

CASE STUDY

DETAILS

Tutor Perini Automatically Tracks Progress on \$3B Project with Cupix

LOCATION:
Brooklyn, NY
FIRM TYPE:
General Contractor
PRIMARY INDUSTRY:
Commercial, Civil
PROJECT TYPE:
Correctional Facility
PROJECT SIZE:
990,000 sqft

In the summer of 2023, Tutor Perini was awarded one of the biggest contracts in its company history.

The project? A new \$2.95 billion correctional facility in Brooklyn, New York, one of four borough-based facilities set to replace the aging Rikers Island.

But erecting a building taller than the Statue of Liberty in New York's most populous borough left no room for error.

"With these kinds of [public] projects, you usually run into at least some kind of holdup," says Evans DeHart, Senior BIM Engineer at Tutor Perini. "The client wants to make sure you're delivering them progress reports and showing what's going on."

And there would be a lot of complexity to keep up with on this project. When complete, the Brooklyn Borough-Based Jail Facility will span an entire city block and stand approximately 30 stories tall.

Inside the 1-million-square-foot facility, there will be 1,040 beds for people in custody, along with amenities like recreational spaces, medical units, and an underground parking garage for employees.

With six years of design and execution work ahead of them, Tutor Perini needed a standardized way to track and communicate progress. And with Cupix SiteInsights, they've been able to automatically track installations, save valuable time, and build trust with project stakeholders.

Zero payment delays

3-4 hours per day saved on steel progress tracking

Building a new software foundation

Tutor Perini is one of the largest general contractors in the United States, with almost a dozen operating companies in its portfolio.

One of those companies is Rudolph and Sletten, a leading California general contractor and early Cupix adopter.

“They were pushing for Cupix and how good the product and price point were,” says Evans. “We got on a pilot project, and it was seamless.”

That was in 2023. Since then, the company has rolled out Cupix across its three main business units (Civil, Building, and Specialty Contractors).

Andrew Battaglino, Project Manager for the Brooklyn project, has spearheaded the reality capture program at Tutor Perini. As part of the project controls division, he’s responsible for strategizing and implementing best practices for using Cupix.

“Cupix is at the core of our reality capture program,” says Andrew. “So I’m looking for ways internal teams and trade partners can effectively use it for progress tracking, quality control, and anything that helps their current workflow be more efficient.”

Per Andrew, one of the benefits of Cupix is its flexibility, since it can support both field and BIM workflows in one place.

“You have all the project data alongside your captures, BIM, laser scans, and drone scans,” says Andrew. “No other reality capture program offers that all-in-one solution that Cupix does.”

Portfolio companies have become well-versed in using Cupix, walking jobsites on a regular basis with a 360° camera and comparing captures to BIM models. Having the BIM models, site captures, and even laser scans

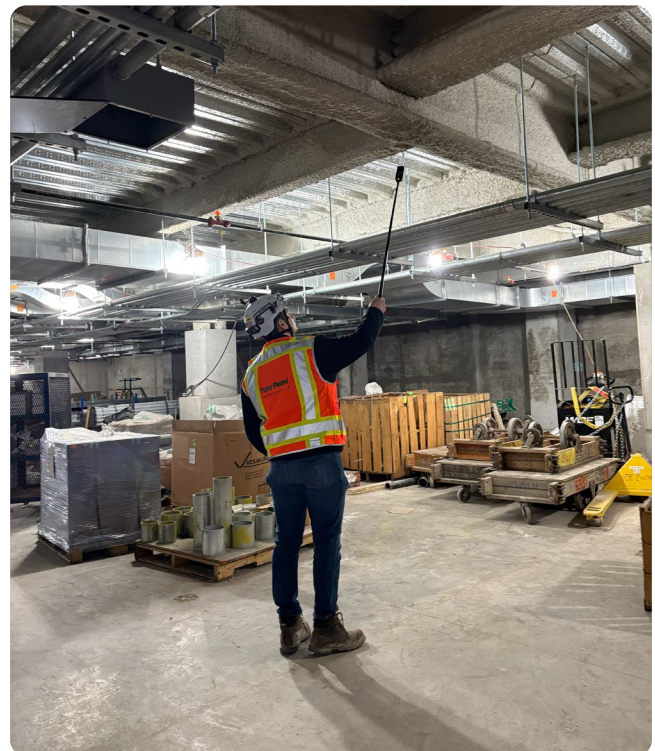
side-by-side speeds up issue resolution.

