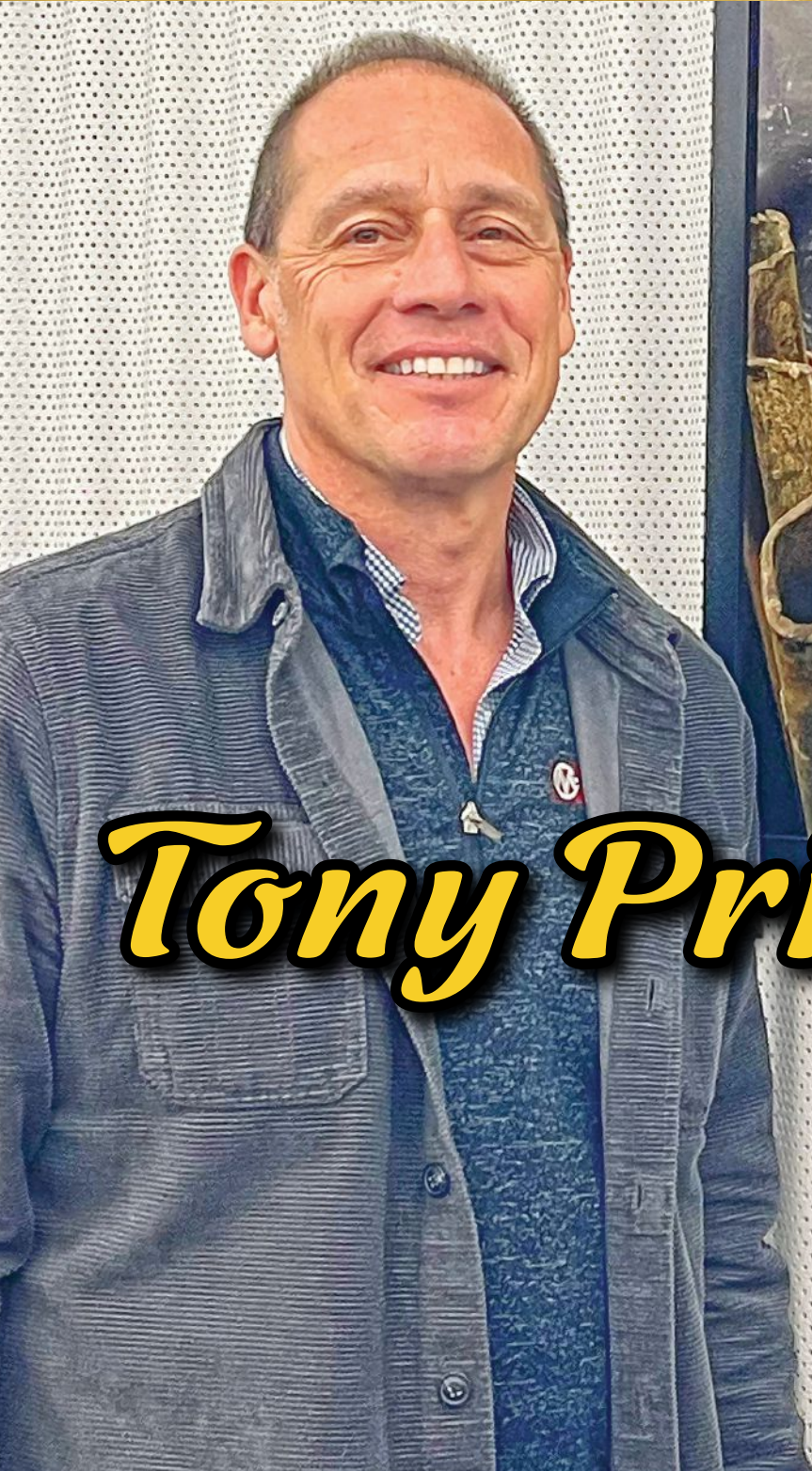


**UC**  
**Utility Contractor**™

**NUCA**  
**60 YEARS**


*Digging America Since 1964*

MARCH/APRIL 2024



***Tony Privitera***

**2024  
NUCA  
CHAIRMAN**



# Above ground, or below, we've got you covered

With the largest, most diverse fleet of construction and industrial equipment in North America, we are a one-stop shop for whatever you need, delivered on time and ready to go.

800.UR.RENTS | [UnitedRentals.com](https://www.UnitedRentals.com)

 **United Rentals**<sup>®</sup>

# DUAL THREAD

## CORDLESS POWER DRIVE FOR WATERWORKS

### Valve Exercising



- **Versatile.** Change the drophead for tapping/drilling or valve turning
- **Light.** Major torque without the weight – just 15 lbs. (6.8 kg)
- **Portable.** No pneumatic or electric drop lines
- **Safe.** Paddle switch stops almost immediately on release

### Tapping/Drilling



Requires 18V Bosch® battery, sold separately.

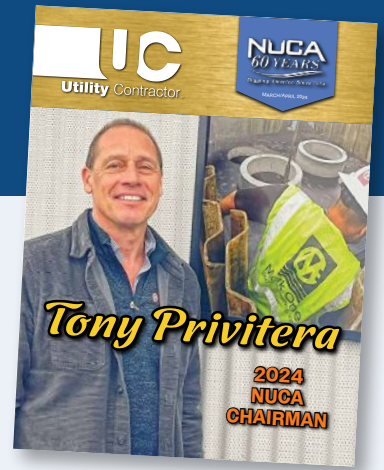


PIPE TOOLS & VISES  
SINCE 1896

Reed Manufacturing • Erie, PA USA  
+1-814-452-3691 • 800-666-3691  
reedsales@reedmfgco.com • www.reedmfgco.com

# CONTENTS

March/April 2024



## Features

### 18 2024 NUCA Chairman: Tony Privitera

Tony Privitera of Kansas City-based Mark One Electric takes the reins of the country's leading organization for utility contractors.  
 By Jim Rush

### 22 5 Advances You Should Know About Today's Compact Drills

HDD manufacturers offer a wide range of models to fit contractors' preferences, and new tooling options are available.  
 By Clint Recker

### 24 Data-driven Profitability for Utility Construction

Three steps to using performance data to improve your bottom line.  
 By Tom Willey

### 26 Transforming Underground Utility Operations

A look at leveraging modern software solutions.  
 By Eric Christensen

### 28 Q&A: Raising the Bar

Tenna's Russ Young discusses how construction tech is driving improvements in contractor communication, efficiency and financial performance.  
 By Andrew Farr

### 30 Advanced Technologies on Next-Generation Crawler Excavators

Smart excavator solutions are redefining job site efficiency, safety and performance.  
 By Diane Heldt

### 32 Q&A with Komatsu

UC talks excavators with Nathaniel Waldschmidt.  
 By Jim Rush

## On The Cover:

Tony Privitera has spent a lifetime in the construction industry, and now he is using his experience to help guide the National Utility Contractors Association as its 2024 Chairman.



Benjamin Media Publishing Team

President — Robert Krzys  
 robk@benjaminmedia.com

Editor/Publisher — James Rush  
 jrush@benjaminmedia.com

Contributing Editor — Andrew Farr  
 afarr@benjaminmedia.com

Advertising Sales Manager — Maura Bourquin  
 mbourquin@benjaminmedia.com

Advertising Sales Rep. — Meghan Squires  
 msquires@benjaminmedia.com

Graphic Artist — Joan Satow  
 jsatow@benjaminmedia.com

July/August Volume 45, Number 4, Utility Contractor (ISSN 1098-0342) publishes 6 issues per year (bi-monthly) for the National Utility Contractors Association by Benjamin Media Inc., 3554 Brecksville Rd., Suite 200, Richfield, OH 44286. Periodicals postage paid at Cleveland, OH and additional offices. One year subscription rates: Complimentary in the USA & Canada and \$99 in foreign countries. Single copy rate: \$10.00. ©2023 NUCA. All rights reserved by the National Utility Contractors Association for articles contained herein except where otherwise noted. No part of this publication may be reproduced or transmitted by any means without written permission from the publisher. Printed in the U.S.A.

Subscription Info. / Address Changes (Postmaster):  
 Utility Contractor Magazine,  
 3554 Brecksville Road, Suite 200  
 Richfield, OH 44286  
 330-467-7588  
 subscriptions@benjaminmedia.com

## Departments

- 8 Groundbreaking News
- 40 Products
- 42 The Pipeline
- 42 Advertisers' Index

## NUCA Departments

- 6 Chairman's Message
- 34 Inside Washington
- 36 Safety Management
- 38 SafetyWorks

A worker wearing a yellow hard hat, safety glasses, a white t-shirt, a high-visibility yellow safety vest, blue jeans, and brown work boots is operating a large industrial machine. The worker is standing on a yellow metal platform with a textured surface. The machine is green and black, with various pipes and components. The background shows a clear blue sky and a gravel surface.

**CORE & MAIN**

**COUNT ON US  
FOR YOUR FUSION  
SOLUTIONS AND SUPPORT  
NATIONALLY**

- Pipe
- Fittings
- Custom fabrication
- Machine sales, service and repair
- Fusion training, rentals and services

**Local Knowledge**  
**Local Experience**  
**Local Service, Nationwide®**

[coreandmain.com/fusible](http://coreandmain.com/fusible)

# NUCA

## Chairman's Message



**I**t is an honor for me to serve as NUCA's Chairman over the next year. Starting a new job can present a lot of challenges, but I'm glad that I have had several terrific predecessors before me, including former chairmen Tom Butler and Ryan Kinning.

I'm Tony Privitera, Executive Vice President of Mark One Electric Company, headquartered in Kansas City, Kansas. I'll be 60 years old this year, on NUCA's 60th anniversary. I've worked at Mark One since I was 14 years old. I've seen every side of my company. I've managed the managers, and really understand this industry from a contractor's point of view.

As you gain experience at a job and in life, you understand authority and how to use it to further the goals of an organization. You also make mistakes along the way. And in the end, you realize your mistakes are the way you learn to use authority for the greater good.

Now it's my turn to take what my predecessors have achieved and take NUCA to that greater good, to benefit all of us in this industry.

Over the next year, I'm going to focus on three important values that can make NUCA the best member-driven organization in the construction world.

**Retention.** Membership strength is not only achieved through signing up new members. It is also achieved through retaining an increasing percentage of existing members.

That's achieved through the most rewarding part of any business relationship. That's the personal connection each one of us makes with a business partner, or a new subcontractor, or an old friend.

**Workforce.** Workforce development is also one of my leadership goals over the next twelve months. I want to make Dozer Days a national program that every chapter can use for their own local workforce development successes.

**Advocacy.** Personal connections are also delivering results in NUCA's advocacy agenda in Washington. This is an election year, and we're able to get things done on Capitol Hill through our political action committee and its support for those lawmakers who look out for us. This is the year to support our PAC, and I encourage you to do so.

Personal relationships open doors. They open them on Capitol Hill, and they open them for all of us when we talk to our fellow industry members about NUCA and our Chapters.

Our work is not just about digging trenches; it's about building bridges—bridges that connect people, businesses, and aspirations. Connections matter. They can lead you to new heights you've never imagined. But you have to make these connections and use them for everyone's benefit.

Thank you for this honor. I promise to lead this association to continued growth and inspire each of us to make those personal connections to benefit our companies and our industry. I want to make this another year at NUCA that we can be proud of.

Sincerely yours,

Tony Privitera

NUCA Chairman of the Board / Mark One Electric Co.

### NUCA BOARD OF DIRECTORS

#### Executive Committee

Tony Privitera, Chairman of the Board

Kevin Cripps, Vice Chair

David Howell, Treasurer

Jason Clark, Secretary

Thomas Butler, Immediate Past Chairman

Kirk Blomgren, SouthEast Region Vice-Chair

Tom Lingvai, Central Region Vice-Chair

Victor Serrambana, NorthEast Region Vice-Chair

Gary Silbernagel, West Region Vice-Chair

Bob Snyder, MidWest Region Vice-Chair

Andy Williams, At-Large Executive Committee Member

#### NORTHEAST REGION

Victor Serrambana, NorthEast RVC

David Duff, UCAC Board Rep.

