

7 Ways COVID-19 Has Altered The Construction Industry For The Near And Distant Future



1. Jobsites will be cleaner and safer

The virus put a spotlight on the importance of worker health and safety, and U.S. contractors responded by implementing new jobsite policies such as staggered shifts, employee temperature checks and top-to-bottom disinfections of jobsites, tools and machinery.

Superintendents at Bridgewater, Massachusetts-based Callahan Construction Managers have implemented a variety of protocols to promote social distancing and employee health, including a ban on carpooling, a 100% mask and glove policy and well-stocked handwashing stations, according to president Pat Callahan. In addition, the company's safety team made 200 gallons of sanitizing soap that has been distributed across jobsites. This emphasis on cleaner, less crowded work areas is one that won't recede after the virus does.

Contractors can't be thinking that they can bring workers back after all this dies down and it will be the same as always. They'll have to include a lot more health and safety measures so that employees are comfortable returning to work.

The new normal will be reinforced by state, local and federal regulations, such as the ones recently proposed in Washington and Pennsylvania, and in the near future, OSHA could require employers to develop written infectious disease preparedness and response plans, said attorney Michael Rubin, chair of Goldberg Segalla's national OSHA and Worksite Safety practice group.

Medical experts' belief that outbreaks across the world will come in waves for months or even years to come make safety plans important now and into the future.

"Employers can no longer conduct business the same way as they did in the past," he said. "Especially now, they need to be flexible and in many instances, creative, as they think of new ways to perform certain tasks that they have performed in the same way for many years in the past."

2. Distancing will be the norm, via technology

The current emphasis on social distancing on jobsites will likely continue even after the current health threat passes, Rubin told Construction Dive. "We can expect to see less group activities and more clearly defined procedures and protocols for even some of the most routine work tasks," he said.

Even as the current outbreak subsides in many areas, state and local officials are putting measures in place to mitigate risk on construction sites going forward. For instance, new guidance in Washington state requires that jobsite employees keep 6 feet away from each other and non-compliance could lead to a project shutdown.

The need for social distancing has also changed how contractors interact with project teams and with customers and companies have developed unique solutions to stay in touch. Los Angeles-based AECOM has

launched an interactive web-based tool that allows clients to hold virtual public meetings, a crucial component in the process of creating public projects such as town halls, stadiums and concert venues. The platform allows AECOM employees and customers to engage with the public about the impact and benefits of proposed projects without leaving their homes.

"It's exactly like a real public meeting, but without the in-person element," says Kevin Carlson, AECOM's global lead for digital transformation.

In addition, in some areas of the country, building departments are implementing remote technology for inspections, a trend that will continue after the health crisis is over, according to Stephen Poposki, a building official in Cape Coral, Florida.

For instance, when faced with a recent inspection delay on a project in Nashville, Tennessee, general contractor DPR submitted 360-degree photos and videos to the local fire marshal for a virtual inspection, allowing it to turn the project over on time.

"I think we're going to come up with some really efficient ways of doing business," said Poposki. "And because people are also very aware of what's going on in the news, they're really more willing to accept change right now, and this is the perfect time to do it."

3. Projects will take longer

Many of the major safety changes on construction sites will add to the time it takes to complete projects. While crucial to keeping workers healthy, techniques such as suiting up with PPE, only allowing one trade on a site at a time and staggering work shifts will slow down progress and the days of fast-tracking a project may be over — at least for now, experts say.

"Construction schedules will not be the same as they used to be," said Mike Benike, executive vice president at Rochester, Minnesota-based Benike Construction, during a recent COVID-19 webinar sponsored by Destination Medical Center, a public-private economic initiative in Rochester, Minnesota. "Things will take a little longer because we won't be able to have lots of people in the same place at the same time."

Natarelli advises contractors to consider time constraints when bidding out new jobs to make sure the contract reflects a reasonable construction schedule. The entire project team, including owners, architects, subs and other partners, needs to understand that at least in the near term, projects will take longer than before.

"We'll be planning jobs differently going forward," he said. "These longer completion times aren't going to go away anytime soon and we need to be prepared going forward that if another wave of the virus does come back we're in much better shape and we're much better prepared."

4. Telework will become more common

The coronavirus has also brought major changes to construction's back offices. Forced to stay at home, many office employees have kept business operations running via remote work, relying on technology like videoconferencing, emailing and texting to stay in touch.

