 standard

System allows for quick switching between fork frame/plow assembly & bucket.

70 Hartwell Street | West Boylston, MA | 01583
508.853.2200 | curtiscab.com | artillian.com



- A MATCHING PAIR -

(2) 2011 INTERNATIONAL 4400 RYDER CERTIFIED

All new snowplow pkg., DT466 diesel, Allison AT, Super V 10.5' plow, 7.5 yd. stainless insert salter, central controls, strobe lights, 10' Godwin dump, 18 ton hoist.

\$74,500 EACH MORE PLOW TRUCKS AVAILABLE

IMEL MOTOR SALES
MEDIUM DUTY TRUCKS

brent@imelmotorsales.com

260-437-4577
www.imelmotorsales.com

SCAN FOR LIVE VIDEOS →



Monroe returns to the river

By JANET PATTERSON | The Municipal

It has been nearly 240 years since a group of French-Canadian settlers came to the bank of the River Raisin in the Northwest Territory. The small community between what is now Detroit, Mich., and Toledo, Ohio, sat where the river flowed into Lake Erie.

During the War of 1812, the river settlement of Frenchtown was the scene of a bloody massacre that decimated the village.

But the river continued to provide rich soil for agricultural development, and by 1817, American settlers had laid out a community that they named for the new U.S. president, James Monroe.

The village grew, and local vineyards and orchards thrived along the riverbanks for 100 years.

Then, industrialization came to Monroe, building the economy, but robbing the River Raisin of its pure water and rich wildlife.

By the 1980s, it was clear that cleaning up the river was a priority for Monroe, Mich.

According to Mark Cochran, assistant to Monroe's city manager, the 1987 Great Lakes Water Quality Agreement designated 43 areas throughout the Great Lakes region in the United States and Canada as areas of concern. One of those was the River Raisin.

"The boundary of the River Raisin AOC constitutes only 2.6 miles of the lower river where it flows into Lake Erie. However, within this small area, decades of industrial development resulted in contamination of the river sediments with heavy metals and PCBs (polychlorinated biphenyl)."

Recognizing the need for action and pulling together the resources to make it all happen, the River Raisin was about to get new life.

In 1997, Cochran said Ford Motor Company removed "20,000 cubic yards of



The River Raisin Legacy Project has invested more than \$23 million to enhance the environmental and recreational opportunities in the River Raisin and nearby Sterling State Park. (Photo provided)

highly PCB-contaminated sediment from the AOC under U.S. EPA order." Following the removal, both the EPA and Michigan Department of Environmental Quality found that high levels of PCBs remained causing restrictions on fish/wildlife consumption; bird and animal deformities and reproduction problems; and restrictions on dredging.

So, in 2012, the River Raisin Legacy Project got underway, with \$17.3 million in remediation funding from the Great Lakes Legacy Act Agreement.

"The River Raisin Legacy Project has invested more than \$23 million to enhance the environmental and recreational opportunities in the River Raisin and nearby Sterling State Park," Cochran said.

The result has been a revitalization of not only the city of Monroe but the fish and wildlife of the area.

The industrial revolution of Monroe

Monroe was the home of the first vineyards planted in the state of Michigan for commercial wine production. Cochran said, "Agriculture drove the local economy through vineyards and orchards along the banks of the River Raisin for nearly 100 years."

In about 1834, several major paper factories were built in Monroe, operating there until the mid-1980s.

But it wasn't just paper that built the economy.

"Monroe was the birthplace of the recliner when Edward Knabusch and Edwin Shoemaker founded La-Z-Boy Inc. in 1928," Cochran said. The city is still home to the company, where its new world headquarters was constructed in 2015.

Additionally, the steel industry and Ford Motor Company have played an important role in Monroe's growth.

“Today, DTE’s Monroe Power Plant that opened in 1971 is the largest coal-fired power plant in North America and the city’s largest taxpayer and employer,” Cochran added.

