

# PUBLIC WORKS Review: Projects Around Missouri

## Cape Girardeau: Missouri Water And Wastewater Conference



The Missouri Water and Wastewater Conference is an organization made up of water and wastewater professionals throughout Missouri. They focus on training and networking throughout the state. The southeast section of the Conference is hosted annually in Cape Girardeau at the Osage Centre.

The day included awards, classes, networking with vendors, and other activities. Around 150 professionals attended the Conference. Some of the highlights included class sessions about safety, maintenance, and management; and awards given to the wastewater operator, water operator, and water distribution operator of the year in the region.

While the day revolved around business, that does not mean there was not any fun. This year participants played a zombie game where they could shoot zombies and receive points for each hit. The top two scores won the nerf guns used in the game. Every participant that hit one zombie entered a drawing for \$100. Other games included “Pop A Squat and Make a Shot,” where participants who made a putt while sitting on a toilet entered a drawing for \$100.

Overall, the 2019 Conference was a success. Next year’s Conference is anticipated by water and wastewater professionals from the region, with attendance expected to grow.



## Columbia: City Roundabout



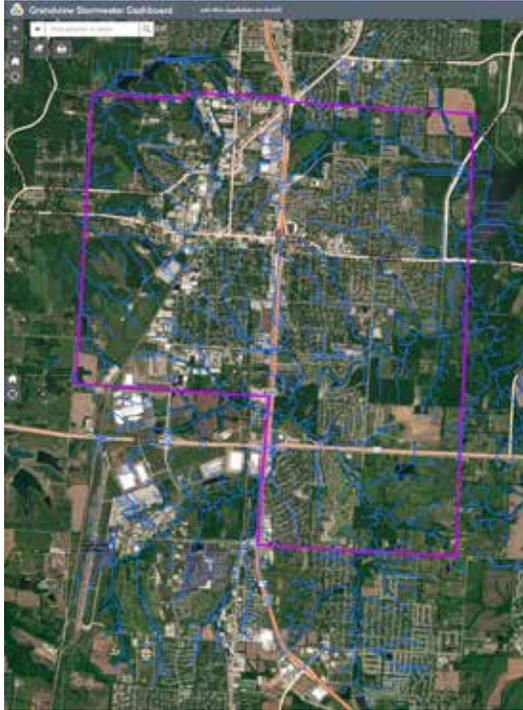
More community members in Columbia are realizing the safety and traffic-flow benefits that strategically designed roundabouts can offer at difficult intersections. National and local studies show that roundabouts maintain traffic flow while reducing crashes by 40 percent, and fatal/disabling crashes by 90 percent.

There had been 14 reported collisions at the intersection of Vandiver Drive and Parker Street in Columbia, with six reported injuries, since 2011. After gathering public feedback, engineers determined that a roundabout was the best solution. Not only did the City receive more than 50 positive comments in support of the project, but a nearby business volunteered to beautify the center of the roundabout.

A special approach was used for traffic control during construction. One lane remained open in alternating directions with a traffic signal on each end to control the direction of traffic. This allowed traffic to continue to use the street and move steadily through the area without the need for flaggers.

“The project received widespread positive support during our public involvement process,” Public Works Director David Nichols said. “But because this was a busy commercial street, we felt it was important to stage the construction in a manner to minimize disruption to local businesses.”

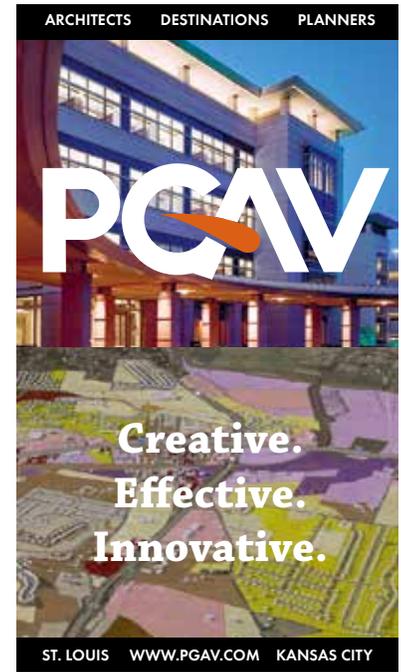
## Grandview: Stormwater Management



In 2017, a 100-year rain flooded and damaged dozens of duplexes and homes in the city of Grandview, as well as some city parks and infrastructure. Less than a month later, it happened again. The increased frequency of these weather events and the resulting significant damage compelled public works to update its 30-year-old stormwater master plan.

