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Imagining the Future of Police Tech

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A primer on emerging technologies for law enforcement, excerpted from the new ITIF report, "Police Tech: Exploring the Opportunities and Fact-Checking the Criticisms."

WHAT ARE THE POSSIBILITIES?

Even the most well-equipped police departments are only scratching the surface of possibilities when it comes to deploying police tech. As technology continues to improve and costs continue to decline—and especially if the federal government takes the lead in deploying police tech and providing funding for state and local law enforcement—more police departments will take advantage of new and emerging technologies for a variety of applications that will make police more efficient and effective and keep officers and civilians safe.

Preventing Crime



As AI becomes more sophisticated, predictive policing software will become more accurate and therefore even more useful to law enforcement as a crime prevention tool. With AI predicting where different types of crimes are likely to occur, police departments could more efficiently allocate their resources and decrease response times.

Responding to Crime



With improvements in natural language processing, which allows AI to understand and replicate human language, automated dispatchers could answer 911 calls, thereby decreasing the burden on human 911 operators. Gunshot detection and other sensors will alert police to crime as soon as a disturbance takes place, and officers will receive these alerts via apps on their smart devices that will also tell them the location of their colleagues so the officers closest to the scene of the disturbance can respond.

Solving Crime



The more cameras that exist in the world—cell phone cameras, security cameras in or outside homes and private businesses, and city-owned cameras in public spaces—the more likely a crime will be caught on camera. With facial recognition, police will be able to more easily identify suspects, victims, and witnesses from photos or videos, and advanced photo editing and reconstruction capabilities could aid in that process.

Keeping Officers Safe



Police departments will procure robots to take over dangerous tasks and drones to enter dangerous situations ahead of human officers. In an active shooting scenario, police could send a drone to give them an aerial view of the scene before engaging. In a hostage scenario, police could send a robot to provide food and supplies to hostages while hostage negotiators work to resolve the situation. In a scenario wherein police do not know if a suspect is armed and dangerous, they could send in a drone or robot first to assess the level of risk and better prepare officers before they engage.

Back Office/Front Office



In the future, case management will be a fully digital process, streamlining back-office processes so officers spend less time filling out paperwork and more time out in the streets solving crime. Office automation will take even more work off human officers' hands and remove opportunities for human error. Fully digital systems not only save time but also allow for greater cooperation, which is key in law enforcement, as cases sometimes require collaboration between multiple police departments or levels of government.

Improving Officer Training



More officer training will take place in AR and VR environments, allowing officers to train under realistic but safe conditions. Instead of gaining their first experience with dangerous or risky situations on the job, officers could first experience simulations of those situations—such as an active shooter or hostage situation—in a controlled environment. Simulations of police interactions from a civilian perspective could also help officers better understand how to interact with victims, suspects, and witnesses.

Maintaining Public Oversight and Accountability



Cameras will not only be important in identifying persons of interest and creating a trail of evidence, they will also continue to serve as an important tool for public oversight. Officers required to use body-worn cameras will have an additional incentive to follow proper protocol, and evidence from body-worn cameras can hold officers accountable if they break the rules or use unnecessary force. Audit trails in digital systems will help hold officers accountable for how they use new technologies.

Read the Full Report

Ashley Johnson, Eric Egan, and Juan Londoño, "Police Tech: Exploring the Opportunities and Fact-Checking the Criticism" (ITIF, January 2023), itif.org.

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