All this industrialization of Monroe caused the city to turn its back on the river, which is now recognized as one of the city’s greatest assets, he continued.

“Following the riverbanks, you can see the community took for granted this great natural asset other communities would love to have. Buildings have their backs facing the river, parking lots were installed along the shore.”

Cochran said much of the city’s industry was built along the east side of the river at the Port of Monroe. In addition, dams that were built to support industry prevented fish from making their way upstream and waterway recreation ceased downstream.

Monroe revitalization

“Today, the city is placing great resources and emphasis to reclaim the benefit of the river running through our city,” Cochran said.

Dubbed “Resilient Monroe,” the new downtown master plan calls for a half-mile extension to the existing Riverwalk from downtown to the Sterling State Park and the River Raisin National Battlefield Park.

“As Michigan’s third oldest community, Monroe has an abundance of historic buildings, structure and sites that define its identity and character,” he said. “Our downtown features many historic buildings with charm and great potential for redevelopment. We are experiencing a resurgence in interest from retail and restaurants gradually improving place and the night life.”

Monroe’s Loranger Square is the heart of the city’s central business district and features a historic courthouse and church as well as a pavilion, lotus fountain, library, city hall and statues remembering historic figures in the city’s history.

Monroe also boasts three historic districts that date back to its founding in 1817.

“The city of Monroe has one of the most comprehensive rosters of extant 19th century domestic architectural styles in the state,” Cochran added.

The old and dilapidated factories along the river have been demolished and remediated to recognize the history that took place along its banks.

With a renewed interest for gathering places along the river, restaurants are locating there and building outdoor spaces for enjoying the river’s ambiance.

Bringing people back to the river’s banks involves not just retail and restaurants, but housing, which Cochran described as the “missing middle,” that is, infilling the existing neighborhoods with residential development such as lofts, townhouses and flats that have increased demand in the real estate market.

A unique location

This city of nearly 21,000 boasts a “unique asset that no one else in North America” has, according to Cochran.

“In one converging point, we have Michigan’s second-most visited state park (Sterling State Park) along the banks of one of the Great Lakes (Lake Erie), where the River Raisin joins an entity of the National Park Service (River Raisin National Battlefield Park) and the Detroit River International Wildlife Refuge, the only international wildlife refuge in



Revitalization efforts along River Raisin have brought economic and recreation opportunities to the community of Monroe, Mich. (Photo provided)



Revitalization has not only brought people to the River Raisin, it has also seen wildlife return, including several varieties of fish. (Photo provided)

the world. This great asset provides great experiences for visitors seeking an adventure rooted in nature, wildlife, history and culture.”

These assets provide opportunities for outdoor recreation like canoeing, kayaking, fishing and exploring.

The area’s Heritage Master Plan complements the city’s master plan to reinvent Monroe as a national destination like Williamsburg or Gettysburg.

Since the National Park Service opened its operation at the battlefield park in 2009, three new hotels have been built in the vicinity and two more are in the development phase

“In the past year, the park received nearly 250,000 visitors from all 50 states and 14 foreign countries,” Cochran said. This number is significant since the park is still fairly young and not yet fully developed.

Among the additions will be the renovation of a former municipal ice rink to create an education and visitors center as well as the first recreation of one of the original French ribbon farms that were in the area when the Battles of River Raisin occurred. Ribbon farms were a unique agricultural configuration that laid out farm plots in long narrow strips with the farmhouse at one end of the property. ▶

He said city officials expect that when the development of the River Raisin Heritage Corridor is complete, it will contribute \$30 million annually to the regional economy with 400 new jobs in both Michigan and Ohio.

Return of wildlife

Cochran said with the return of health to the river itself, wildlife is making a comeback to the region. This includes fish such as pike, large- and smallmouth bass, muskie and bluegill as well as bald eagles, canvasback ducks, muskrat and beaver.

