



# How Cincinnati Police began a digital transformation journey

**F**our years ago, the Cincinnati Police Department (CPD) relied on pen and paper for some of its most critical functions.

Overtime, training, court, and medical leave information was largely recorded on paper slips and then entered manually into spreadsheets and paper timebooks. These records were sent to the city's payroll system and the emergency operations center, where the lack of real-time information on staff availability could cause problems beyond accounting mistakes.

"There were multiple entry points and too many opportunities for human error," says Kristen Cosgrove, CPD special projects director.

After several unsuccessful attempts to modernize, the department migrated its timekeeping systems to the cloud. The implementation succeeded despite the pandemic, civil unrest, budgetary challenges, and city leadership departures. The cloud helped address longstanding workflow and organizational challenges and opened the door for greater use of data across the department, helping police officers fulfill their mission faster and more effectively.

"As the leader of a law enforcement organization, it boils down to how you can implement technology to make officers' and citizens' lives a little easier, especially in an age where every agency in the country is having staffing and recruiting challenges," says CPD Chief Teresa Theetge. "Where we used to turn to personnel, we now turn to technology to further our mission."

## A cloud-based evolution

CPD's previous attempts to digitize had stalled due to the complexity of the processes and stakeholders involved.

The city's 1,000 sworn officers, supported by more than 125 civilian staff members, are represented by three separate collective bargaining agreements. Pay was calculated, usually on paper, by as many as 20 different timekeepers, who had to apply more than 200 work codes and enter them into spreadsheets and timebooks. The labor agreements involve a staggering level of detail. For example, K-9 officers have their own pay provisions and codes because they care for their canine partners at home.

"We were just not equipped to automate that complex a process, and any technology out there wasn't robust enough to handle the complexities,"

Cosgrove says. "Any time we started to make headway, there were a lot of ifs, thens, and maybes."

Recognizing the importance of greater transparency, Theetge decided it was time to move forward. "Our previous city manager said we have to look at this, and I said the police will be the first to do it because our expenditures have always been under a microscope," she says.

As leaders looked at digitizing processes, they recognized the benefit of cloud-based recordkeeping systems to support officers in the field.

Implementing the cloud-based system and additional middleware took more than four years. IT staff and vendors worked with police officers and other stakeholders to understand paper-based processes, pilot and test systems, and make adjustments as needed.

"How do you eat an elephant? One bite at a time," Theetge says. "We took on each hurdle and moved on to the next phase of the project."

## Data-driven results

After the system went live, payroll operations were streamlined and real-time scheduling information was

## Three keys to success

- ✔ **1. Executive buy-in.** “When someone’s been in the same pen-and-paper role for 30 years, it’s very difficult to get buy-in for change,” Cosgrove says. Vocal support from executive leadership makes it easier to bring everyone along on the same digital transformation journey.
- ✔ **2. User buy-in.** Officers, timekeepers, staff, and community members were involved throughout the process. “You can’t bring them in too late, or they’ll be behind,” Theetge says. Ongoing feedback also proved critical once the system went live, given the complexity of recordkeeping within the department. “We had to change the system based on interactions with stakeholders,” Cosgrove says.
- ✔ **3. IT support.** Along with skilled IT staff and vendors, “you need to have a solid project manager,” Theetge says. “You need someone who has the same vision you do and is able to drive it to the end goal.”

provided for the emergency operations center for the first time. It also simplified recordkeeping for officers and supervisors and provided greater insights on staffing for leaders. “The less time they spend on administrative tasks is critical, because there’s always something else for the officers and supervisors to do,” Cosgrove says.

The system has helped with transparency, including required biannual audits of the department’s overtime expenditures. “Anytime a public entity is spending taxpayer money, you need to be held accountable,” Theetge says. “This gives us the accountability piece we didn’t have before.”

The cloud-based system has also jumpstarted a greater use of data across the department — and beyond it. “Given the nationwide shortages in staffing, being able to look at the data to see patterns of coverage and make management decisions is a huge step,” Cosgrove says.

The department is now analyzing calls for service and trends every day. IT staff also used GPS data from officer-worn cameras, cars, and other tools to develop an in-house system that allows police to respond to service calls more effectively, says Cincinnati CIO Sean Ware.

“This project is a great example of how Cincinnati continues to leverage technology in a transformative way,” Ware says. “Change management was critical to the project’s success, so a good portion of the success should be attributed to CPD leadership.”

### Data for the community

The wealth of data also provides opportunities for community involvement. That’s especially critical given CPD’s 20-year-old collaborative agreement, which has become a national model for community/police relations.

“We consider not only the way we police but also what technology we

use based on how it’s received in the community,” Theetge says. “Someone could show me the latest and the greatest, but community reception is a critical factor in my decision-making.”

Data allows the city itself to engage with the community around the changing nature of public safety. For example, Cincinnati recently published a dashboard summarizing the activity of its Alternative Response to Crisis pilot program, which dispatches behavioral health specialists and paramedics instead of police for certain low-risk 911 calls.

“Residents and activists rely on our public safety dashboards for up-to-date information on things like reported shootings and pedestrian safety,” says Amy Mostafa, deputy director of the city’s Office of Performance and Data Analytics. “These dashboards have been viewed tens of thousands of times by media, community groups, and engaged residents to better understand patterns across neighborhoods and trends over the years, and to engage with the city on solutions.” Cincinnati also publishes a variety of data on its [open data portal](#) built on Tyler Technologies’ Amazon Web Services-hosted platform.

CPD’s ongoing digital transformation will ensure the department evolves to meet its mission, and the cloud will be a valuable tool on the journey. “I often tell people that the only thing police hate more than change is things remaining the same,” Theetge says. “You have to look hard at what’s in front of you and make it better.”

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