

A background image showing a panoramic view of the Chicago skyline, including numerous skyscrapers and high-rise buildings, with Lake Michigan visible in the foreground. The image is partially obscured by a blue diagonal overlay on the left side.

ProjectDox Case study

Chicago Department of Transportation

The Chicago Department of Transportation (CDOT) is responsible for public-way infrastructure, including planning, design, construction, maintenance, and management for the country's third largest city, which is home to almost 3 million people.

Supporting Mayor Lightfoot's five-year, multi-billion-dollar Chicago Works capital plan, which aims to improve infrastructure, economic outcomes, and climate resiliency across the City's 77 communities, the CDOT is a hub of activity and moving parts.

ProjectDox enables CDOT's unique use case and saves the City of Chicago millions

When their previous electronic plan review solution was discontinued, CDOT sought out a new platform that could fit their unique use case.

Rather than engaging ProjectDox for traditional plan review and permitting, CDOT relies on the solution to more efficiently manage utility dig projects to reduce costs and right-of-way interruptions.

Prior to issuing any permit for a right-of-way project, we must first coordinate and get approval from 30 underground utilities," said Jai Kalayil, Deputy Commissioner, Division of Infrastructure Management, CDOT.

CDOT's previous solution worked well enough but workflows weren't completely digital. "There were still some clerical and administrative work that had to be done on paper," Jai said.

ProjectDox provided the features and functionality that CDOT required, integrated with their permitting solution, and — critically — to the map the Project Coordination Office (PCO) uses. "That was one of our biggest requirements for a solution, that it integrated with our map, which ProjectDox was able to do," Jai said.

ProjectDox's superior markup and comparison tools, plus reporting capabilities helped ProjectDox cinch the deal, too.

“They say that every six minutes an underground utility line is damaged, which costs billions of dollars every year,” Jai said. “Nationwide, utility damages average out to 1.67 hits per thousand. Our rate is 0.49 hits per thousand,”

Workflows that improve efficiency

As an integrated and one-hundred percent digital solution, ProjectDox has simplified processes at CDOT and boosted efficiency.

“We’ve been able to create workflows that we didn’t have before for our different processes,” said Sheetal James, Division of Infrastructure Management at City of Chicago, who said the workflows improved communication, helped projects move along more swiftly, and provides much-wanted visibility for internal and external stakeholders, alike.

Underground utility damage at a fraction of the national average

Since implementing ProjectDox, CDOT has leveraged the full capabilities of the system to achieve efficiencies and cost savings for the City of Chicago.

CDOT uses ProjectDox to coordinate across 30 different utilities to prevent damages, minimize downtime, and more. If the gas utility wants to replace gas mains on five blocks, they use ProjectDox to alert the other utilities of their plans and request underground infrastructure information. Next, they mockup the underground utility facilities and submit for approval from all 30 utilities.

Reviewers then use ProjectDox to ensure proper clearance by marking up drawings, comparing versions, and using the overlay feature to manage any need for a change to the plan.

Because CDOT engages utilities before any permits are issued, they’ve managed to keep their underground utility damage rate to a fraction of the national average.

“They say that every six minutes an underground utility line is damaged, which costs billions of dollars every year,” Jai said. “Nationwide, utility damages average out to 1.67 hits per thousand. Our rate is 0.49 hits per thousand,” he added — noting that as a metropolitan area, the rate should be even higher than the national average.

“But due to our stakeholder participation from the beginning, the damages we experience are low, very low because before it goes to construction, all these conflicts are resolved.”

ProjectDox helps the City of Chicago realize \$23.7 million in savings in 2022

From water management to gas, telecom, and more, CDOT already liaised across multiple utilities to prevent damages, but designating the Project Coordination Office (PCO) as a reviewer in ProjectDox produced impressive cost savings for the City — just shy of \$24 million in 2022.

By requiring the PCO’s review, CDOT ensures that the City minimizes duplicative work and public-way disruptions keeping their citizens and communities happy. PCO’s review also reduces the possibility of damage to other utilities, identifies opportunities for the applicant to restore the right of way — saving the city restoration costs — and ensures aging facilities are replaced with new, safe ones.

“Adding CDOT’s Project Coordination Office as a reviewer in ProjectDox helped us realize almost \$24 million in potential savings in 2022”

Jai Kalayil, Deputy Commissioner, Division of Infrastructure Management, CDOT

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