“Sometimes subcontractors don’t go per plan, so we’ll bring up our capture along with TwinLens [Cupix’s BIM overlay viewer] to show where an installation is supposed to be,” explains Evans.

The integration with Revizto is another plus, since issues logged in Revizto are geolocated in Cupix. Instead of working off a model that lacks context, Cupix allows field teams to see where an issue is in a 3D space.

“The value of Cupix really comes into play during project execution,” Andrew says. “With BIM, you have a virtual world that you have full control over, but spatial intelligence gives you a broader understanding of the world around you.”

And rolling out SiteInsights—Cupix’s automated progress tracking software—would take Tutor Perini’s understanding of the jobsite to new heights.



Faster insights on the jobsite

On past projects, Tutor Perini's field teams had gone out to jobsites and marked up what had been installed when on a PDF.

"It was a very manual process that takes a lot of time, and that guy could be doing something way more productive," says Evans.

But on the Brooklyn jail project, SiteInsights automatically calculates progress for the Tutor Perini team, reducing the likelihood of errors and giving them valuable time back. After a daily site walk is completed, SiteInsights compares the latest captures, BIM models, and schedules, verifying if parts have been installed in the right place at the right time.

"We can break out all of the systems that are in place [by trade] and show what's been installed," says Andrew. "If field teams miss anything during walkthroughs, it's really not missed because it's captured inside Cupix."

After using SiteInsights to successfully track structural steel and concrete installations, Tutor Perini is now using it to accurately track MEP system installations. All progress insights are displayed on a dashboard, which Tutor Perini teams can customize and drill into based on trades, work areas, and more.

This comes in handy for monthly owner updates, according to Evans.

"We're using SiteInsights to actually justify our billing to the owners," says Evans. "We can see what we're billing our subcontractors [from SiteInsights], but maybe we only want to show the progress we've made versus the dollar amounts. That's one of the best things for us as a general contractor."

SiteInsights has even won over some skeptics with what it can do.

"Our project manager was like, 'Are you sure I can turn these fields on and off?'" says Evans with a laugh. "But he can actually actually customize it to show what he wants, and now he loves it."



The New York metrics

Since launching Cupix on the Brooklyn jail project in February 2024, the results speak for themselves:

- **Zero payment delays**

Each monthly pay application is submitted with a Cupix-generated progress report—a curated set of date-stamped captures that provide visual proof of work completed. “We haven’t had one issue with payment on this job, and that doesn’t usually happen,” says Evans. Adds Andrew: “Having greater visibility into what’s been installed means better cashflow management, because it’s already there and reported on ahead of payment reviews.”

- **Up to a day of work saved on progress updates**

On the steel installation part of the project, Evans estimates that without Cupix, it would have taken 3-4 hours to walk the site, and then additional time for PDF markups and email updates. Now that the project is in the MEP stage, Andrew estimates the six-person capture team can shorten walkthroughs from a day or even multiple days to a couple hours, since anyone can log into Cupix and see the current completion status. “Once you actually see how much time you save with tools like Cupix, you’re not going to want to go back,” adds Evans.