As a result of the river restoration, an additional 23 miles of the River Raisin has been opened for fish migration and spawning.

“It is everyone’s dream to see the day when the sturgeon make a return to the River Raisin as well, and the restoration work that has been done to date has made great strides to make that dream more of a reality.”

The evolution

With a two-century history behind it, Monroe continues to evolve and adapt like many other American Rustbelt cities.



Monroe, Mich., has one of the most comprehensive rosters of extant 19th century domestic architectural styles in the state. (Photo provided)



A bridge crosses over the River Raisin while wild fowl enjoy the water. (Photo provided)

Cochran said, “As we move from an industrial economy to a community that showcases, shares and appreciates our cultural, ecological and historical assets rather than taking them for granted, we move toward a new chapter in our history that offers a quality of life residents are looking for, whether to raise a family or age in place.”

All because of a river. **M**



Pictured is Monroe’s historic courthouse, located on East First Street. (Photo provided)

FLEET DISCOUNT PARTS 1 (888) 533-8277

AMERICA'S ONE STOP SHOP

Tarps & Replacement Parts for all tarp vendors!

FRONT TO BACK TARP SPECIALTY TARP REPLACEMENT ARMS REPLACEMENT COMPONENTS CONSTRUCTION & LANDSCAPING SYSTEMS

BEST SOURCE FOR US Tarp Covering America!

ARM SYSTEMS, REPLACEMENT PARTS, & TARPS

				
PRO-TEC MESH	BLACK MESH	ARMOR MESH	LUMITE	BLACK VINYL

AVAILABLE ARM STYLES:

						
US TARP* ALUMINUM	US TARP* STEEL	US TARP* BULLETPROOF	ROLL RITE*	SHURCO*	MOUNTAIN TARP	AERO*

FLEET DISCOUNT PARTS - A FULL ONLINE DISTRIBUTOR

FLEETDISCOUNTPARTS.COM SALES@FLEETDISCOUNTPARTS.COM

SIGN GUARDIAN

ANTI-THEFT SIGN BRACKETS AND ACCESSORIES

www.SignGuardian.com
 Bob@signguardian.com
 410-251-3487

The SignGuardian anti-theft bracket provides a safe and secure method of attaching signs & banners to various fence and post types:

- Standard Chain-link fencing
- Tight mesh security fencing
- Ornamental fencing
- U-Channel posts
- Square Channel Posts



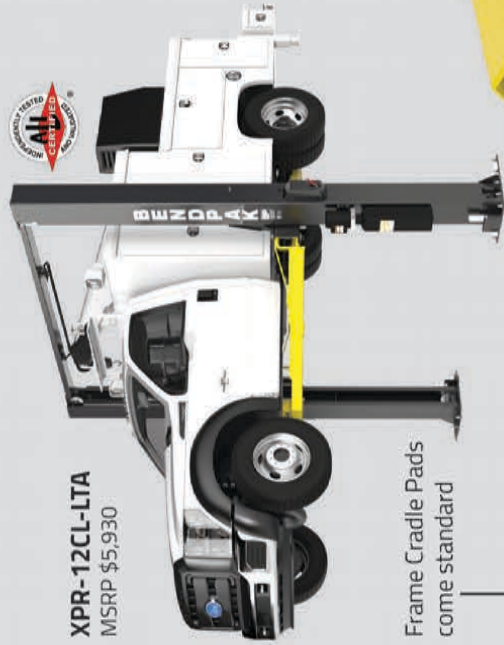
Call or email for additional information

WHEN BALANCING SAFETY AND PRODUCTIVITY, BENDPAK GOES THE DISTANCE.