For a timely and cost-effective solution, the City called on Burns & McDonnell. Instead of developing the traditional capital project list requiring significant funding, the team created a master plan for the digital age: a financially feasible, next generation stormwater master plan applicable for every city and every day.

In conjunction with TREKK Design Group, the teams developed a suite of tools to provide real-time analysis of stormwater issues. Using current city data, the team created map layers in a geodatabase framework, compatible on a multitude of platforms. These tools identify locations of current drainage issues, overland flow paths and any obstructions, and drainage service requests. Layering the tools paints a picture of how water moves through



Grandview. Engineers can see how much area (acres) is draining to a point and how much stormwater (cubic feet per second) is anticipated during various storm events. These tools can also determine if existing pipes meet the minimum level of service per current regional design standards, as well as estimate the pipe capacity needed for future development. Additionally, the tools make direct use of service request information, creating a people-centric model for engineering. With the right tools in an easy-to-navigate dashboard, Grandview can now better manage stormwater on a day-to-day basis. The total project cost was \$100,000.

**TRANE**  
Beyond Energy. Beyond Comfort. Beyond Sustainability.

Trane provides sustainable solutions that are fiscally and environmentally responsible in improving the lives of the people who work, live and play in your communities.

Consider how utilizing a Performance Contracting financial method will help your City take a comprehensive approach to tackling longstanding capital infrastructure issues. For over 100 years, Trane has helped clients save billions of dollars in projects with energy savings contracts.

Contact me today to learn more about scheduling a no-cost energy audit to see how your facilities can go beyond their existing state to save energy and money over the long term.

**Jennifer Geen**  
Government Comprehensive Energy Services & Solutions  
Jennifer.Gray@Trane.com  
314.374.9233  
www.Trane.com

**US COMMUNITIES**  
Trane is a proud U.S. Communities Supplier Partner

**LET'S GO BEYOND™**

**Jackson:  
Walk Jackson**

Walk Jackson is a way to introduce the citizens of Jackson, Missouri, to their public works department; a chance to involve citizens in public works; and an opportunity to educate citizens about their wards while interacting through fun and exercise. Walk Jackson challenges Jackson residents to walk their ward, or the equivalent of the street-miles in their ward. They do not have to walk every street or any street, although the challenge is to walk as much of the ward as possible and record it on the tracking sheet provided.

Special Red Rocks were hidden in each ward that could be redeemed for prizes. Those that complete at least one ward in the challenge received a certificate of completion. The first 50 registrations received a special Walk Jackson tee shirt. The challenge began May 20, 2019, in conjunction with the beginning of National Public Works Week.

Participants were encouraged to keep an eye out for things that may need reporting to the public works department while out walking. Citizens were encouraged to contact the City when they saw things such as streetlights not burning at night, water running down the street when it should not be, or storm sewers that may be clogged.

**Follow MML!**



[www.twitter.com/mocities](http://www.twitter.com/mocities)



[www.facebook.com/mocities](http://www.facebook.com/mocities)



[www.linkedin.com/company/mocities](http://www.linkedin.com/company/mocities)

[www.mocities.com](http://www.mocities.com)



830 EAST PRIMROSE | SUITE 200  
SPRINGFIELD, MO 65807 | 417.888.0645  
TOTHASSOCIATES.COM

Our vision is stronger communities through reliable engineering design.