Tony Raposo, NUCARI Board Rep.

Jim Rudolph, NUCA of NJ Board Rep.

Gabriel Santos, NUCA of DC Board Rep.

#### MIDWEST REGION

Bob Snyder, MidWest RVC

Sawyer Barnard, NUCA of OK Board Rep.

LA Beck, NUCA of San Antonio Board Rep.

Robert Farrow, NUCA of Austin Board Rep.

Robert Garner, NUCA Gulf Coast Board Rep.

Greg Miller, NUCA of N. TX Board Rep.

Bob Snyder, NUCA of KC Board Rep.

Jeff Theis, NUCA of IA Board Rep.

Brad Wegner, NUCA of NE Board Rep.

#### SOUTHEAST REGION

Kirk Blomgren, SouthEast RVC

Kirk Blomgren, NUCA of N FL Board Rep.

Rhonda Cason, NUCA of SW FL Board Rep.

Linda Goslee, NUCA C FL Board Rep

Mike Hewitt, NUCA of the Carolinas Board Rep.

Shannon Joiner, NUCA of NW FL Board Rep.

Paul Knight, NUCA of S FL Board Rep.

Kevin McLaughlin, SUCA Board Rep.

#### CENTRAL REGION

Tom Lingvai, Central RVC

Mike Adams, NUCA of E TN Board Rep.

Dave Burns, NUCA of C&SW Virginia Board Rep.

Darren Cleary, NUCA of M TN Board Rep.

Tom Lingvai, NUCA of OH Board Rep.

Shawn Martin, NUCA of KY Board Rep.

Kurt Youngs, NUCA of IN Board Rep.

#### WEST REGION

Gary Silbernagel, West RVC

Kurt Brna, NUCA of Las Vegas Board Rep.

Ryan Harada, NUCA of HI Board Rep.

Riley Lindemann, NUCA of CO Board Rep.

Richard Oliver, NUCA of E WA/N ID Board Rep.

Mark Scoccolo, NUCA of WA Board Rep.

Arvid Veidmark III, AZUCA Board Rep.

#### AT-LARGE DIRECTORS

Jason Holden, At-Large Director

Mike McShane, At-Large Director

Marty Piel, At-Large Director



#### NUCA STAFF

##### Chief Executive Officer

Doug Carlson — doug@nuca.com

##### Chief Operating Officer

Chris Barrett — chris@nuca.com

##### Director of Communications

Robert Baylor — robert@nuca.com

##### Director of Marketing

Cheryl Stratos — cheryl@nuca.com

##### Digital Media Manager

Zak Jordon — zak@nuca.com



**LARGEST LEGAL PAYLOAD IN THE INDUSTRY  
WITH A CAPACITY OVER 27,000 LBS**

**HX-12 QUINT-AXLE  
HYDRO EXCAVATOR**



SALES@ROCK-RENTAL.COM / 1.888.477.7906 / ROCK-RENTAL.COM



## LBX Co. Announces Organizational Changes

Organizational changes are on the horizon for LBX Company as Rod Boyer is named Vice President Learning & Development and Senior Advisor, while Edward (Smitty) Maloy moves into the role of Director of Customer Support.

Boyer has been an integral part of LBX Company for the past 24 years and has demonstrated his talent and capabilities as a contributor and leader. He was most recently Vice President of Customer Support.

In a statement Eric Sauvage, President and CEO, said: “We are very fortunate to have Rod take on this new challenge. Rod brings 45-plus years of experience in our industry to help us design a premium Learning and Development organization.”

In his new role, Boyer will continue as a participating member of the Company’s Senior Leadership Team (SLT) and will drive the Company’s efforts to develop and execute a strategic plan and comprehensive curriculum for all internal and external training programs that support the overall Company Long-Term and Mid-Term plans and will guide other key strategic initiatives.



Boyer



Maloy

Maloy is now Director of Customer Support. Maloy has demonstrated his talent and capabilities as a contributor and leader over the last eight years with LBX through various roles of increasing responsibility, including his most recent role as General Manager of Customer Support.

Sauvage said: “Since joining LBX, Smitty has demonstrated his commitment to excellence and passion to support our dealers and customers. I am excited to welcome him to our Senior Leadership Team.”





# 22nd UESI/BAMI-I Utility Investigation School

The 22nd ASCE UESI / BAMI-I UIS School will be hosted at the Austin Texas, from April 1-5, 2024. This highly-anticipated event is a collaboration between the Buried Asset Management Institute – International (BAMI-I) and ASCE's UESI - Utility Engineering and Surveying Institute (UESI).

The 22nd UESI/BAMI-I Utility Investigation School (UIS) addresses what project owners, designers, and constructors need to know about utilities on their projects. The course is available as a two-day or five-day option.

The two-day school will explain the risks that existing utilities present on infrastructure projects of all kinds, and practices to help stakeholders mitigate and manage those risks. It will explain newly issued national engineering standards and how those standards are incorporated in state and federal infrastructure initiatives. If you own, manage, design, or build infrastructure projects, this 16-hour PDH Course is for you.

The five-day school is designed to provide the licensed professional and their staff involved with utility investigations knowledge necessary for being in professional responsible charge of a utility investiga-

tion practice. If you practice in the realm of subsurface utility engineering, this 40-hour PDH school is for you.

The UIS is tailored to empower licensed professionals and their teams engaged in utility investigations. It equips you with the knowledge and skills required to take professional charge of utility investigation practices. Whether you are a seasoned expert or a newcomer to the field, this comprehensive 40-hour Professional Development Hours (PDH) school is designed to meet your needs.

This course not only imparts the knowledge to provide proficient utility investigations in accordance with nationally accepted standards (ASCE 38-22) but also equips you to defend your findings through sound documentation. In addition to classroom lectures, you'll have the opportunity for hands-on experience with technology such as Ground Penetrating Radar, Pipe and Cable Locators (PCL), and more.

The course director is Dr. Tom Iseley, a professor of engineering practice at Purdue University. The course developer is Jim Anspach, an affiliate assistant professor at Iowa State University.

For information, contact Wei Liao, [liao186@purdue.edu](mailto:liao186@purdue.edu), or visit <https://bami-i.com/event/22nd-utility-investigation-school>.



**JOBSITE.**



**THE BIGGEST, BADDEST DITCH WITCH® HYDROVAC TO EVER HIT THE WILD.**  
[DITCHWITCH.COM/WARLOCKW12](https://ditchwitch.com/warlockw12)



CASE Power Abe Award Winner – Progressive Tractor & Implement (Lafayette, La.).

## Ten CASE Construction Equipment Dealers Recognized

In celebration of the strength of its U.S. and Canadian dealer network, CASE Construction Equipment recently announced the winners of its new CASE Dealer Awards program, comprised of four award categories.

“Our dedicated and customer-first dealer network differentiates CASE in the market. Across the U.S. and Canada, we have the strength of 66 dealers, 325 locations and more than 7,000 faces of CASE providing customer-first sales, service, parts and financing support,” says Terry Dolan, vice president — North America, CASE Construction Equipment. “The CASE Dealer Awards program recognizes the best of the best.”

### Power Abe Award Progressive Tractor & Implement

Also known as the CASE Dealer of the Year Award, the Power Abe Award is given to the dealer who is committed to building the CASE brand and delivers top performance in sales, parts, service and offering Capital financing products to their customers.

### J.I. Case Award Lee Tractor Co.

In recognition of CASE’s founder, who was resilient, customer-first and rooted in practical innovation, this year’s award is presented to the dealer with the greatest focus on technology (precision and connected services).

### Building Community Award GT Mid Atlantic

The heart of the CASE brand is building (and rebuilding) community. This award recognizes the dealer who goes above and beyond in exhibiting CASE’s brand purpose. GT Mid Atlantic won for its work with Construction Angels and will receive a \$10,000 donation for this deserving nonprofit.

### Power Tan Awards

These awards are earned for high sales performance by product category.

Backhoe Loader / Tractor Loader / Forklift: Bingham Equipment Company

Skid Steer Loader / Compact Track Loader: Torgerson’s

Dozer: Hills Machinery Company

Motor Grader: Scott Equipment

Compaction: Border Equipment

Mini Excavator: Progressive Tractor & Implement

Full Size and Midi Excavator: Progressive Tractor & Implement

Wheel Loader: Hitrac

Compact Wheel Loader: ASCO Equipment

# Sunstate Equipment Taps Trench Market In Southwest

Arizona-based Sunstate Equipment Co. LLC announced it has signed an agreement to purchase the assets and ongoing operations of all Trench Shore Rentals and Trebor Shoring Rentals locations in Arizona, California and Texas, with an anticipated close date in early 2024.

Each company brings decades of expertise within the construction rental industry, sharing similar values, a commitment to excellent customer service, and people-first relationships that have earned both Sunstate and TSR a widely respected reputation of excellence.

“The combination of two family-founded, Phoenix-based rental industry pioneers is a one-of-a-kind opportunity for both teams,” said Chris Watts, President and CEO of Sunstate Equipment. “Our companies share a long history of mutual respect, friendship, and shared values. By blending Sunstate’s deep knowledge of the general rental business with TSR’s expertise in underground shoring, we create new growth opportunities while developing more robust ways to serve our customers that work above and below ground.”

Sunstate has a proven record in the general rental space — dating back to 1977 — and it is no stranger to helping customers with excavation, shoring, and confined space safety. After entering the trench business in 2018, Sunstate now has thirteen dedicated trench locations in the Gulf, Southeast and Northwest as part of its overall rental network that spans sixteen states from coast to coast.

“Today, there is no overlap in Sunstate Trench Division and TSR branch footprints,” Watts explained. “This expansion is a perfect fit, both to accelerate our national growth plan for our Trench Division, as well as our existing general equipment rental operations in these areas.”



TSR has grown over twenty years to become a trench shoring powerhouse in the Southwest and has helped drive and shape meaningful industry standards for shoring and excavation safety.

“We are excited for the opportunities that will be available to our employees,”

said Dana Woudenberg, CEO of Trench Shore Rentals / Trebor Shoring Rentals and founding member of North American Excavation Shoring Association (NAXSA).

TSR teams and locations will continue with normal operations, supplying the world-class customer service its customers know and trust.

“Our team is looking forward to joining and contributing to Sunstate Equipment,” Woudenberg added. “Sunstate and TSR share values that will make the combined company a force in the trench shoring industry.”



Portable Equipment Designed for Professionals  
Increase Profits and Decrease Labor Costs



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



## Midstate Site Development, CW & Sons Infrastructure Awarded Top Platinum Level of Utility Construction Industry Safety Program

**S**afety is a vital component of every utility construction jobsite and employee activity. The National Utility Contractors Association (NUCA) announced that Midstate Site Development LLC and CW & Sons Infrastructure Inc. have finished the NUCA STAR safety program. The companies have completed the association's new safety program enhancing and recognizing this critical aspect of utility construction.

NUCA's STAR (Safety, Training, Awareness and Recognition) Program provides a venue for every company in the utility construction industry to measure the effectiveness of their safety programs and recognize how these important company programs can be improved.

Midstate Site Development LLC of Bloomfield, Connecticut, achieved the STAR Program's top Platinum Level status. The company is both a NUCA National and a Utility Contractors Association of Connecticut (UCAC) member.

CW & Sons Infrastructure Inc. of Washington, D.C. achieved the STAR Program's top Platinum Level status. The company is both a NUCA National and a NUCA of Metro D.C. association member.