LONG-REACH ARMS PROVIDE BETTER CENTER-OF-GRAVITY LOADING

When servicing trucks and vans with extremely long wheelbases, longer-reach arms deliver a more stable lifting solution. The lengthy triple-telescoping arms on BendPak's new **ALI Certified XPR-12CL-LTA** extend to 72" long – that's six feet in length and over one foot longer than almost any other lift or brand in its class. And with rugged BendPak dependability combined with a 16-piece adapter set, you'll realize that balancing safety* and worker productivity has never been so perfectly matched. For more information visit www.bendpak.com/LTA or call **1-800-253-2363**.

XPR-12CL-LTA
MSRP \$5,930



Frame Cradle Pads
come standard

Stackable adapters
come standard

- 12,000-lb. lifting capacity
- Dual direct-drive hydraulic cylinders
- Oversized 53" tall carriage for superior strength and durability

36" - 72" arm reach

3-stage long-reach
telescoping arms

Oversized A36
steel base plates

Zinc-plated arm restraints
and connecting pins



*Always read and follow all safety warnings that accompanied your lifting equipment at the time of purchase. More information regarding vehicle lift safety is available directly from BendPak or from the Automotive Lift Institute.

www.bendpak.com/LTA • 1-800-253-2363

© 2020 BendPak Inc. BendPak is a registered trademark.

BP BendPak

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

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

JANUARY

Jan. 7-9 Landscape Ontario Congress

Toronto Congress Centre,
Toronto, Ontario, Canada
www.locongress.com

Jan. 9-14 ACA Winter Conference

San Diego, Calif.
www.aca.org

Jan. 12-17 NRPA Event Management School

Oglebay, Wheeling, W.Va.
www.nrpa.org/careers-education/education/event-management-school/

Jan. 13-15 FDSOA Fire Apparatus, Safety and Maintenance Conference

Scottsdale Plaza Resort,
Scottsdale, Ariz.
www.fdsosa.org

Jan. 14-16 Northern Green 2020

Minneapolis Convention Center,
Minneapolis, Minn.
www.northerngreen.org

Jan. 21-24 Louisiana Recreation and Park Association Annual Conference

Hilton Baton Rouge Capitol Center,
Baton Rouge, La.
www.lma.org

Jan. 22-24 U.S. Conference of Mayors 88th Winter Meeting

Capital Hilton Hotel,
Washington, D.C.
www.usmayors.org/meetings

Jan. 22-25 Fire-Rescue East

Ocean Center, Daytona Beach,
Fla.
www.ffca.org

Jan. 23 Rhode Island League of Cities and Towns Convention

Crowne Plaza Hotel, Warwick,
R.I.
www.rileague.org

Jan. 24-25 Massachusetts Municipal Association Annual Meeting and Trade Show

Hynes Convention Center and Sheraton Boston Hotel, Boston,
Mass.
www.mma.org

Jan. 24-28 ATSSA's Annual Convention & Traffic Expo

New Orleans, La.
www.expo.atssa.com

Jan. 27-30 Heavy Duty Aftermarket Week

Grapevine, Texas
www.hdaw.org

Jan. 28-30 Underground Construction Technology: The Underground Utilities Event

Fort Worth Convention Center,
Fort Worth, Texas
www.uctonline.com

FEBRUARY

Feb. 3-7 World of Concrete

Las Vegas Convention Center,
Las Vegas, Nev.
www.worldofconcrete.com

Feb. 11-13 Indiana Parks and Recreation Association Conference and Expo

Horizon Convention Center,
Muncie, Ind.
<http://inpra.evrconnect.com/conference>

FEBRUARY

Feb. 11-14 ARFF Leadership Conference

Rio All-Suite Hotel, Las Vegas,
Nev.
www.arffwg.org

Feb. 12-14 Arkansas Municipal League 2020 Winter Conference

Statehouse Convention Center,
Little Rock, Ark.
www.arml.org

Feb. 17-20 WWETT 20

Indiana Convention Center,
Indianapolis, Ind.
www.wwettshow.com

Feb. 18-21 Missouri Park & Recreation Association's Conference and Expo

The Lodge of Four Seasons,
Lake Ozark, Mo.
www.mopark.org/conference

Feb. 24-27 TMC Annual 2020

Atlanta, Ga.