This nationwide experiment in telework will likely cause many leaders to think about making the practice permanent. A recent Gartner study found that 74% of American companies will move at least 5% of their office workforce to permanently remote and nearly a quarter of respondents said they will move at least 20% to permanently remote positions, according to a survey of the company's chief financial officers.

Companies will have some workers remain remote

Percentage of companies that will have different amount of workers become remote.



“CFOs, already under pressure to tightly manage costs, clearly sense an opportunity to realize the cost benefits of a remote workforce,” said Alexander Bant, practice vice president, research for the Gartner Finance Practice.

While the trend toward remote work will lead to a dramatic reduction in the need for office space for many companies, others may think about expanding. These firms may seek to take advantage of lower rents to expand their office space to allow for greater social distancing in the workplace. This could mean a move away from the popular open office space layouts to allow for additional private space to reassure skittish staff long after the worst of COVID-19 infections have passed.

5. Demand for project types will change

The coronavirus outbreak has reshaped the types of projects that will be built this year and for many years to come. Hospitality, retail and entertainment projects are likely to be in less demand while healthcare construction and healthcare-related manufacturing projects could see more activity, according to Charles Hewlett, RCLCO Real Estate Advisors' director of strategic planning.

In addition, demand for distribution and warehouse space may likely increase as U.S. companies favor higher inventory levels and emphasize supply chain resiliency over efficiency, Hewlett said.

“In the long run, expect more manufacturing facilities to locate in North America to ensure supply and access to markets during episodes like this one, a boon to economic growth and industrial and logistics facilities in the U.S. and Mexico,” he said.

Keith Prather, market intelligence expert for Olathe, Kansas-based business management consulting firm Pioneer IQ, agreed, saying that less reliance on Chinese-made building products will create a surge of new manufacturing- and supply chain-related construction projects such as factories and warehouses.

Experts are divided on how infrastructure initiatives will fare in the near future, with some noting that projects like road and bridge construction could suffer as state DOT revenue declines because of decreased fuel tax revenues and that federal infrastructure funding may be waylaid as Congress turns its attention to COVID-19 mitigation measures for business and unemployed Americans.

Nevertheless, some public works projects have received a shot in the arm because of the pandemic. The Airport Improvement Program will invest \$3.2 billion in the development and modernization of aviation facilities across the country, and the governors of some states, including Florida and Minnesota, have accelerated billions of dollars of transportation projects in an effort to lessen the economic fallout from the coronavirus pandemic and to take advantage of fewer vehicles on the road.

6. Supply chains will recalibrate

Even before the outbreak hit the U.S., the coronavirus created major global supply chain disruptions, especially of goods from China, the source of about 30% of U.S. building materials last year. Government containment

efforts and quarantines in China slowed or shut down factories in dozens of cities and provinces, leading to a falloff in production of everything from cars to smartphones. U.S. builders have noted delays and shortages in items like steel, surfacing and case goods.

Wendy Cohen, vice president of operations for Sacramento, California, construction management firm Kitchell CEM, said she has experienced some delays in material availability since the crisis began. Kitchell project teams are working with clients, architects, contractors and trade partners to identify shortages and develop creative solutions for the projects that the company continues to build for essential clients such as schools, colleges and the Los Angeles Department of Public Works.

With so many sourcing challenges on the horizon, many American construction firms will be hesitant to resume orders from Chinese suppliers, according to Prather.

"How we source projects has a lot of weaknesses," he said. "We believe that going forward there will be a lot of reshoring back in the U.S., where we'll see an increase in our manufacturing ability here as well as heading into Mexico."

Natarelli said many of his large contractor clients that are bidding out jobs include clauses in their contracts that call for as many as five backup sources for materials. Many are willing to pay higher prices for supplies coming from less risky locations. "Alternative suppliers are very big right now, and contractors are weighing the risks with the rewards."

7. Modular adoption will increase

An enhanced focus on worker safety will help accelerate the industry's move to offsite construction methods. While contractors like PCL, Clark and Mortenson have relied on prefabrication for many years, Natarelli said the coronavirus pandemic will motivate more firms to investigate the benefits of offsite building.

The assembly-line efficiency and climate-controlled environment of factory production can save on labor costs and shorten project schedules, but other advantages will take center stage in post-pandemic construction, according to Natarelli, including increased site safety and reduced congestion.

"It reduces the amount of time you're in the field, and keeping the labor force in a controlled environment is good from a health standpoint, too," he said. "So maybe now you have a job that went from six months to nine months and maybe this can shave that to eight months while you're also promoting social distancing, too."