"Congratulations to Midstate Site Development, CW & Sons Infrastructure and their safety teams," said Mike Flowers, NUCA's director of safety, education, and training. "Our NUCA STAR winners show strong dedication to creating and managing world-class safety programs on their jobsites. Through their commitment to jobsite safety, their leadership ensures that their employees make it home safely when the working day is through."

"The executive commitment to safety at Midstate Site Development and CW & Sons Infrastructure was clearly demonstrated in the documentation they submitted with their NUCA STAR application. They have developed a top-notch safety programs. Receiving the NUCA STAR Platinum Level rating is an exemplary accomplishment and these companies continue to be a superb example of

a company devoted to safety excellence," concluded Flowers.

The STAR Program categories of Bronze, Silver, Gold, and Platinum allow companies to review their processes and evaluate their safety programs' strengths and potential areas of improvement in the critical areas that provide a lasting path to safety success. Evaluation areas are Leadership, Records Management, Culture, and Procedures. Under these four core areas are subsections scored on a point system meeting specific guidelines that a company must meet for each category.

Winners at all levels are chosen by the STAR review board based on their submissions following the STAR Program guidelines. The overall winner in the top Platinum category will be announced at the next NUCA Safety / Damage Prevention Conference, to be held in early 2025.

NUCA's website ([www.nuca.com/nucastar](http://www.nuca.com/nucastar)) contains detailed information on NUCA STAR Program guidelines, as well as the application process for NUCA members and non-members. The STAR Program was unveiled in 2022 during June's Trench Safety Month and has already awarded several construction companies industry-wide recognition for their safety programs.

All participants who attain one of the four levels of the STAR Program are recognized as companies who are sincere in their efforts to build effective programs and are to be commended for their participation in ensuring the safety of their employees.

The goal of this program is to help industry members master one of the most essential functions of a successful company—safety—and to help ensure industry employees stay healthy and safe while they build our nation's vital core infrastructure projects. All industry members are encouraged to participate in NUCA STAR.

Midstate has won two past NUCA National William H. Feather Safety Awards in 2014 and 2016, and several other industry safety awards since 2006, all recognizing the company's commitment to maintaining a safe construction jobsite.

# ARA Releases Updated Economic Forecast

In its updated forecast released at The ARA Show, the American Rental Association (ARA) indicates that the United States equipment rental industry's growth has a fairly positive outlook. Last quarter, the year-over-year growth was expected to be 7.6% in 2023 and 3.1% in 2024. The most current projections indicate a 7.9% increase in 2024 totaling \$77.3 billion in construction and general tool rental revenue.

"The ARA Rentalytics quarterly forecast reinforces the strength of the rental industry," says Tom Doyle, ARA vice president, program development. "Rental should benefit with tailwinds from interest rates, inflation, improving supply, a preference to rent, and government and private spending. Rental revenue is again forecasted to increase."

Looking more granularly at construction and industrial equipment (CIE) growth in the United States, \$60.9 billion is the projected revenue in 2024, which is 7.5% growth. In the coming years, 2025, 2026, and 2027, 3% growth is projected. The difference is smaller but still appreciable and more in line with a steadily growing economy.

"We see a slowing of growth this year compared to last year but bear in mind, we have a slowing of inflation this year as well," says Scott Hazelton, managing director at S&P Global. "The growth rates tail off in the future years, with growth of 4.3% in 2025 and 3.9% in 2026."

The current forecast for total Canadian equipment rental revenue shows a 3.1% growth to \$974 million in 2024. 2024 growth is stronger in Canada than 2023 growth due to inflation and resilient demand. In addition, Canada's housing market and non-residential structure construction are both improving.

While CIE investment will decline from previous years, a 7.2% increase is forecasted.



The stark contrast from previous years is attributed to the lack of post-COVID investments in 2024.

As businesses choose rental over ownership, the CIE rental penetration rate follows. The 2023 estimate of 56.4% is near the pre-pandemic peak.

General tool investment in the United States is not quite as positive of an outlook. There is muted investment growth at 6.8%. Manufacturing is driving the growth and housing is still the weak spot.

"ARA's quarterly member survey showed conflicting results amongst members with just over half of respondents saying they saw a revenue increase in quarter four, a slight improvement over quarter three which saw an even split between those an increase and decrease," says Mike Savely, ARA director, program development.

It is worth noting that in current forecasts, no state in the United States has a decline in rental revenue growth in the next five years. There are states with weaknesses, but there is still growth.

For more in-depth economic data, visit [ARARental.org](http://ARARental.org).

**BUILDING A Better WAY FOR 70 YEARS**

**MCELROY HAS A LONG HERITAGE OF REDEFINING PIPE FUSION.**

Beginning with the very first fusion machine in 1969, founder Art McElroy was dedicated to streamlining jobsite efficiency and creating a safer way to work. Today, McElroy is known worldwide as the leader in thermoplastic pipe fusion machines and productivity-enhancing accessories. Revolutionary tools like the PolyHorse®, TracStar®, and Tritan™ are changing the way we work on the job.

**SEE HOW MCELROY TOOLS CAN BENEFIT YOUR NEXT JOB AT**  
**MMI McELROY.COM**

Copyright © 2024 McElroy Manufacturing, Inc. MMI block, PolyHorse, TracStar are registered trademarks of McElroy Manufacturing, Inc. Tritan is a trademark of McElroy Manufacturing, Inc. All rights reserved.

# Caterpillar Celebrates Women in Construction

Dubuque, Iowa's Kait Burds took home top honors at Caterpillar's first Women in Construction Celebration March 13-14 in Clayton, North Carolina. Burds successfully demonstrated her advanced machine operator skills by maneuvering difficult work site challenges in record time with extreme precision.

Burds was one of 18 women—representing Cat dealers throughout the Americas—who gathered at Caterpillar's Edward J. Rapp Customer & Training Center to compete in the state-of-the-art skills tests, learn about the latest industry trends and network with peers.

"I feel really good; the competition was pretty stiff. It's good affirmation of the hard work I put into my career," said Burds. "I hope this event gives women in construction more exposure and gives them the confidence to go out and do things that scare them."

The skills tests included expertise in the following areas:

- Small Wheel Loader: Move material through the course to achieve 7.0 -7.5 tons; then change to forks and use them to move a pallet.
- Compact Track Loader: Navigate an obstacle course using multiple machine functions.
- Small Hydraulic Excavator: Load truck to achieve 10.0-tons payload.

Along with the tests, the competitors participated in a panel discussion where they shared best practices, discussed managing a successful career in a male-dominated industry and talked about the importance of recruiting more female operators and technicians into the workforce.

"The event is a celebration of female machine operators who build our world, advocate and drive awareness for their trade, and highlight solutions that address jobsite needs," said Caterpillar marketing manager, Chrissy Metz. "Each competitor demonstrates advanced abilities operating the latest Cat construction machines and technologies, showing the world the invaluable role women play in the construction industry."

Renowned Air Force fighter pilot, retired Lieutenant Colonel Tammy Barlette, delivered a powerful and inspiring keynote during the opening lunch where she shared lessons learned from her years in the cockpit that she now applies to everyday life.

The event concluded with an awards ceremony where the overall skills test winner and others were recognized:

- Overall Skills Test: Kait Burds, Dubuque, Iowa
- Small Wheel Loader Skills Test: Kait Burds, Dubuque, Iowa



Azaria Biven, Kait Burds and Kenzi Tackett at Cat's Women in Construction Celebration.

- Compact Track Loader Skills Test: Kenzi Tackett, Ray, Ohio
- Small Hydraulic Excavator Skills Test: Azaria Biven, Indianapolis, Indiana

The list of participants in Caterpillar's first Women in Construction Celebration and their supporting Cat dealer is below:

- Kait Burds, Ziegler Cat
- Daiane da Silva Candido, Sotreq
- Jordyn Ledford, Stowers Cat
- Shayla Sublette, Warren Cat
- Azaria Biven, MacAllister Machinery
- Ana Gonzales, Thompson Machinery
- Misheala Brozovich, Wagner Cat
- Amanda Miles, Gregory Poole
- Rondalee Wilke, Ring Power
- Letti Ortiz, Holt Cat
- Miranda Menchaca, Holt Cat
- Mackenzie Tackett, Ohio Cat
- Chelsey Holdosi, Carter Machinery
- Rachel Riggs, Empire Cat
- Megan Riley, Empire Cat
- Alexandra Smith, Milton Cat
- Whitney Poulin, Milton Cat
- Carla Vitoria de Araujo Marques, Sotreq

Complete details of Caterpillar's Women in Construction Celebration can be found at <https://www.cat.com/WomenInConstruction>.



# NUCA Statement on Additional EPA Water Infrastructure Resources

The chief executive officer of the National Utility Contractors Association (NUCA), Doug Carlson, in February issued the following statement about the announcement by Vice President Kamala Harris and EPA Administrator Michael Regan to release \$5.8 billion in new funding for clean water and wastewater infrastructure:

"This week's announcement by the White House releasing details of \$5.8 billion in funding from the Bipartisan Infrastructure Law for this industry's two State Revolving Fund (SRF) programs is good news for many American communities.

"NUCA is very pleased to support the Administration's release of this EPA funding to every U.S. state and territory, helping to share this life-giving investment in clean water to many more Americans. The \$3.2 billion through the Drinking Water SRF and the \$2.6 billion via the Clean Water SRF highlights the importance of these two EPA programs in providing clean drinking water, replacing harmful lead pipes, and improving or rebuilding America's wastewater infra-

structure. America's utility construction industry is ready to use this money to build these investments in public health over the years and decades ahead.

"Congress should pay attention to this news and pass without delay Drinking Water SRF and Clean Water SRF funding in the long-stalled FY2024 EPA appropriations legislation to at least match FY23 levels. The \$5.8 billion is barely a down payment needed over the next 15 years for the \$473 billion to improve America's drinking water infrastructure, or the more than \$271 billion that is needed to maintain and replace our nation's aging or obsolete wastewater and stormwater treatment systems. America is a very large nation that has built out over a century-and-a-half an incredibly complex and expensive subsurface water and wastewater system that was never designed to last forever. Those repair bills are coming due, so we applaud the Biden Administration for recognizing this fact in this EPA funding announcement."

## Bettering Lives From the Ground Up

Jack and Bore

Hand Mining

Micro-tunneling

Horizontal Directional Drilling

Rehabilitation

Pipe Ramming

6814 W 350 N., Greenfield, IN 46140  
Phone: 317.545.1335  
Website: Midwestmole.com

Connect with us

# ABC: 2024 Construction Workforce Shortage Tops Half a Million

The construction industry will need to attract an estimated 501,000 additional workers on top of the normal pace of hiring in 2024 to meet the demand for labor, according to a proprietary model developed by Associated Builders and Contractors. In 2025, the industry will need to bring in nearly 454,000 new workers on top of normal hiring to meet industry demand, and that's presuming that construction spending growth slows significantly next year.

"ABC estimates that the U.S. construction industry needs to attract about a half million new workers in 2024 to balance supply and demand," said Michael Bellaman, ABC president and CEO. "Not addressing the shortage through an all-of-the-above approach to workforce development will slow improvements to our shared built environment, worker productivity, living standards and the places where we heal, learn, play, work and gather."

ABC's model uses the historical relationship between inflation-adjusted construction spending growth, sourced from the U.S. Census Bureau's Value of Construction Put in Place Survey, and payroll construction employment, sourced from the U.S. Bureau of Labor Statistics, to convert anticipated increases in construction outlays into demand for construction labor at a rate of approximately 3,550 jobs per billion dollars of additional spending. This increased demand is added to the current level of above-average job openings. Projected industry retirements, shifts to other industries and other forms of anticipated separation are also embodied within the computations.

Based on historical Census Bureau Job-to-Job Flows data, an estimated 1.9 million construction workers will leave their jobs to work in other industries in 2024. This should be offset by an anticipated 2.1 million workers who will leave other industries to work in construction. These frictional interindustry transfers are estimated exogenously and serve as inputs to the model.