<p><b>ELECTRIC UTILITY SERVICES</b></p> <ul style="list-style-type: none"> <li>• Long Range Plans</li> <li>• Substation Design</li> <li>• Construction Work Plans</li> <li>• Transmission Design</li> <li>• ROW/Easement Acquisition</li> <li>• Cost of Service Analysis</li> <li>• Distribution Design</li> <li>• Construction Administration</li> <li>• Environmental Studies</li> <li>• GIS/CAD Mapping</li> <li>• Regulatory &amp; Expert Testimony</li> <li>• Power Quality</li> <li>• Staking &amp; Field Investigations</li> <li>• Load Forecast Studies</li> </ul>	<p><b>CIVIL SERVICES</b></p> <ul style="list-style-type: none"> <li>• Sanitary Sewer Design</li> <li>• Sewage Lift Stations</li> <li>• Wastewater Treatment</li> <li>• Potable Water Design</li> <li>• Water Treatment</li> <li>• Stormwater Modeling</li> <li>• Floodplain Management</li> <li>• Site Development</li> <li>• Roadway and Intersection Design</li> <li>• Water and Sewer Rate Studies</li> <li>• Permitting</li> <li>• Construction Administration</li> <li>• Surveying</li> </ul>	<p><b>STRUCTURAL SERVICES</b></p> <ul style="list-style-type: none"> <li>• Substation Structure Design</li> <li>• Safe Room Design</li> <li>• Bridge Design</li> <li>• Building Design</li> </ul> <p><b>GRANTS</b></p> <ul style="list-style-type: none"> <li>• Grant Applications</li> <li>• Grant Administration</li> <li>• Over \$200 million in approved grants for our clients.</li> </ul>
--	--	---





CONSULTING ENGINEERS

ELECTRICAL | STRUCTURAL | CIVIL | LAND SURVEYING | GIS

## Federal Flood Protection Grant Saves KC Millions



A federal grant will enable Kansas City, Missouri, to save more than \$30 million on a project that will protect a major employment area from flooding.

The U.S. Army Corps of Engineers decision will enable millions of dollars in levee improvements along the Missouri and Kansas rivers. The federal dollars replace a previously required 35% local match.

“This federal funding keeps millions of dollars here in our local economy to support other needed improvements,” said Terry Leeds, KC Water Director. “It puts into motion construction on critical flood protection projects along Kansas City’s levee system, which is the third largest urban levee system in the country.”

The confluence of the Missouri and Kansas rivers includes a bistate area that was an encampment site of the Lewis and Clark Corps of Discovery Expedition in the early 1800s and among the region’s original settlement areas in the 1820s.

The new grant action will cover ongoing construction of the Central Industrial District Levee protecting what is known as the West Bottoms area of Kansas City, Missouri; and the nearby Argentine and Armourdale levees in Kansas City, Kansas.

The three levees protect more than seven square miles of primarily industrial properties valued at more \$7 billion. The area is home to thousands of jobs, including redevelopment

bringing office, entertainment, recreational sports, dining, retail, and residential enterprises. It also is the heart of one of the largest rail centers in the country.

Areas along the Kansas and Missouri rivers through the metropolitan area are divided into seven levee districts. The Corps determined after the Missouri and Kansas River Flood of 1993 that the seven Kansas City area levees were at risk of overtopping.

Previously completed work since 1993 improved levees protecting the Northeast Industrial District (East Bottoms) of Kansas City, Missouri.; the communities of Birmingham and North Kansas City, and the Fairfax industrial area in Kansas City, Kansas. 🌱

**Photo upper left: Improvements are coming to a levee protecting the West Bottoms area of Kansas City, Mo., thanks to a new federal grant. (Photo by Karen Lim/City of Kansas City, Mo.) Upper Right: A view through a railroad bridge from the Riverfront Heritage Trail near the confluence of the Kansas and Missouri rivers shows a levee slated for improvement thanks to a new federal grant. (Photo by Karen Lim/City of Kansas City, Mo.)**