Feb. 26-28 Wyoming Association of Municipalities Winter Conference

Little America, Cheyenne,
Wyoming
www.wyomuni.org

Feb. 27-29 NUCA Annual Convention and Exhibit

Loews Ventana Canyon Resort,
Tucson, Ariz.
www.nuca.com

Feb. 28 Integrated Response to Active Threats Conference

Benedictine University, Lisle, Ill.
www.Disaster-Ready-Solutions.com/events

MARCH

March 1-4 DRI2020

Westin Savannah Harbor Golf Resort & Spa, Savannah, Ga.
www.conference.drii.org

March 2-4 MSTPA Spring Conference

Sandestin Golf & Beach Resort,
Sandestin, Fla.
www.mstpa.org

March 2-6 EMS Today: The JEMS Conference & Exposition

Tampa, Fla.
www.emstoday.com

March 3-6 NTEA's 20th Work Truck Show and Green Truck Summit

Indiana Convention Center,
Indianapolis, Ind.
www.ntea.com

March 8-11 NLC Congressional City Conference

Washington, D.C.
www.ccc.nlc.org

March 24-26 Wildland Urban Interface

Peppermill Resort, Reno, Nev.
www.iafc.org/events/wui

March 26-28 Mid-America Trucking Show

Louisville, Ky.
www.truckingshow.com

March 30-April 3 IWCE Conference

Las Vegas Convention Center,
Las Vegas, Nev.
www.iwceexpo.com

May 31-June 3 IPMI Conference & Expo

San Antonio, Texas
www.parking-mobility.org/ipmi-meetings-events/ipmi-conference-expo/

LET'S BUILD | YOUR IDEAL STRUCTURE



SUPERIOR
BUILDING SOLUTIONS
FOR OVER
40 YEARS

INDUSTRY-LEADING WARRANTIES
ENERGY-EFFICIENT DESIGNS
EXPERT CONSULTATION
METAL AND FABRIC BUILDINGS

ClearSpan
www.clearspan.com
1.866.643.1010

TURF RAIL
For safe lifting of Turf & Outdoor Equipment

800-359-2974
www.turfrail.com



We sell directly, FD to FD, for Fair Market Value!

SOLD by FIRETEC **1994 International/Pierce**
SOLD for Coalton VFD of Ohio
Now serving with
Central DeKalb FPD of Missouri

*Don't settle for pennies on the dollar by selling at auction:
Let Firetec Handle The Sale*

Call to tell us about the used fire truck your FD needs to sell
800-347-3832

FIRETEC USED APPARATUS SALES
WWW.FIRETEC.COM • EMAIL: FIRETEC@FIRETEC.COM



WAM SOFTWARE, INC.
The Premier Waste Accounting Management Software for Haulers

BILLING - ROUTING - REPORTING

World class customer service to give you what you need, when you need it.

WAM Software, Inc.
800-926-4748
www.WAMSoftware.com



The Sidewalk liquid spreader you've been asking for!

HighCountry Spray Systems
For Professionals, by Professionals
303-838-4233
www.HighCountryIS.com

The Walk-About II

- Dependable Gravity feed
- Durable wheels, axles & frame
- Super simple operation
- Works with all deicing liquids
- American made with American parts



Serving Municipalities for over 40 years

We service municipal lots, residential sidewalks, train platforms and downtown city sidewalks

SNOW SYSTEMS®
(847) 808-7800 | snowsystems.com



Mile-X Equipment, Inc.
Shop & Garage Equipment
www.mile-x.com

Over 7000 Items Online

TIRE CHANGERS • OIL FILTER CRUSHERS • BAND SAWS • OTC TOOLS
LIFT EQUIPMENT • BATTERY CHARGERS • BRAKE LATHES • WHEEL BALANCERS
DRILL PRESSES • BALDOR GRINDERS • SHOP PRESSES • PRO-LINK