The U.S. construction industry unemployment rate averaged 4.6% for the second straight year, matching the second lowest level on record, while job openings remained historically elevated at an average of 377,000 per month through the first 11 months of 2023. As a result of labor shortages, contractors laid off workers at a slower rate than in any year between the start of the data series in 2000 and 2020.

"Broadly, there are two factors shaping the interaction between construction worker supply and demand," said ABC Chief Economist Anirban Basu. "There are structural factors,

including outsized retirement levels, megaprojects in several private and public construction segments and cultural factors that encourage too few young people to enter the skilled construction trades. There are also structural factors, including those related to interest rates, consumer sentiment and general economic performance.

"Over the past two years, cyclical influences have helped diminish the gap between construction worker supply and demand," said Basu. "Though nonresidential construction spending has continued to surge, homebuilding segments have felt the impact of higher borrowing costs more intensely. With interest rates set to decline in 2024 and 2025, the expectation is that construction worker shortfalls will remain elevated. Among other things, that would delay the rebuilding of American infrastructure and the creation of new domestic supply chains. It would also tend to drive up the cost of construction service delivery, impacting American enterprise and taxpayers alike.

"Meanwhile, structural influences persist," said Basu. "More than 1 in 5 construction workers are 55 or older, meaning that retirement will continue to contract the industry's workforce. These are the most experienced workers, and their departures are especially concerning."

"While construction employment is growing, it is not growing fast enough to meet the demand to complete the work on the books for 2024," said Bellaman. "To address this shortage and grow the construction talent pool, ABC has a network of more than 800 apprenticeship, craft, health and safety and management education programs — including more than 450 government-registered apprenticeship programs across 20 different occupations. ABC chapters also have 323 entry point programs in place nationally to welcome all to begin a career in construction. To address workforce demand that drives the U.S. economy, Congress must also look toward much-needed reforms to our legal immigration system and provide high-demand industries, like construction, with access to new or expanded visa programs."

"Exclusionary policies and programs that do not welcome all to compete to build our public works projects, such as project labor agreement mandates, will further exacerbate this shortage and undermine significant investments made by taxpayers in infrastructure, clean energy and manufacturing projects," said Bellaman. "Taxpayers and workers are best served by inclusive, win-win policies that create a level playing field for all contractors to compete to build public works projects."





**WHERE SERVICE  
MEETS EXPERTISE**  
**[WWW.NTSAFETY.COM](http://WWW.NTSAFETY.COM)**

**NATIONAL  
TRENCH SAFETY**

ROAD PLATES | TRENCH BOXES | SLIDE RAIL | PIPE PLUGS  
IN-HOUSE ENGINEERING | ALUMINUM BOXES | TRAFFIC SAFETY



## 2024 NUCA CHAIRMAN

# Tony Privitera

By Jim Rush

**T**ony Privitera has spent a lifetime in the construction industry, and now he is using his experience to help guide the National Utility Contractors Association as its 2024 Chairman. Privitera took over the association's top position at the 2024 NUCA Annual Convention and Exhibit March 20-23 in Palm Springs, California.

Privitera took the reins from 2023 Chairman Tom Butler at the event, with Kevin Cripps (Vice Chair), David Howell (Treasurer) and Jason Clark (Secretary) rounding out the executive council with Butler serving as Immediate Past Chairman.



Privitera (left) at a recent NUCA Convention.



Privitera (second from left) with past chairmen (l-r) Tom Butler, Ryan Kinning and Lauren Atwell.

Privitera's experience in the construction industry began at a young age as part of the family business – Mark One Electric based in Kansas City, Missouri. Mark One was founded in 1974 by Tony's parents – Carl and Josephine Privitera. The company originally serviced small business, commercial and industrial accounts, but quickly developed a reputation for completing difficult jobs for demanding clients. This soon led to large projects working in automotive manufacturing plants and industrial facilities across the country.

In 1994, Carl and Josephine retired from the company's day-to-day operations and passed Mark One on to their four children: Rosana, Joseph, Carl and Tony. Rosana Privitera Biondo was appointed company President at this time, with each brother taking Vice President positions in their respective areas of expertise.

Under their leadership, the company has evolved and diversified, providing an array of electrical construction services from design/build and pre-construction to underground, data/comm and specialty systems. During their tenure, Mark One has grown to about 400 employees and is the specialty contractor of choice for the Kansas City construction community. With nine grandchildren, the next generation is beginning to become a part of the business.

"I grew up in the family business – I didn't have a choice," Tony jokes. "I started working in the company when I was 14 years old – working in the warehouse and working in the yard, and working in the office. There you learn everything about the business: you know how to operate equip-

ment, load equipment, paint equipment and fix equipment. Beyond that I worked in estimating, project management and service. Being involved in all aspects as a young man, you are able to understand everything about the business, which has helped me tremendously as I have continued to advance in my career."

Interestingly, with more than four decades of industry experience, Privitera has worked for just one company – Mark One. Yet Privitera's passion for the company or the construction industry has never wavered. One of the things that keeps him motivated is the impact that construction has on the community. Driving around Kansas City, Privitera sees reminders of his work everywhere he goes. "Mark One has been involved in so many high-profile construction projects that you can't go down the street without seeing something that we haven't been involved with, whether it is an office building, civic facility, school, hospital or sports stadium. In fact, we just got finished with a project at the Kansas City International Airport. It is amazing to see the impact your work has within the community," he says.

While the company originally operated as a building electrical contractor, it formed a utilities division in the 1990s and began doing a substantial amount of work on manholes and duct banks for Evergy, the company formed as the merger Kansas City Power and Light and Westar Energy, which led to even more excavation projects for Mark One. And, the diverse client base provides even more opportunity for the company across all sectors of its business.

As a result of the company's growing underground utility work, Privitera gladly accepted an offer to join a group of contractors forming the new National Utility Contractors Association Greater Kansas City Region chapter that launched in 2017. Privitera and Mark One were founding members, with Privitera serving a stint as chapter president beginning in 2018. He is still involved as part of the chapter's Board of Directors to this day.

As his involvement with the KC chapter grew, so did his involvement at the national level. Privitera has been active in the Government Relations Committee and Political Action Committee, and was soon asked to be part of the executive committee.

"My experience at the national level has been rewarding," he says. "It has been eye-opening to know that contractors across the country are experiencing the same problems that you are, and it is so beneficial to be able to share your experiences and learn from others who are going through the same thing. And along the way, you are able to meet so many great people and develop a camaraderie with contractors everywhere."

As far as his vision for the upcoming year, Privitera eyes the association from a business perspective. "The best customers are the ones that you already have," he says. "Along those lines, I think it is important for the association to make sure that we are staying connected with the current members and meeting their needs. The same is true for the chapters. Of course, growth is important, but increasing retention is one way to grow."



Privitera (left) and the NUCA of Kansas City team with Rep. Mark Alford at the 2023 Washington Summit.

As outlined in his inaugural Chairman's Message in this issue of *Utility Contractor*, Privitera also sees workforce development and advocacy as priorities for the upcoming year.

"Workforce issues affect many industries, with construction being particularly impacted," Privitera says. "We need to communicate to the younger generation that construction is an industry with a bright future, and one of the ways we can do that is through Dozer Days events. These events spark an interest in not only young people, but it is also a great way to communicate to parents the benefits of a career in construction.

Privitera concludes: "Our work is not just about digging trenches; it's about building relationships that allow people to work with people."

Jim Rush is editor of UC.

## NUCA Chairs

1966- Peter Ellis  
 1967- Tom Marinelli  
 1968- Tom Marinelli  
 1969- Joe D'Annunzio  
 1970- Harold Schneider Jr.  
 1971- Harry Peyton  
 1972- Anthony Shuttle  
 1973- Fred Compagni  
 1974- John Leach  
 1975- Peter Inzero  
 1976- Bill Lee  
 1977- Ed Cruz  
 1978- Ken Goodwin  
 1979- Dave Shevock  
 1980- Paul Carson Jr.

1981- Gorman Pinkston  
 1982- Dan Carapellucci  
 1983- Bill Burgett  
 1984- Leon Asadoorian  
 1985- Loretta Simmons  
 1986- Gerry Kenny  
 1987- Vic D'Geronimo  
 1988- Rick Egge  
 1989- Jay Matriccioni  
 1990- Mike Ellis  
 1991- Ron Pacella  
 1992- Delaine Nelson  
 1993- Gerry Dorfman  
 1994- Ted Bragger  
 1995- "Spunky" Thaxton

1996- Johnny Hall  
 1997- Walter Gainer  
 1998- Lino DeAlmeida  
 1999- Andy Mayts  
 2000- Angelo Di Paolo  
 2001- Jeff Weitzel  
 2002- Thomas Henkels  
 2003- Mark Accetturo  
 2004- William Bowman  
 2005- Cheryl Yoder  
 2006- Jim Stutler  
 2007- James King  
 2008- Terry Dillon  
 2009- Lyle Schellenberg  
 2010- Dan East

2011- Ryan Schmitt  
 2012- Ryan Schmitt  
 2013- Florentino Gregorio  
 2014- Ron Nunes  
 2015- Bruce Wendorf  
 2016- Jeff Rumer  
 2017- Kara Habrock  
 2018- Mark Fuglevand  
 2019- Dan Buckley  
 2020- Fred Chesney  
 2021- Lauren Atwell  
 2022- Ryan Kinning  
 2023- Tom Butler  
 2024- Tony Privitera



 **Mark One**  
Electric Company, Inc.  
*The Mark of Electrical Excellence*

43rd to 45th and Oak Duct Bank  
Removal of Existing Manhole  
Installation of 5 New Manhole  
Excavation of Existing Duct Lines  
Installation of New Duct Bank  
Street Paving

# 5 Advances You Should Know About Today's Compact Drills

By Clint Recker

**C**ompact horizontal directional drilling (HDD) emerged in the 1990s to install small utility lines with minimal disruptions. It has become the dominant method due to the global demand for high-speed data connectivity and streaming.

To maintain its status, the industry has invested in advancements in drills. The latest generation of compact drills includes onboard technology for simplified operations and quiet performance in urban environments. Manufacturers offer a wide range of models to fit contractors' preferences, and new HDD tooling options are available.

Here are five advancements in today's compact directional drill market.

## 1. Onboard Technology — CAN bus system

If you're familiar with HDDs in the past decade, you may have heard about the benefits of HDD common controls in drill lines. These controls simplify operator training and help with productivity for HDD crews, regardless of the drill used.

The technology enabling common controls on HDDs is the controller area network communication system, or CAN bus system. This system connects the drill's functionality to the joystick controls at the operator station through a network of wires. When the operator commands the drill, the CAN bus system relays that information to the machine's moving parts, reducing the operator's input.

CAN bus technology is a significant improvement over early HDD generations that relied on switches to control individual functions. It simplifies drill operations, improves machine serviceability, and allows for expansion.

Another advantage of CAN bus systems is the reduced machine wiring. Traditional machines with rocker switches require multiple wires connected to each switch to control different functions. This large number of wires can complicate



troubleshooting wiring issues. The latest Vermeer HDD models have 30 percent fewer wires compared to those without a CAN bus system.

## 2. Automated Functionality and Telematics

HDD common controls, powered by a CAN bus system, enhance drill functionality, and allow for telematics integration.

Modern compact drills are equipped with automated features that simplify the learning process for new operators and reduce manual input during regular drilling operations. For instance, auto drilling enables operators to execute repetitive hand control movements with less effort, even in challenging ground conditions.

Additionally, most compact drills offer semi-automated rod loading capabilities, eliminating the need for manual rod addition and removal. Carriages equipped with encoders can also automatically decelerate and halt at specified points for smooth rod handling.

