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## City considers high-tech system to spot gunmen

William Kaempffer , Register Staff

**-NEW HAVEN — The city is considering purchasing a new high-tech gunshot-detection system that uses acoustic triangulation to pinpoint the location of gunfire and alert police dispatchers within seconds.**

Police Chief Francisco Ortiz Jr. said the technology would provide real-time information to help officers get to the right location, faster.

"I think, as we continue to look at crime, that we've got to think about technology and the role of technology to help us reduce violence," said Ortiz.

In New Haven, there are an average of 400 to 500 confirmed reports of gunfire each year.

In other cities, the system had produced a significant decrease in gunfire, he said. It allows police officers to arrive at scenes faster, he said, instead of waiting for the 911 calls to start coming in.

The technology is in use in 17 municipalities across the country, including Washington, D.C., according to the manufacturer, Shotspotters of Santa Clara, Calif. Boston has signed on to spend \$1.5 million to cover six square miles of the city.

At this point, New Haven doesn't have any money earmarked to pay for it, but the interest was enough that representatives from Shotspotters recently visited New Haven.

The technology is designed to detect shots, and within 10 to 15 seconds, alert police dispatchers to the exact address of the shooting. It even detects how many shots were fired.

Gregg Rowland, senior vice president of the company, said it guarantees accuracy to within 75 feet. The reality is more precise, varying on barometric condition and competing noise, he said.

On a cold winter night, for instance, the system can be accurate to within five to 10 feet, he said. On a summer afternoon, it would be accurate to within 10 to 30 feet.

Here's how it works: Audio sensors, which are about the size of a coffee can, are installed at various locations throughout the coverage area. When shots are fired, the sensors triangulate the location and within seconds information appears on a screen in front of a dispatcher. Depending on the location and acoustical environment, there would be between 12 to 20 devices per square mile.

The system is sophisticated enough to differentiate between gunfire and similar sounds such as a car backfiring and firecrackers. The software filters out ambient noise and is equipped with a large library of acoustical fingerprints to further filter extraneous sounds, Rowland said. It also can say whether the shots were coming from something that is a moving shooter, such as a car, or is stationary.

The system has the potential to get information to police so quickly that "the guy hasn't even stopped shooting yet by the time they roll up," Rowland said.

Rob Smuts, the city's chief administrative officer, said no decision has been made on whether to purchase the product but said, "We're actively looking at it.

"We're interested in learning a little bit more about the technology before we steam ahead, but it does sound very interesting and very promising," he said.

How to pay for it is another question. The city was examining whether federal grants could be used, and Ortiz said it's possible asset forfeiture funds from the state and federal governments could fund a portion. Beyond that, Smuts said, the city would have to examine the capital budget and see if it fits.

Rowland estimated a city the size of New Haven would cost between \$700,000 and \$800,000, plus annual maintenance. Smuts said the city's estimate was a little over \$1 million.

In Washington, the FBI's Field Office is paying for the system, which was used to help solve a series of random highway shootings by a sniper near Columbus, Ohio, in late 2003 and early 2004, according to the Washington Times.

The benefit of the technology is that it often alerts police to gunfire more quickly, which in turn gets cops to the scene faster, Ortiz said.

It's not uncommon, the chief said, to have a delay between the shots being fired and the first 911 calls and in some cases shots go unreported entirely. And in many case, callers can only give a general area of gunshots, while this triangulation can pinpoint it to an address.

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