GSA # GS-7F-96368S
PH: 1.800.837.3818 | FX: 419.678.2489 | E: sales@mile-x.com
GOVERNMENT DISCOUNTS & FREE SHIPPING AVAILABLE ON MANY PRODUCTS!

www.mile-x.com

Fueling the work truck industry for decades

Work Truck Week 2020



20TH WORK TRUCK SHOW

ANNIVERSARY



Brought to you by



March 3-6

Indiana Convention Center | Indianapolis, IN

Sessions begin March 3 | Exhibit hall open March 4-6

Register at worktruckshow.com

Friction Reducing Lubricants

LUBE - A - BOOM®
"slick just got slicker™"



- Protect against rust and corrosion
- Long term protection
- Water and saltwater resistance
- Excellent adherence properties
- For operating temps from -40° up to 400°
- Reduces maintenance intervals

NEW!
DIELECTRIC
AEROSOL
LUBRICANT

Also Available:
LUBEABOOM &
LUBEAPIN grease in
shuttles, cartridges, pails,
kegs and drums. MATO
pneumatic hand held
grease guns.



www.lubeaboom.com • sales@lubeaboom.com • 317-578-3961

REALWHEELS CORPORATION



LED AirGuard®

SET & GO Tire Pressure Monitoring System

The Easiest TPMS to Install,
Calibrate & Re-Calibrate.



DANGER

SAFE

Flashes RED if the tire pressure drops 5 to 10 psi.



MSRP
\$16.85 Each
(reduced prices for larger volumes)

Complies with the NFPA
**1901 & 1917 Standards for
Ambulances & Fire Trucks!**

LOCK-DOWN HELMET HOLDER

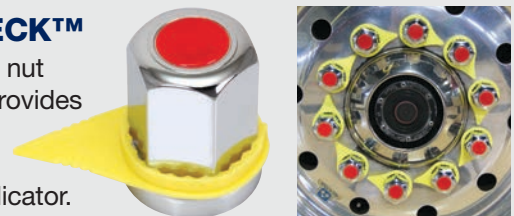
A safe, secure and efficient way to store and access their helmets in the vehicle.



Helps you comply with NFPA 1901 Guidelines!

LUG CHECK™

The only lug nut cover that provides safety, good looks, and a lug nut indicator.



FRONT LOADING FIRE EXTINGUISHER CASE



- All plastic construction, non-corrosive
- Lightweight
- Suitable for most 13lb and 20lb extinguishers

WHEEL CHOCK AND HOLDER



- Conforms to DIN-76051-53
- Heavy duty poly construction

CALL BEV FOR PRICING AND MORE INFORMATION



Bev Lowery
Municipality Product Sales Manager
1-800-982-1180
Cell: 847-826-0100
www.realwheels.com

CHECK WEBSITE NOW FOR MORE DETAILS ON THESE AND OTHER CURRENT ITEMS! NEW ITEMS DAILY!

BID, BUY & SELL AT
www.WisconsinSurplus.com
Everything sells at online auction to the highest bidder - Bid online now!!

BUY & SELL YOUR SURPLUS MUNICIPAL OR BUSINESS ITEMS!



1-800-383-SOLD

WISCONSIN SURPLUS ONLINE AUCTION

ACT NOW ... AUCTIONS ENDING DAILY!

Registered Wisconsin Auction Company, License #01
Cars @ Auction Sales - Used Car Dealer #3887
202 W. Front St. - Mount Horeb, WI 53572-0113
(608) 437-2001 - bid@WisconsinSurplus.com

*VEHICLES & ITEMS ARE SUBJECT TO AUCTION CLOSING DATES.

Best coffee cities in America

What makes a winter day slightly better? Coffee. Some cities have the roasted bean game down to a science, crafting a bounty of coffee creations and flavors. To determine the best among these cities, WalletHub in September did some research. It compared 100 of the largest cities in the U.S. across 14 key indicators of “coffee lover-friendliness.”