Using a CAN bus system, drills can provide telematics data collection, which is crucial for proactive maintenance in the competitive compact drill market with thin project margins. Telematics gives contractors more control over planned maintenance intervals and, in some cases, allows them to gather additional productivity information from their drills.

## 3. Quiet Operations

Significant progress has been made in improving the mechanical aspects of compact drills to provide a quieter operating experience. Manufacturers have prioritized reducing



noise levels due to the extensive use of drills in residential and commercial areas. Quieter drill operations help minimize the disruption caused by utility installation work and help minimize the number of complaints from individuals residing or working near the work site.

## 4. Range of Models

The capabilities and number of compact utility drills have increased in recent years while maintaining the same size. Previous generations of compact drills had a thrust/pullback range of 5,550 lb to 36,000 lb (2,052 kg to 16,329 kg) and spindle torque ranging from approximately 550 ft-lb to 5,000 ft-lb (746 Nm to 6,779 Nm). Today's compact drills, which

are similar in size, offer a thrust/pullback range of 7,850 lb to 40,000 lb (3,563.9 kg to 18,143.7 kg) and spindle torque ranging from 900 ft-lb to 5,500 ft-lb (1,220 Nm to 7,458 Nm).

These higher performance specifications have been achieved without increasing the machine's footprint. Manufacturers have focused on optimizing the specifications of the machine to align with the capability of the drill rod.

The engine horsepower rating on today's compact drills has remained relatively unchanged compared to their predecessors. This right-sizing strategy has helped control fuel consumption without sacrificing performance.

In addition to standard single-rod HDDs, manufacturers have also developed compact dual rod drills. These drills have an inner rod that provides torque to the drill bit and an outer rod that offers steering capability and rotation torque for reaming. This combination delivers powerful downhole-cutting action and the flexibility to select the appropriate tooling for different ground conditions.

Dual rod drills provide the ability to drill rock with a user experience similar to a single rod drill and do not require the additional support equipment like other methods. They also offer greater versatility when drilling in soil conditions that vary significantly along the bore path. In addition, they allow contractors to work in tight spaces without the need for a larger drill, thus maintaining a small jobsite footprint.

## 5. Variety of Tooling Options

Over the years, the options for HDD tooling have significantly expanded as the industry gained experience working on different ground conditions. Choosing the appropriate tooling for specific ground conditions can substantially enhance a crew's productivity and extend the lifespan of a drill bit.

Several non-torqued tooling connection systems have been introduced to the market in recent years. These systems enable crews to work more efficiently by eliminating the need for threaded connections and breakout tongs. Operators simply align the geometric features with each other and install the dowel pins or collar and bolt.

Many non-torqued tooling systems allow crews to skip the housing removal process after the pilot bore, resulting in a smaller exit pit in certain applications.

## Looking Ahead

As the demand for compact directional drills continues to grow, manufacturers are dedicated to meeting the changing needs of contractors. They are actively exploring innovative ways to develop future HDD technology and ensure that upcoming generations of drills effectively address the challenges and requirements of tomorrow's projects.

Clint Recker is a product manager – utility infrastructure, HDD at Vermeer Corp.



# DATA-DRIVEN PROFITABILITY for Utility Construction

Three steps to using  
performance data to improve  
your bottom line



By Tom Willey

**A**ccurate, thorough and timely reporting on what utility construction crews achieve in the field does a lot more than fulfill accounting and payroll requirements.

By leveraging specialized software to track and report on labor and productivity along with equipment and material utilization, contractors gain key competitive advantages. They decrease the data entry burden and increase the engagement of foremen. Analytics on performance versus plan also gives them the short- and long-term insight to adjust operations immediately and effectively, identify and react to trends and base their next estimates on actual, achievable production rates.

## Making it easier for foremen

Step one in a data-driven approach is getting the right data from teams in the field. Utility contractors often struggle with a gap between the data that management wants in order to analyze performance thoroughly and the data teams in the field are willing or able to capture. Finding a sweet spot and the right balance between the two can be tricky.

Foremen typically prefer to focus on completing work, not on data entry. To overcome resistance and get them to deliver accurate, timely information, it's important to give them a tool that actually makes their lives easier and that they see benefits of. This is where replacing paper or spreadsheets

with customizable electronic logs for daily reporting can make a big difference.

Electronic logs streamline the process of capturing labor hours, production quantities and material and equipment utilization significantly. Sections or fields within the logs can be added, suppressed or customized according to the specific requirements of a business or a particular job. Pre-populated drop down menus for items like employees, equipment and materials make it easier to fill out forms and harder to make mistakes. Electronic logs can also be set up so that only the relevant cost codes for that job are available as options, not the entire list of the company's cost codes.





All of these features make it easier and faster to record more information with more accuracy. At companies that make this switch, foremen often report spending around 15 minutes per day filling out logs as opposed to an hour or more.

Electronic logs also give foremen confirmation of the value of their data reporting efforts. Summary reporting can provide a snapshot of how crews performed versus how they were expected to perform on a daily basis and give them data points for communicating with project managers and superintendents about how to move forward.

### Adjusting operations immediately

The ability to get more in-depth reporting on performance versus plan in a timely manner and a field-focused format is the next advantage of electronic field logs and specialized performance tracking software.

These applications take the field data input by foremen and immediately turn it into actionable information that apprises managers and executives of how a job is performing. Reports and dashboards allow them to quickly analyze progress at the cost code or tracking account level and to drill down for specific details.

Managers, for example, can look at metrics that show percentage of the work completed per tracking account in relation to the plan at a given point in time, or similarly, whether labor hours or equipment utilization are over or under plan for those accounts.

This reporting essentially becomes the focal point for data-driven management of productivity and costs on both a single

job and across multiple jobs, and for better, data-driven communication between the office and the field about strategic changes or corrective actions.

Utility contractors can rely on their accounting systems for this type of reporting, but the liability is the lag time. By the time an accounting report comes out at the end of the month, or even in a couple of weeks, it may be too late to make adjustments to keep a job on schedule or budget.

### Long-term analysis and estimating benefits

Beyond better management of existing jobs in progress, utility contractors can also leverage reporting on daily field performance versus plan for longer-term analysis and improved bidding. Specialized software, again, plays an important role.

Reporting capabilities of field tracking applications make it easier to slice and dice data on performance versus plan in multiple ways and across jobs. Contractors frequently use this capability to look at specific tracking accounts across all jobs or for a specific time period or category of job. Results can identify trends and provide insight into where they may be stronger or weaker, how they could deploy resources differently, where they may want to put more effort into training or skill development, or even which jobs they should be focused on winning as opposed to jobs they may not be as profitable on.

Leading estimating software can extend this analysis benefit by giving estimators what is essentially a live connection to their performance tracking application. This allows them to bypass the need to pour over paper logs, spreadsheets or accounting reports to get production rate actuals - the production levels that their crews were able to actually attain in the field. Instead, within the estimating application, they can choose an activity or item for which they want to review productivity and costs from past jobs or even current jobs in progress. Filtering allows them to zero in on particular types of jobs, date ranges, tracking accounts or other variables to get production rates that are most relevant and comparable to the upcoming job they are bidding on.

From labor hours to production achieved, the volume of data generated daily on a utility construction site is extensive. Technology gives contractors the opportunity to harness that data and turn it into actionable intelligence. By stepping up to specialized software they can collect more data with less effort and generate reporting to drive operational adjustments and improve estimating accuracy.

Tom Willey is a senior solutions engineer at B2W Software, a Trimble company.



# Transforming Underground Utility Operations:

## Leveraging Modern Software Solutions

By Eric Christensen

Long before any thoughts of building software, I worked as a senior estimator, project manager and engineer for a large heavy civil construction company.

We struggled with an information gap between the field and office. As a project manager, I knew delays from lost equipment, incomplete preventative maintenance, scheduling mishaps, etc. cost us thousands of dollars per day.

When you're doing underground utility jobs, you have many problems. You need to consider three main things:

- Where is your equipment?
- What needs to be done to it?
- Where are your people going?

Of course, you must take these questions further, such as "Does Dave know that John moved that excavator on Saturday, and he needs to go to a different job?" The complexity increases. I got calls and texts constantly about scheduling and equipment challenges.

We turned to technology – and we tried everything, getting countless demos. The technology we saw was expensive, complicated, and ultimately failed to deliver on what every sales rep promised us – a simple solution that streamlined daily operations that our field employees would actually use. The software we saw fell into two categories:

- Estimating software trying to be operations software.
- Accounting software trying to be operations software.

Your foremen aren't estimators, and your mechanics aren't accountants. Your field employees don't need that much detail.

I still had to make constant phone calls because what the estimating software said was best, wasn't the reality in the field. I still got text messages from dawn to dusk from employees asking where their next jobsite was. We still logged into four different telematics/GPS systems to get the full picture of what our fleet needed.

I started to think, "If we just built this ourselves, we'd get it right, it would be easy to use, and have all information readily available to those who need it." This wasn't the reality at the time.

Now, technology and software has evolved to better meet the needs of modern construction. Cloud-based software offers real-time communication between the field and office. Everyone can have the information they need – from equipment locations, inspections and maintenance, to scheduling and field reporting, you can find software available to help.

When we talk with our customers, we see three main trends that convince us that software can now truly make an impact on your bottom line:

### Your Data Can Be Aggregated

If you've used GPS trackers/telematics data, you know that unless your entire fleet is from one manufacturer or have identical trackers, you must log into different systems to get the full view. It can seem impossible to create reliable reports, much less customize the reports for how you run your operations. Now, modern software can aggregate your data from multiple providers via simple integrations.

### Technology Can Work How You Do

Many underground utility contractors rely on a simple magnet board or spreadsheet to track equipment locations, schedule crews, and manage work orders. Historically, this worked until you needed to communicate that information to the field. If you're emailing a spreadsheet or using an office magnet board, it's impossible for everyone to have the necessary up-to-date information.

Modern technology can now replicate this, providing simple "magnet board" style dashboards to click and move equipment. As an underground utility contractor, it's critical your provider allows you to schedule crews in the same platform, enabling users to see relevant equipment and project information.

### Your Employees Will Use the Right Technology

Construction companies are reluctant to adopt new technologies because they feel their employees won't use them. If field employees won't use the operations software, it won't improve your daily work.

Software has evolved – you don't need employees to download an app, providers give them browser access. Form collection can be easily done from the field through interactive text messages, enabling instant communication.

It's worth looking into technology that can help reduce complexity and ultimately sleep better at night – I certainly wish we had this level of support.

Eric Christensen is CEO of IVO Systems Inc.



# STAND ABOVE THE CROWD.

Looking to boost your earth-moving productivity without added fuel costs? The adaptability and maximum performance of the X4S series gives you the power to tackle tough jobs. Experience our innovative line of Link-Belt excavator equipment at [lbxco.com/x4s](http://lbxco.com/x4s).

**Link-Belt**  
EXCAVATORS

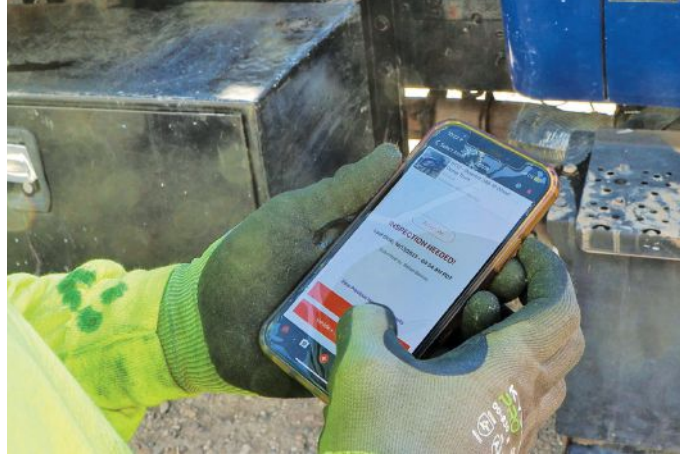


## Q&A:

# Raising the Bar



*Utility Contractor* recently caught up with Russ Young, Chief Business Development Officer at Tenna, to discuss how construction tech is driving improvements in contractor communication, efficiency and financial performance.



