



NEWSLETTER

Summer 2025

MESSAGE FROM OUR EXECUTIVE DIRECTOR

NECA Innovation Community,

The electrical construction industry is undergoing a profound shift driven not only by new digital tools, but also by the rapid rise of prefabrication and modular building practices. As contractors face tighter schedules, rising labor costs, and increasing complexity on jobsites, prefab is emerging as a powerful solution to deliver smarter, safer, and more scalable projects.

No longer limited to simple assemblies, today's prefabrication strategies are integrated into the entire project lifecycle; from design and planning to installation and commissioning. This shift is redefining how electrical systems are designed, built, and delivered.

At the core of this evolution is Design for Manufacture and Assembly. Contractors are now leveraging Building Information Modeling to create highly detailed, coordinated models that enable prefab planning from day one. These models aren't just visual, they are actionable, guiding the production of modular electrical rooms, racked conduit systems, and prewired panels in offsite facilities. This upstream approach reduces rework, improves coordination, and allows for just-in-time delivery to the field.

The benefits are measurable. Prefabrication has been shown to improve productivity by up to 30%, cut material waste, and reduce jobsite congestion. These benefits are especially critical on projects with tight site logistics. For the electrical trade, this means safer working conditions, fewer delays, and more predictable project outcomes.

What's more, modular building practices are enabling entirely new scopes of work for electrical contractors. From integrated power distribution units to plug-and-play lighting systems, modular components are becoming the standard on hospitals, data centers, and even large-scale residential builds. These systems can be factory-tested before arrival, reducing commissioning time and ensuring quality control.

Contractors embracing prefab are also finding unexpected value in workforce development. Offsite facilities create stable, controlled environments that support apprenticeships, training, and new talent pipelines. In a labor market where recruitment is a growing challenge, prefab helps broaden the industry's reach by creating entry points for individuals who may not thrive in traditional field roles.

Another key enabler of this prefab momentum is the rise of connected jobsite tools. Cloud-based platforms allow project teams to track prefab packages in real time, coordinate deliveries, and document installations seamlessly. QR-coded assemblies, mobile work instructions, and digital quality checks ensure that field teams stay aligned with the shop. This is instrumental in bridging the gap between the physical and digital.

NECA contractors across the country are leading this charge by developing prefab standards, investing in fabrication facilities, and collaborating across trades to streamline delivery. As adoption grows, so does the opportunity to rethink how we build: not just faster, but better. We are proud to support this movement through programs including the NECA National Convention, NECA Innovation Institute, the EMERGE Conference, and our national peer networks. By sharing best practices and spotlighting successful prefab strategies, we aim to help contractors transform challenges into opportunities.

Prefabrication isn't a trend, it's a transformation. And for those willing to embrace it, the future of electrical construction has never looked brighter.

Tauhira Ali
NECA Executive Director of Industry Innovation
innovation@necanet.org

INDUSTRY PIONEERS



"Being an innovator is being creative, a game changer, and thinking outside of the box. It's hard to invest in yourself day-to-day so if your given this opportunity you 1000% should take it."

Sheri Trzebiatowski

Vice President of Operations at
ArchKey Solutions

NII Westinghouse Cohort
2023 - 2024



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the NECA Innovation Institute



"When looking at new technology, you need to be realistic about what your use case is because you are going to be spending a good amount of money to have access to that product and if you are not going to use it to its full capability, it may not fit into your workflow and what you really need."

Justin Kohlman

President & CEO of
Schaeffer Electric



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The **NECA Innovator of the Year** is awarded to an industry pioneer from a NECA member contractor who champions innovation and continuous improvement across their company and the entire NECA community.



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innovative team member today

AROUND THE INDUSTRY



WHAT WE'RE READING

- [Google Funding Electrician Training as AI Power Crunch Intensifies](#)
5/30/25, Reuters
- [Deloitte: AI Data Center Power Demand Could Surge 30x by 2035](#)
6/24/25, PR Newswire
- [Return to Office Doesn't Mean Rewind to 2019](#)
7/2/25, Construction Dive



UPCOMING EVENTS

- [FABTECH](#)
September 8 – 11 in Chicago, IL
- [NECA Convention](#)
September 12 – 15 in Chicago, IL
- [Autodesk University](#)
September 16 – 18 in Nashville, TN