These factors included the average price per pack of coffee; average price of a cappuccino; average spending on coffee per household; share of adult coffee drinkers; share of households that own coffee makers; affordable coffee shops, coffee houses and cafes; coffee shops, coffee houses and cafes; coffee and tea manufacturers per capita; coffee shops with free Wi-Fi per capita; donut shops per capita; Google search traffic for the term “coffee”; “coffee lovers” meetups per capita; presence of coffee-centric events or “U.S. coffee championships”; and average ranking of coffee shops on the The Daily Meal’s “50 Best Coffee Shops” list.

Unsurprisingly, Seattle, Wash., won with a total score of 69.44 out of 100. Other top coffee cities are included below:

City	Total Score
1. Seattle, Wash.	69.44
2. New York, N.Y.	67.42
3. San Francisco, Calif.	65.31
4. Portland, Ore.	64.88
5. Los Angeles, Calif.	60.23
6. Chicago, Ill.	57.09
7. Washington, D.C.	54.26
8. Miami, Fla.	53.60
9. San Diego, Calif.	51.04
10. Boston, Mass.	48.61



A

All Access Equipment 2
 Alunitank..... 54

B

Bend Pak Incorporated 47
 Bonnell Industries..... **Back Cover**
 Buyers Products Company 55

C

Clearspan Fabric Structures 15
 Curtis Industries 43

D

Delmhorst Instrument Company 43

E

Ever Blades Incorporated 9

F

FCAR Tech USA, LLC..... 42
 Fleet Discount Parts 46
 Frost Incorporated..... 27

G

Greystone Construction **Cover, 10-11**

I

Imel Motors 43
 International Code Council..... 5

K

Kimtek Research 8
 KM International 7

L

Land Pride 16
 Lube-A-Boom..... 51

M

Mean Green Products 32
 Mile-X Equipment Incorporated 49
 Monroe Truck Equipment 14

N

National Construction Rentals 27
 NTEA - The Work Truck Show..... 50

O

Omega Industrial Products..... 3

R

Real Wheels..... 51

S

Sign Guardian 46
 Specialty Maintenance Products Incorporated 15
 Strongwell 33
 Stumper Industries 27

U

US Tarp..... 32

W

Wisconsin Surplus Auctions..... 51
 WWETT 28-29

This index is provided courtesy of the publisher, who assumes no liability for errors or omissions.



It's a No-Brainer!



Approx. **\$1,300**
International 4300
OEM - Steel Tank

Replace-It!



AT-IN-3002
\$651.68
55 Gallon Aluminum

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

MADE IN THE USA with PREMIUM American Materials



AT-GM-4001
\$808.48
GMC style 54 Gallon Tank



AT-IN-2001
\$741.75
International style
50 Gallon Tank

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

ALUMITANK
THE FUEL TANK SPECIALISTS
www.alumitank.com

ORDER WHOLESALE FACTORY DIRECT!
Call Us Toll-free At **1-800-652-6630**

**GET A CUSTOMIZED
MUNI SPREADER
WHEN YOU NEED IT**

**IT'S LIKE HAVING
A FACTORY ON CALL 24/7**



**Call 440-299-5011 or email
munisales@buyersproducts.com
for a quote**

SaltDogg
by **Buyers**
NOTHING WORKS LIKE A DOGG™



Sourcewell
Formerly NJPA

Awarded Contract
080818-BPC



BONNELLTM
INDUSTRIES INC
TRUCK & ROAD EQUIPMENT




BONNELL
INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DEMANDED
BY THOSE WHO KNOW
QUALITY

Sourcewell SM
Formerly NJPA

Awarded Contract



SALES. SERVICE. INSTALL.  (800) 851-9664 • www.bonnell.com • Dixon, IL

080818-BNL