**Utility Contractor:** What are some of the needs of your clients in the underground utility construction market? In general, are contractors looking for solutions in equipment/fleet management, field operations, resource management, scheduling, all of the above? What trends are you seeing?

**Young:** Specific trends we are seeing among utility contractors currently include an uptick in focus on safety and risk reduction. AI dash cameras, equipment inspections, compliance tracking etc., are all hot topics right now, in addition to the other “have to haves” around equipment fleet management (maintenance, resource management, dispatching, scheduling and more). Not only will the existing value of equipment management systems continue to benefit businesses over time, but there are several areas where it can provide benefits in other ways in the future as technologies continue to mature and richer data becomes available.

**UC:** How have some of these areas – software use for equipment/fleet/field operations management – evolved for contractors in the past 10 years?

**Young:** Despite the construction industry’s hesitation to evolve when it comes to the use of technology, specialized technologies such as AI and data analytics provide contractors with new and more effective methods to ensure they are making the most of their equipment management systems. Until recently, data shows contractors have struggled with seeing real gains and value using construction tech. However, contractors are adopting

construction-focused equipment management systems rapidly to see measurable improvements in communication, efficiency and financial performance. The future of the industry is moving more towards a “cloud stack” and predictive analytics that will fuel advanced business intelligence we have yet to experience. This, combined with advancements in machinery such as autonomous equipment, robotics, assistive devices, etc., will raise the bar for the requirements in equipment management.

**UC:** How can effective fleet management affect a contractor’s bottom line?

**Young:** Equipment fleet management directly affects the bottom line in four simple, but significant ways. First, it improves productivity and progress. Used effectively, it reaches employees in all levels and departments in a construction business, beyond just operations. This benefits the whole organization and improves employee attitude and adoption. Second, it provides insights on operational efficiencies and performance. Performance insights can keep a fleet operational with reduced downtime. These insights can help improve the balance sheet by exposing underutilized machines that are continuing to cost money. Without accurate utilization data, contractors provide estimators with inflated internal costs, which they apply to bids for projects that require similar work. This can make or break a bid and impacts project margins. More accurate bid rates can increase overall competitiveness over time. Finally, the

examples covered all directly relate to a reduction in capital expenditures. With equipment resources being one of a contractor’s highest cost centers, better purchase, disposal, rental, and maintenance decisions that can be gleaned from asset management system insights can save a contractor many thousands of dollars each year.

**UC:** How can you help optimize preventative maintenance on equipment?

**Young:** By using equipment management technology, construction businesses can track the utilization and condition of their equipment in real-time and identify potential problems before they become serious. This helps identify potential issues early and allows for quick action, and can be used to optimize maintenance schedules, ensuring that equipment is serviced at the optimal time. By identifying patterns and trends early, contractors can take proactive measures to prevent equipment downtime. Additionally, any time a work order is needed, whether it is preventative maintenance or an emergency repair, this information can be sent automatically from Tenna to various construction ERPs via integration, for accurate utilization and cost sharing.

Tenna’s powerful new feature, Parts Inventory, makes it easy to manage cost tracking for parts, efficiently schedule preventative maintenance when parts are available, and have more control over inventory issues that can delay projects.

**UC:** Do Tenna’s equipment management solutions integrate with

accounting and other business systems that contractors might use? How has software integration evolved?

**Young:** As technology becomes more specialized, construction companies are likely to adopt a range of software and hardware solutions instead of a total solution. That is why it is critical that an equipment management platform can integrate seamlessly with the other software in a contractor's tech stack.

Tenna allows contractors to link all of the tech in their ecosystem in one, unified place. Specifically, Tenna integrates with accounting and ERP software, cloud-based software providers – such as project management and estimating software – and OEM and rental telematics. Tenna strives to align an organization's business objectives with their existing IT ecosystem. This includes tailored software and process workflow definitions during the implementation

of an integration. Custom built integrations may seem more tedious than the increasingly prevalent but very generic Open API, however, in an industry with very specific needs, a 'one-size-fits' integration is simply insufficient.

**UC:** How have areas such as safety, regulatory compliance and recordkeeping for audits been improved by software solutions such as what Tenna offers?

**Young:** The combination of equipment management software and mobile technology makes it easy for construction businesses to mandate equipment inspections, monitor safe driving and more. Most recently, artificial intelligence (AI) has been a game changer in camera technology. Paired with IoT, AI-driven video, such as that from the TennaCAM 2.0 fleet camera, not only intervenes immediately when safety issues

are detected but also allows safety managers to review issues and revise policies.

For compliance monitoring, Tenna supports the process of calculating fuel tax that contractors are liable to report to the federal government. Tenna's International Fuel Tax Agreement (IFTA) feature provides automated reports of miles driven per jurisdiction which contribute to accurate tax estimates. Tenna also supports the process of maintaining hours of service (HOS) for ELD compliance while improving on-road safety with our integrated Electronic Logging Device solutions. Tenna triggers notices when rests are needed so that drivers do not become overtired at the wheel. This automation improves the process of manually collecting and analyzing how many miles a vehicle drove, reduces paperwork and minimizes the risk of errors and non-compliance while increasing driver safety overall.



**IS YOUR BORE ON TARGET?**

Michael Byrne Mfg Provides Options

The Michael Byrne D48-950 combined with the Akkerman 240A GBM completes bores over 500ft within fractions of an inch.

**STOP PULLING AUGER**

Water level meets technology. Meet the Casing Compass. This new cost-effective product gives instant results to the status of your bore path.

[sales@byrnegroup.com](mailto:sales@byrnegroup.com)

1855 Earth Boring Rd  
Mansfield, Ohio

419-525-1214



# Advanced Technologies on Next-Generation Crawler Excavators

Smart excavator solutions are redefining job site efficiency, safety and performance

By Diane Heldt

**O**n construction and excavating job sites where timelines are often critical and skilled labor may be in short supply, equipment that helps operators improve efficiency, productivity and safety can help keep projects on track.

Whether the job is installing a water line or leveling terrain for site development, today's next-generation crawler excavators include smart technologies and user-friendly features that make these machines must-have tools — capable of saving companies time and money.

“Excavator manufacturers are constantly pushing the boundaries of what these machines can accomplish,” says Jacob Sherman, dealer and product marketing manager at DEVELON. “Consequently, these versatile machines have become indispensable.”

Learn about some of the latest excavator technology advancements that are delivering optimized performance on job sites.

## Advancements in Excavator Design and Performance

When operators can perform jobs safely — and work efficiently on even the most compact of job sites — they can complete work faster using less fuel. New excavator cab designs that incorporate more glass and larger windows increase operator visibility to the front and sides of the machine for enhanced safety. The addition of cameras also helps improve safety. DEVELON offers a standard rearview camera and optional side view cameras for its crawler excavators. The side view and rearview cameras can be easily viewed by the operator on the cab's LCD monitor.

Some manufacturers are now offering larger reduced tail swing models with a tighter front minimum swing radius. This design allows contractors to work in space-restricted areas — such as single-lane roadways — without sacrificing machine performance. With the reduced tail swing design, there's less chance of damaging the machine when the operator turns the upper structure. DEVELON recently added a larger model, the DX350LCR-7, to its reduced tail swing excavator offerings, joining two smaller machines in the lineup.

Modern crawler excavators incorporate advanced engine design and technologies, such as low-emission and variable-speed diesel engines, which enhance fuel efficiency and reduce emissions during operation. Enhanced fuel injection systems and integrated electronic controls play a crucial role in significantly improving the fuel efficiency of diesel engines compared to those manufactured 15 to 20 years ago.

## GPS Integration

The functions provided by GPS technology are growing increasingly important as the decrease in available skilled workers means more operations are relying on technology to fill the gap for some tasks. One example of innovative excavator features is 2D grade control, which empowers operators to work seamlessly along a single plane — such as a straight-line trench — from point A to point B. By utilizing sensors and controllers, the system can make real-time adjustments to achieve the precise slope and elevation required for the job. This eliminates the need for a worker to check trench depth manually and improves accuracy and efficiency in utility construction projects.



## Advanced Hydraulic Systems

Electrohydraulic control systems use both electrical and hydraulic components to manage the excavator's movements and functions: integrating electronic sensors, controllers and actuators with traditional hydraulic components. These systems may include a fully electronic joystick to manage excavator functions or a swinging sensor that measures the swinging motion of the excavator's upper structure. These added capabilities increase precision and deliver more efficient control, so operators can complete cycle times faster and improve productivity. Electrohydraulic control systems in excavators can be easier for new operators to use compared to traditional manual controls, offering another incentive when recruiting new employees.

## Excavator Telematics Integration

Telematics systems make it easy for contractors to remotely monitor and maintain their machines. Many of these excavator fleet management tools are available on user-friendly mobile apps as well as websites. Operations can track their machines remotely, helping to prevent theft and avoid unauthorized machine use. They can also track maintenance schedules and monitor such data as fuel consumption, idle time and oil pressure. This information can help them resolve issues faster to minimize downtime.

## Enhanced Safety Features

Excavator technology and solutions that improve job site safety not only help protect operators — they can also save time and improve efficiency. Rearview cameras are often standard on crawler excavators, while additional options such as side view cameras and object detection systems are growing in popularity. Optional around view monitor (AVM) camera systems on DEVELON -7 Series crawler excavators display a full view of the machine's surroundings, giving operators greater confidence when working in tight conditions. In some machines, AVM systems offer up to 360 degrees of visibility through the monitor inside the cab, allowing operators to better identify potential hazards and obstacles.

## Tiltrotator Accessory Use

This excavator accessory provides contractors with added precision when using attachments. Operators simply set the

controls from the display to move the arm and rotate or tilt an attachment simultaneously, efficiently and accurately without the need to reposition the excavator.

For underground contractor Vince Lallo, tiltrotator technology has saved significant labor time on commercial and residential projects in confined areas. He and his wife, Kristie Lallo, are the owners of Lallo Pipeline located near Medford, Oregon. The company specializes in sewer, main water and main storm drain work.

“We get into situations where we are working in tight areas around buildings and existing utilities with big pads. In the past, it created a lot of hand work, and we might have three or four laborers on the ground to grade and rake to prep it around those pads,” Lallo says. “The tiltrotator takes away all that time and labor, down to just a grade checker and the machine operator, which makes it a lot more efficient. We can do these jobs more efficiently now and with fewer employees.”

Smarter crawler excavator technologies allow contractors to become more efficient and more productive than ever — helping them complete projects faster and tackle more jobs with the labor they have.

Diane Heldt is Senior PR and Content Strategy Supervisor with Two Rivers Marketing, Des Moines, Iowa.

## CRAWLER EXCAVATOR BLADE BENEFITS

Some earthmoving machine manufacturers, including DEVELON, offer an optional front dozer blade with smaller crawler excavator models, increasing their versatility with the power and precision to dig and move dirt on the job site. Dozer blades provide numerous benefits for construction, site preparation and underground applications, offering contractors the capabilities for:

- Grading and leveling dirt and other material
- Pushing or moving material, including backfilling trenches
- Creating embankments
- Altering or shaping job site terrain more precisely



# UC Talks Excavators

*with Nathaniel Waldschmidt*

**An** excavator is the workhorse for any utility contracting company. From digging pits to trenching and loading, the versatile excavator keeps crews productive and profitable.

In its simplest form, an excavator has a moveable arm with a bucket at the end, mounted on a rotating cab, with wheels or tracks to tackle a variety of terrain. Excavators can range in size from the mini excavator for light construction or residential jobs, to large excavators for heavy construction and mining.