- **Capturing conditions in hard-to-reach areas**

Only certain people had access to certain floors during steel installation, but the Tutor Perini team still wanted to capture progress in these areas. In a feat of ingenuity Evans calls a “fun science project,” the Tutor Perini team attached a 360° camera to a drone to capture all the in-slab that was being put in, without anyone having to be on the deck itself. Having the drone data available alongside other Cupix capture is beneficial because “all project data is already in there, and you’re just enhancing it with more

- **Thousands of dollars in rework avoided**

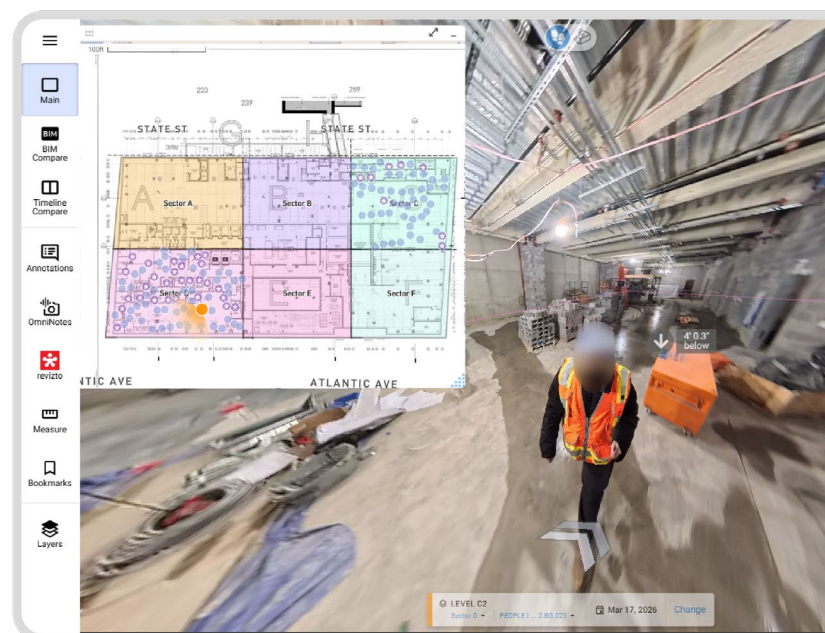
During the steel and concrete phases, Andrew noticed a beam captured by Cupix had been installed at the wrong angle and wouldn’t be capable of bearing weight. Using the Timeline Compare and BIM Compare features, he was able to verify the capture against slab scans and flag the issue before concrete was poured. Fixing those errors after the pour would require mobilizing an X-ray crew, a coring machine, and significant labor. “Depending on the size of the blockout, it’s thousands of dollars,” Evans notes.

- **Clearer owner communications**

The client requires monthly photo updates, which Tutor Perini can export as a timestamped PDF in seconds. SiteInsights reports can also be exported and shared, with Gantt charts and color-coded progress drawings making it easy to spot schedule overruns or delays.

- **Proactive quality control**

Rather than waiting for the QA/QC team to issue a formal Non-Conformance Report, the team uses TwinLens in coordination meetings to flag deviations in real time—giving subcontractors the chance to self-correct before a formal notice is required.



What's next for Tutor Perini

As the Brooklyn project progresses with SiteInsights, other project teams within Tutor Perini are eager to try it out.

"Everyone's seeing the success that we've had on this project with SiteInsights and wants to get their hands on it," says Andrew. "Adoption has just been incredible."

Andrew, Evans, and the rest of the team are also continuing to refine workflows that leverage Cupix capture data, such as issue management. Instead of having to manually take photos and upload them to Procore, Andrew is building templates that push Cupix annotations and captures straight into Procore for subcontractors to act on.

"Once we get all these workflows dialed in, it's going to absolutely revolutionize the way we do construction, 100 percent," says Andrew. "We'll have full visibility into our project's health, potential risks, and cost exposures."

And Tutor Perini has plenty of projects to manage. In February 2025, Tutor Perini announced a pending contract even larger than the Brooklyn-based jail facility.

The project? A \$3.8 billion dollar joint venture with O&G Industries to build the new Manhattan jail.

But the Brooklyn Borough-Based Jail Facility will be the first of four new and renovated jails to open, with a target completion date of 2029. And Tutor Perini will be taking the learnings from this project forward.

"With Cupix, you know where things have been installed, where they should be installed, and how much has been installed," says Andrew. "Those three simple metrics are the cornerstones of a successful project. And that is what Cupix delivers."

