

COVID-19 and Construction

Proximity Trace Used to Monitor, Maintain Social Distancing on \$1.9-Billion KCI Airport Project

Steel erector National Steel City uses Triax's wearable sensors to keep workers 6 ft apart



Union ironworkers working for steel erector National Steel City are maintaining social distancing using Proximity Trace at the \$1.9-billion Kansas City International single-terminal project. Photo courtesy of National Steel City

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In order to maintain social distancing on site, steel erector National Steel City of Plymouth, Mich., is using the Proximity Trace wearable sensor from Triax Technologies on the \$1.9-billion Kansas City International Airport (KCI) single-terminal reconstruction project.

Proximity Trace tags are easily clipped to hardhats. “The alert goes off when two of the workers are within 6 ft of one another. They get a beep. If they don’t move, the beep goes faster and then it doesn’t stop,” says Bob Dunn, CEO of National Steel City. “Triax had a relationship with United Rentals, who we’ve had an alliance of 20 plus years with. Within a very short period of time, they got information and the sensors to us and we were able to deploy them at the site.”

NSC crews have used the sensors since April as they installed 2,167 steel members and 172,000 sq ft of metal deck at KCI. The use of the Proximity Trace sensors is part of a site-wide safety protocol that National Steel City implemented based on Centers for Disease Control guidelines that includes sanitizing the workplace, maintaining distance, sanitizing tables during breaks and temperature checks for workers multiple times a day.

"Our laborers are union ironworkers and operators, and it's been just extremely well received," Dunn says, "I think that has a lot to do with the fact that they feel that their health is important to us. We're doing this in the best interest of keeping them healthy, which is always the goal of our company."

For its part, Triax says that they were able to roll out the Proximity Trace social distancing module in a matter of weeks and get it on the KCI site when NSC began its work, by testing it rapidly with contractor customers such as Gilbane as the rest of the world was still coming to terms with the requirements of social distancing on jobsites and industrial settings.

"The genesis of this product was that we basically built it, tested it and launched it in four weeks," says Triax Technologies CEO Robert Costantini. "We had a proven product in the field, the Spot-r, and we basically leveraged that technology stack and positioned it differently for proximity trips. Having that system, we had a real sense of

how this was going to work. We were also fortunate to be in a pilot in the early stages with some really big customers."

National Steel City has completed erection of structural steel on two segments of what eventually will become the terminal's concourse A and three segments of the future concourse B, on opposite sides of the H-shaped new single terminal. The steel portion of the project is the largest job Proximity Trace has been used on to date. The whole project is planned to be completed by 2023. National Steel City has 50 team members working on the project and is ahead of the steel erection schedule.

"We have had zero issue with absenteeism," Dunn says, "from the beginning of this job to a day ago, we haven't had an issue with absentees at all. We have people who are committed to come to work. We're ahead of schedule. In the areas that we're working, we're working several crane paths. This has had no impact whatsoever."

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ENR Midwest Editor and Associate Technology Editor Jeff Yoders has been writing about design and construction innovations for 16 years. He is a two-time Jesse H. Neal award winner and multiple ASBPE winner for his tech coverage. Jeff previously launched Building Design + Construction's building information modeling blog and wrote a geographic information systems column at CE News. He also wrote about materials prices, construction procurement and estimation for MetalMiner.com. He lives in Chicago, the birthplace of the skyscraper, where the pace of innovation never leaves him without a story to chase.