To get a read on the where the industry stands on the latest in excavator technology, UC sat down with Nathaniel Waldschmidt, Komatsu's product manager for hydraulic excavators. Waldschmidt grew up in the construction equipment business and has experience on the dealer and manufacturing side. Here's what he had to say.

## **Can you start off by giving us a brief overview of the Komatsu excavator lineup – the size range, markets served, etc.?**

Komatsu covers a full range of excavators from 3 metric tons to 125 metric tons and larger, with 13 metric ton through 50 metric ton models representing the lion's share of the market in North America. Our customers use the equipment in all types of industries, including, energy, commercial, residential, infrastructure and more. We pride ourselves on recognizing the needs and challenges of our customers, and offering solutions to meet those needs.

## **How is technology changing the way contractors operate? What technology is Komatsu offering in its lineup?**

We are in a very interesting time when we talk about technology in the excavator market. We're seeing some operators lean on technology more than ever, while at the same time there are legacy operators who are more comfortable using traditional methods – so we're in kind of a hybrid period. But generally, there is more technology being used, which is particularly helpful in getting less experienced operators up to speed quickly, whether that is on an excavator, dozer or any piece of equipment on the jobsite.

For Komatsu, our flagship product has been our Intelligent Machine Control models. We call it Komatsu IMC 2.0, our second generation of Intelligent Machine Control. Last year at CONEXPO we celebrated our 10th anniversary of IMC, so the technology is continually evolving.



In a nutshell, Intelligent Machine Control excavators offer semi-automatic control for trenching, slope work and other high-production applications that helps increase precision and decrease over-excavation. Komatsu's IMC is integrated into the equipment and is not a bolt-on afterthought. IMC takes over some of the machine functionality and, in turn, takes some of the guesswork out of the operation. Another advantage is the ability to integrate the data with design and office management software.

As far as technology development goes, we have a two-part path. We are offering what the market is asking for today, but we are also looking to the future, so that we can stay ahead of the curve for where the market is heading.

### **Electrification is an emerging topic in construction. What factors are leading to the increased use of electric and hybrid equipment? How is Komatsu responding?**

Electrification touches a wide range of topics involving contractors, owner agencies and the manufacturers themselves. At Komatsu, we have a corporate challenge target of achieving carbon neutrality by 2050, so, electrification contributes to that. From the contractor's perspective there are issues related to charging solutions.

But electrification and alternative engines are expanding and are a focus area for us. At CONEXPO last year we introduced our PC210 electric machine, and we also offer hybrid equipment. What is interesting about hybrid engines is that it is not new technology for Komatsu; we have been producing hybrid equipment on the mining side of our business for nearly 50 years.

For the general construction market, we produce the HB365LC-3, which is a 35 metric ton excavator that is a true hybrid solution. It offers two major benefits to a contractor. One is an increase in productivity when compared to the standard model. The second major benefit is of course the fuel savings that can be achieved with the hybrid engine, which can add to the contractor's bottom line.

### **Long-lasting and efficient equipment is key for contractors increasing uptime and profitability. Can you give us tips regarding the best ways to keep machinery operating at peak proficiency?**

The most important thing to do is familiarize yourself with the operation and maintenance manuals; they do a very good job at spelling out maintenance intervals and replacing wear items. Some operators are very hands-on and do a great job maintaining the equipment, but our dealers are also great resources for service and maintenance. Buying equipment is a big investment, and planning for service and maintenance allows you to maximize uptime and get the most return on your investment.

One common misconception we see is that service relates to downtime; if the machine is being serviced it's not in the



field working. But the reality is that equipment that is not well maintained can lead to catastrophic failures that can lead to even greater downtime and higher repair costs or even expensive new equipment purchases.

### **What are some of the current issues that contractors are facing? What can equipment manufacturers do to help contractors cope with these challenges?**

Probably the biggest issue we are seeing today is the labor shortage and attracting people to the construction industry. The construction industry offers great opportunities and we need to do a better job promoting ourselves. But we are making strides and I believe that we can right the ship.

Technology is helping in this regard. With increased automation, incoming workers are better able to step in and operate the machines more quickly. They were born into the digital age and are familiar with using technology.

Again, at Komatsu we are looking to the future, both in the short term and the long term. We want to provide the equipment that helps contractors in a shifting landscape, whether that is addressing labor issues, keeping current with regulations or maintaining efficiency and profitability.





# 2024 Washington Summit Preview

NUCA National is pleased to report that we've wasted no time in 2024 achieving major success in Washington.

For the past several months, preserving annual appropriations funding for water programs – and in particular, the Drinking Water and Clean Water State Revolving Funds (SRF) - has been the main priority for our association. The threat of nearly \$2 billion in drastic cuts to the annual FY2024 appropriation for the Clean Water and Drinking Water SRF fund has loomed large since last July, when the House Appropriations Interior and Environment Subcommittee initially unveiled their proposed FY2024 legislation. With the news in March from Congress that funding levels were going to be maintained at previous levels, we should be able to breathe a sigh of relief.



However, issues around water funding remain. While the advocacy of NUCA, NUCA's members, and other likeminded associations helped avoid disaster by staving off devastating funding cuts for FY2024, the fact remains that the annual appropriations for water funding have remained flat for several years. Furthermore, the percentage of SRF dollars diverted to specific projects as Congressionally-directed spending grants ("earmarks") continues to increase – cutting into funding available for state intended use plans and threatening the long-term health of the SRF programs themselves.

At the same time, needs are higher than ever. According to the U.S. Environmental Protection Agency, the 20-year national drinking water infrastructure need for the United States as estimated by the 7th Drinking Water Infrastructure Needs Survey and Assessment is \$625 billion. This is a 32% increase over the 6th DWINSA (\$472.6 billion) and an increase of \$152 billion in only five years. Those numbers are just for drinking water – we are currently awaiting the new estimated Clean Watersheds Needs Survey numbers for wastewater/stormwater. The previous analysis, conducted in 2012, found needs of \$271 billion. Taken together, it is likely that there will be funding needs of over \$1 trillion over the next 20 years for upgrades and repairs to public water and wastewater systems. The funding gap is estimated in the hundreds of billions.

Congress must act to increase annual appropriations for the Clean Water and Drinking Water SRFs in FY2025, and NUCA intends to be one of the loudest groups pressuring them to do just that. At our upcoming Washington Summit, we intend to make a strong argument to increase water funding in FY2025, as well as communicate to Congress our needs to successfully implement the \$55 billion in federal water infrastructure investment being doled out through the Infrastructure Investment and Jobs Act through FY2026. We're going to supply Washington Summit attendees with the information and talking points to make this point clear to Congress.

Meanwhile, Congress continues to face other critical deadlines, which at this rate may end up as additional items on our Summit agenda. The Pipeline Safety and Hazardous Materials Administration (PHMSA) re-authorization under the PIPES Act and its associated NU-

CA-supported damage prevention language still remains in legislative limbo. As of today in mid-March, the full House has failed to take up reauthorization language that passed by an overwhelmingly bipartisan majority in the Transportation & Infrastructure Committee. And to make matters worse, the corresponding Senate committee has yet to even produce language.

Likewise, NUCA-supported permitting and tax reform legislation also continues to move through the House, but has stalled in the Senate. All these and more will be major priorities for NUCA National in early 2024.

NUCA is also looking ahead to major workforce development legislation being passed in 2024. This includes reauthorization of the Workforce Innovation and Opportunity Act (WIOA), one of our main vehicles for funding technical and vocational education, as well as legislation expanding Pell Grant eligibility to short term vocational training programs, and other legislation to support our nation's trade schools and training programs.

Workforce capacity remains one of the biggest bottlenecks to successful infrastructure buildout – contractors and manufacturers all across the United States have reported significant and ongoing challenges in hiring and retaining employees, even as they have raised wages and expanded benefits packages. According to industry estimates, the construction industry as a whole will need more than 500,000 employees this year beyond the normal pace of hiring, and manufacturing – crucial to meeting the supply chain demands imposed by the Buy America law – may have over two million unfilled positions by 2030. Congress must provide the necessary support to meet those needs, and we hope you can come to Washington next month to help us tell the story of our industry to your lawmakers.

Congress must move swiftly to address these key issues before election 2024 truly gets underway. The May 22-24 Washington Summit will be the best opportunity we have to directly influence lawmakers before the campaign season takes off in summer 2024.

Registration is now open for Summit. For more information, we invite you to visit the Summit website at [WeDigAmerica.org](http://WeDigAmerica.org). We hope to see you in D.C. this May!

**Zack Perconti** is the Vice President of NUCA Government Affairs.



## A Comprehensive Approach to Safety Management in Construction: Building a Foundation for Success

By Mike Flowers

In the dynamic world of utility construction, safety management stands as the cornerstone for project success and the well-being of every individual involved. The construction industry's inherent risks make it imperative to adopt a comprehensive approach to safety management, ensuring a secure environment for employees and safeguarding the success of projects. In this article, we delve into the various aspects of safety management in construction, exploring why it is essential and how it contributes to overall project excellence.

**1) Human-Centric Focus:** Safety management in construction begins with a human-centric focus. Every employee, from the skilled laborers to project managers, plays a crucial role in the success of a project. Prioritizing safety is not just about compliance; it is a commitment to preserving lives and ensuring that every individual returns home safely. By fostering a culture that places the highest value on human well-being, construction companies can create an environment where employees feel supported, leading to increased morale and dedication to safety protocols.

**2) Risk Assessment and Mitigation:** An effective safety management system involves rigorous risk assessment and

mitigation strategies. Construction projects inherently involve various hazards, from working at heights to handling heavy machinery. A thorough risk assessment identifies potential dangers, allowing for the implementation of preventive measures. This includes proper training programs, the use of personal protective equipment (PPE), and the establishment of safety protocols that address specific risks associated with each project phase.

**3) Compliance and Regulations:** Staying abreast of and complying with safety regulations is not just a legal requirement; it is a fundamental component of responsible construction management. Regulations are in place to safeguard employees and the surrounding community. Adhering to these guidelines not only avoids legal repercussions but also demonstrates a commitment to ethical practices and responsible corporate citizenship. Regular updates and training on new regulations are essential to ensure ongoing compliance.

**4) Investment in Technology and Training:** Technology plays a pivotal role in enhancing safety management in construction. From wearable devices that monitor employees' vital signs to advanced safety training simulations, integrating tech-

nology can significantly reduce accidents and enhance overall safety. Additionally, providing ongoing training for all personnel ensures that they are equipped with the latest knowledge and skills to navigate potential hazards effectively.

**5) Continuous Improvement Culture:** A robust safety management system is never static; it evolves through continuous improvement. Regular reviews of safety performance, incident investigations, and feedback mechanisms contribute to refining safety protocols. Establishing a culture that encourages open communication about safety concerns and suggestions fosters an environment of collective responsibility, driving continuous improvement at every level of the organization.

**6) Emergency Response Planning:** Effective safety management includes comprehensive emergency response planning. In the event of an incident, having well-defined protocols for immediate response and evacuation can be the difference between a manageable situation and a catastrophe. Regular drills and simulations help ensure that all team members are familiar with emergency procedures, minimizing response time and potential injuries.

**7) Measuring Safety Performance:** Key performance indicators (KPIs) are essential for measuring the effectiveness of safety management efforts. Metrics such as the number of incidents, near misses, and the frequency of safety training can provide valuable insights. Regularly analyzing these metrics enables construction companies to identify trends, address potential issues, and continuously enhance safety protocols.

Safety management is not an isolated aspect of construction projects; it is the bedrock upon which successful projects are built. By adopting a holistic approach that encompasses human-centric values, risk assessment, compliance, technology, continuous improvement, emergency response planning, and performance measurement, construction companies can create a safety culture that protects lives, enhances project efficiency, and contributes to the industry's positive reputation. In an industry where precision and attention to detail are paramount, safety management emerges as the guiding principle that ensures the well-being of the workforce and the longevity of construction projects.

