New Haven Register

Cops will soon be able to zero in on gunfire

By William Kaempffer, Register Staff
Tuesday, February 26, 2008

NEW HAVEN — In an average year, there are 450 confirmed reports of gunfire across the city, but police officials acknowledge that is only a fraction of what actually occurs.

Now, law enforcement hopes technology from a Silicon Valley tech startup can help provide an edge for street cops by letting police know within seconds when someone pulls a trigger, thereby allowing officers to respond to the exact location possibly while the gunsmoke is still in the air.

Later this year, using funding from a federal grant, ShotSpotter Inc., a Mountain View, Calif., tech firm, will install a network of rooftop sensors in part of the city. When operational, it will use acoustic triangulation to give real-time information to officers about the numbers of shots fired, number of shooters, direction of travel in moving gun battles and a reliable location to which to respond. Currently, police rely on 911 callers who might be reporting shots that occurred blocks away.

It's hard to say how much gunfire there really is in New Haven. City police track confirmed gunfire, that is, cases where forensic evidence such as shell casings are located or an eyewitness confirms it. But shootings from revolvers, which don't eject casings, or early morning incidents in which casings aren't easily seen, might be deemed unfounded.

Many other incidents simply go unreported by the community, either out of fear, indifference or because residents have become desensitized to sound of gunfire.

"In New Haven, we're still seeing people not calling in gunshots," said Police Chief Francisco Ortiz Jr.

Often enough, he said, police arrive at a scene and find a shooting victim, indisputable evidence of gunfire, but 911 operators didn't received a single call from the neighborhood.

That's not exclusive to New Haven. In gang-ridden Compton, Calif., a Los Angeles suburb, for example, only about 15 percent of gunshots are reported to police, according to a ShotSpotter executive.

"In other words, 85 percent of the time, nobody calls 911," said ShotSpotter CEO James Beldock. In contrast, in Boston, which installed ShotSpotter in 2007, police were alerted about 80 percent of the time.

In Oakland, Calif., for instance, gunfire dropped nearly 50 percent in the year after ShotSpotter was installed, said Beldock. But, he noted, the level of violent crime remained constant during that time, suggesting the deterrent factor affected people shooting guns for the sake of shooting,

while those bent on violence continued to blast away. Experience says the drop in violent crime typically occurs starting in the second year, said Beldock.

Right now, the gunshot locator system, which can differentiate between a gunfire and other noises, is deployed in 20 cities with nine other sites are under contract, he said.

Minneapolis police Sgt. Jesse Garcia called it a "very useful tool."

In the two years ShotSpotter has been in use there, Garcia said he didn't believe it reduced shooting volume, but it has helped police be more efficient in their response. In the past, officers might have had to canvass an eight-block area to find a scene; they now are sent to within a few houses, he said.

A look at a color-coded density map of gunfire in New Haven clearly defines neighborhoods that struggle most with violence. A north-to-south swath of different shades of blue bisects the city, from the Hill, through Dwight, Edgewood, Dixwell and ending at Newhallville at the Hamden line, known as the crime corridor. To the east, Fair Haven is a sea of blue. Other smaller blots mark other hotspots: Blake Street. Brook Hollow Apartments. McConaughy Terrace housing.

City Chief Administrative Officer Rob Smuts, said the system would be installed in either the corridor or Fair Haven. Funding would be enough to cover 90 percent of the corridor.

Garcia said his department is in the process of integrating ShotSpotter with police surveillance cameras, so video technology will automatically turn toward a location when ShotSpotter detects gunfire.

"In one homicide, we had (video) of the suspect vehicle coming and going, which helped out greatly with the investigation," he said. Minneapolis has two of five precincts equipped with the gunshot locator.

When New Haven's department eventually upgrades wireless connections to its squad cars, information seen by dispatchers would be available on car laptops.

In December, the federal government awarded New Haven $376,000 to install the ShotSpotter as part of a domestic appropriations and military funding bill. It was about a quarter of what the city requested to equip the entire city with the sensors.

In other cities, ShotSpotter technology has provided authorities with key information in some high-profile cases, including a police-involved shooting and an Ohio highway sniper case.

Last month, the FBI revealed ShotSpotter was employed in 2003 after a sniper began shooting random motorists and buildings near I-270 in Columbus, Ohio. After a few weeks with no leads or even a shell casing, the FBI set up gunshot locators along the highway and learned the shooter was firing from overpasses. Authorities were then able to recover shell casings. While a tip from the public led to the arrest, the ballistics evidence helped tie several shootings to the suspect's rifle, the FBI said.