Mike Flowers is Director of Safety, Training, and Education at NUCA.

**NUCA members now have a choice in commercial insurance options.**



**NUCA Choice Includes:**

- Automobile
- Contractor's E&O
- Crime
- Cyber Liability
- Equipment
- Property
- General Liability
- Inland Marine
- Umbrella
- Workers' Compensation
- Surety Bond Discounts

Find out what NUCA's new partnership with FCCI Insurance Group can do for your company's risk control needs.

**Learn more at [NUCAChoice.com](http://NUCAChoice.com)**



# SafetyWORKS



## 2023 NUCA Safety Award Overall Winner:

## NUCA'S SAFETY AWARDS: WHERE IS YOUR COMPANY'S AWARD?

By Robert Baylor, NUCA Director of Communications

*SafetyWORKS* is a regular column highlighting NUCA's William H. Feather Safety Awards winners. If you would like to be considered for these prestigious NUCA awards in 2024, please submit your entry by the end of December 2024. Award details can be found at [nuca.com/safetyawards](https://nuca.com/safetyawards).

Safety is our industry's number one priority on every jobsite. Over the last year, our magazine's SafetyWORKS column highlighted the 2022 NUCA safety award winners in several categories based on manhours. We will do the same for our 2023 safety award winners, once they are announced at the NUCA 2024 Convention in Palm Springs, California, in late March.

This column started out as an idea from current NUCA leadership to highlight our association's safety awards and the commitment to employee safety from each NUCA member. "Inspiration for other members" was the phrase used, and our volunteer leader was right about these unique industry awards and what they are meant to do when they are publicly awarded at our annual Convention.

The William H. Feather Award was created in 1978 to honor the contributions of the founding chairman of NUCA's Safety Committee, William H. Feather, and to recognize excellent safety commitments demonstrated by other NUCA members. Each year since then, NUCA



and the industry are proud of those who won these awards in each category.

We're a competitive industry, sometimes head-strong, always thinking of business success, but when it gets down to what we have in common as NUCA members, we look out for our men and women on the jobsite.

Safety. Each of our award winners since 2021 wanted to tell their story to fellow NUCA members to inspire them to make their own company's safety program an award-winner each day.

They had common traits across their company's safety culture. Executive commitment to their company's safety program, open communication and trust,

reinforcement of basic safety messages daily, weekly and monthly, safety training, and safe equipment delivered that award-winning message to their workforce. And each award winner also said their company's approach to safety enhanced their profits and business success. That's the thinking behind Utility Contractor's SafetyWORKS column.

Safety. A company commitment to a culture of safety in the workplace, plus a strong safety record in the last year, might just deliver some industry-wide recognition and inspiration from your own company's achievements.

If you think your company safety program deserves a William H. Feather



## William H. Feather Safety Awards are judged in the following categories:

- Overall Winner
- 0-100,000 Manhours
- 101,001 - 200,000 Manhours
- 200,001 - 500,000 Manhours
- 500,001 - 1,000,000 Manhours
- 1,000,000+ Manhours

Safety award—and a SafetyWORKS column—NUCA strongly encourages each member with a superior safety record and program to submit an entry for the 2024 awards.

Any contractor member of NUCA who has maintained a strong safety record in 2024 will be eligible to submit an application through our website [nuca.com/safetyawards](http://nuca.com/safetyawards). The list of supporting doc-

umentation for the award is available on the website, such as your company safety statement, a copy of your company's OSHA 300 log, and 300A Summary for 2024. Applications for the 2024 awards open on November 1, 2024, and close December 31, 2024.

A panel of judges selected by the Awards Committee will evaluate the entries and select the overall winners. And

please note by applying to this award, you are agreeing to send a representative to the 2025 NUCA Convention accept the award in-person.

NUCA will be highlighting each 2023 Safety Award winner in this column across the rest of the year. We hope you learn from your peers about their award-winning programs and what made them stand out and what techniques kept their men and women safe on the jobsite.

Safety. NUCA hopes your company's safety program can also inspire other NUCA members throughout 2024 and beyond.

**TAKE  
CONTROL**  
OF YOUR CONSTRUCTION  
SAFETY, CLAIMS &  
BOTTOM LINE

Comprehensive insurance coverage shielded from market fluctuations

Best-in-class, in-person and virtual risk-control services

Customized claims handling that puts control back in your hands

Opportunity for business owners to recapture premium

EXCLUSIVELY FOR NUCA MEMBERS

[NUCAASSURANCE.COM](http://NUCAASSURANCE.COM)





## Cemen Tech CD2 Dual Bin Volumetric Concrete Mixer

With a legacy built on 55 years of global leadership in volumetric concrete solutions, Cemen Tech introduced the CD2 – the next generation in its line of computerized models. The journey from the first computerized model to the CD2 showcases Cemen Tech's relentless pursuit of excellence, continually adapting to industry needs and setting new standards.

This fully automated addition to the C Series lineup features a unique split bin with individual compartments to transport and blend various supplementary cementing materials (SCMs). Notably, the mixer is equipped to handle fly ash, a crucial component mandated by Department of Transportation (DOT) standards and municipalities.

The CD2 combines Cemen Tech's world-class volumetric mixing technology with a new SCM dual bin, enabling real-time mixing of individual ingredients at any proportions needed, without extra equipment or expense. Its convenience, customization and cost benefits make it a valuable addition to a contractor's fleet, opening doors to more work. The dual bin design also doubles the amount of mixes this unit can produce, further enhancing its efficiency.

As the most innovative mixer on the market, the CD2 allows operators to produce a more durable and sustainable concrete. The special split bins hold up to 115 cubic feet of cement and 80 cubic feet of fly ash, meeting the demands of a variety of projects.



## Komatsu GD955-7 Motor Grader

Komatsu has introduced the new GD955-7 motor grader to the North American market. The GD955-7 offers operators the control and precision needed to build and maintain haul roads for truck fleets of 100 tons and up and is an important addition to Komatsu's motor grader lineup.

This powerful new machine stands out with its ample horsepower and powerful blade downforce pressure for efficient grading performance. With faster working travel speeds compared to the previous model, Komatsu engineered the GD955-7 to increase grading efficiency while helping reduce maintenance requirements and total cost of ownership.

Despite its large size, the GD955-7 offers excellent maneuverability. It can execute tight U-turns on a standard 100-ton class haul road without the need to fully cut the wheel or course correct. The long wheelbase and large, 27-degree articulation angle allow a tight turning radius and provide maneuverability for narrow haul road applications in confined spaces and around obstacles.

The newly adopted, long-life circle bearing allows for smooth and precise rotation of the moldboard while eliminating the need for circle play adjustments or replacing wear plates. Coupled with a standard auto-lubrication system, the GD955-7 is engineered to help reduce planned and unplanned maintenance downtime while helping to extend life to overhaul.

## DEVELON HB-Series Hydraulic Breakers



DEVELON is expanding its attachment offering and launching its HB-Series hydraulic breakers — the HB06H and HB15FH — in North America.

The breakers are engineered for high-performance, long-lasting durability and easy maintenance in the most punishing demolition, mining and quarry, and general construction applications. The HB06H and HB15FH are compatible with the DX62R-7 and DX63-7 mini excavators, the DX140LC-7 and DX140LCR-7 crawler excavators and the DX140W-7 wheel excavator.

DEVELON HB06H and HB15FH breakers boast high-quality materials and components, ensuring a long lifespan. The breakers' durability is enhanced through an advanced heat treatment process and the use of quality materials for key components, such as the cylinder and piston.

How a breaker works: The energy of the piston stroke is collected by charged nitrogen gas, and the breakers use an inward valve system with a simple structure and fewer internal parts. A urethane damper prevents vibrations that can damage the breaker and improves operator comfort. The front head supports the breaker and assemblies with a bushing, which absorbs the impact of the tool. The low-noise housing is ideal for excavators working in urban areas where noise levels must be controlled or where local regulations require damped breakers.



# WATER FINANCE AT THE WATER TOWER

AUG. 6-7, 2024 | BUFORD, GA



## REGISTER TODAY

For sponsorship information, contact Maura Bourquin: [mbourquin@benjaminmedia.com](mailto:mbourquin@benjaminmedia.com) or 440-465-9434.

# The Pipeline



**ARNTZEN**  
STEEL PIPE MILL

Producing:  
**Large Diameter  
Casing Pipe & Caissons**

Diameters 24" - 204"  
Wall Thickness .250" - 2.00"  
DSAW - 20 Ft. Straight Seam

800.821.3475  
www.ArntzenPipe.com  
PipeSales@ArntzenCorp.com



**Interested in  
advertising in  
Utility Contractor  
Magazine?**

**Utility Contractor**

Contact Maura Bourquin, Advertising Sales Manager:  
[mbourquin@benjaminmedia.com](mailto:mbourquin@benjaminmedia.com)

or Meghan Squires, Advertising Sales Representative:  
[msquires@benjaminmedia.com](mailto:msquires@benjaminmedia.com)

## Ad Index

ADVERTISER .....	WEBSITE .....	PAGE #
Arntzen Pipe .....	arntzenpipe.com .....	42
Core & Main .....	coreandmain.com/fusible .....	5
Ditch Witch .....	ditchwitch.com/warlockw12 .....	8,9
IOWA Trenchless .....	iowatrenchless.com .....	43
Link-Belt Excavators .....	lbxco.com/x4s .....	27
Mark One .....	markone.com .....	21
McElroy .....	mcelroy.com .....	13
Michael Byrne .....	byrnegroup.com .....	29
Midwest Mole .....	midwestmole.com .....	15
MiniTrencher .....	minitrencher.com .....	11
National Trench Safety .....	ntsafety.com .....	17
NUCA Assurance .....	nucaassurance.com .....	39
NUCA Choice .....	nucachoice.com .....	37
NUCA Washington Summit .....	wedigamerica.com .....	back cover
Reed Manufacturing .....	reedmfgco.com .....	3
Rock Rental, A Sewer Equipment Company .....	rock-rental.com .....	7
United Rentals .....	unitedrentals.com .....	2
Water Finance Conference .....	waterfinanceconference.com .....	41

# BORING & TUNNELING SPECIALISTS



Iowa Trenchless is a full-service boring & tunneling company located in Iowa and completing projects nationwide.

We use the newest technology and equipment to get the job done right the first time.

[iowatrenchless.com](http://iowatrenchless.com)

(641) 755-4692

Email: [office@iowatrenchless.com](mailto:office@iowatrenchless.com)

222 Se 12th Street | Panora, Iowa 50216



# Be The Key To NUCA's Washington Summit!

May 22–24, 2024



Infrastructure is built on relationships.

NUCA members are coming to Washington this spring to construct critical new connections for our industry.

Our 2024 Advocacy Goals Include:

- **Water & Wastewater Investment Is Critical:** Support Increased Funding in FY2025
- **Implementing the Bipartisan Infrastructure Law:** Three More Years Of Funding Required
- **Workforce Development:** Finding Our New Employees / Immigration and H-2B Visa Reforms
- **Lead-Pipe Replacement:** Delivering The Right Resources To Finish The Job
- **Your Chapter's Government Affairs Agenda Items:** Keeping Local Projects Funded

#NUCA60 | #NUCASummit

At this year's Summit, meet in-person with your lawmakers. We'll provide fact sheets and information. Your Chapter will arrange the group meetings. And we'll wrap it up with our evening Congressional Reception on Capitol Hill. Lobby Day is Thursday, May 23.

**We need to see you in Washington, D.C. at NUCA's Washington Summit.**

Registration and hotel information:  
[WeDigAmerica.org](https://www.wedigamerica.org)



**2024 Washington Summit**

*Digging America's Future*