

ShotSpotter Fact Sheet

What: ShotSpotter is an acoustic surveillance technology that incorporates audio sensors to detect, locate, and alert police agencies of gunfire incidents in real time. It quickly notifies police of gunshot crimes in progress with real-time data delivered to dispatch centers, patrol cars and even smart phones. It takes not more than 45 seconds from the actual gun discharge and the digital alert (including a precise location of event on a map) being delivered to the police agency.

Technology Acoustic sensors are strategically placed in an array of 15-20 sensors per square mile to detect and triangulate gunshot activity. The sensors are stationed at least 30 to 40 feet off the ground and deployed in elevated locations such as building rooftops, street light poles, cell towers, etc.

Each sensor captures precise time, location, and audio snippets associated with boom and bang sounds (impulsive noise) that may represent a gunshot. This data is first filtered by sophisticated machine algorithms then qualified and confirmed by human acoustic experts staffed in the 24x7 Incident Review Center (IRC) located at SST headquarters in Newark, Calif. The alerts include number of shots fired, the precise time and location (latitude and longitude) represented on a map and other situational intelligence such as multiple shooters etc. and are immediately sent to the police department.

Where: ShotSpotter is deployed in approximately 90 cities worldwide, including across 23 U.S. states and territories and covering approximately 450 miles. ShotSpotter coverage areas include a diverse set of cities by size, geography and socioeconomic standards, including: New York City; San Francisco; Boston; New Haven, CT; Canton, OH; Milwaukee, WI; Miami Gardens, FL; Camden, NJ; Denver, CO and San Antonio, TX.

Benefits: Officers can arrive at the scene of a crime faster, and with an increased level of safety and situational awareness knowing exactly where gunfire is taking place. These precise alerts also enable first responders aiding victims, interviewing witnesses and searching for forensic evidence critical to investigations that could also be used later in court. ShotSpotter is a tool that augments and enhances existing law enforcement manpower to improve response time and quality of response. Statistics show that fewer than one in five unlawful gunshots are called into 9-1-1. By responding to all shooting events in communities besieged with gun violence police can develop stronger community collaborations which is critical in gun violence deterrence.

Cost: The service is offered as a cloud-based solution with no expensive premise based equipment or software to be owned or maintained. The subscription fee is between \$65k and \$95k per square mile per year with a 3 square mile minimum.

Success: Law enforcement agencies and cities that have adopted SST solutions and best practices have experienced reductions in gunfire of up to 80% and reductions in related violent crime and homicides of as much as 40%.

According to the SST 2014 National Gunfire Index, using data from 28 cities where ShotSpotter was deployed, the median reduction in gunfire rates in 2014 was 28.8% compared to 2013. Ninety-three percent or 26 of the 28 cities saw reductions in their rates of gunfire.

New York City: Since deploying ShotSpotter in March 2015, the NYPD has had 27 gun

recoveries and 21 arrests related to ShotSpotter alerts and 11 of these arrests had no calls to 9-1-1 (source: Deputy Commissioner Tisch, NYPD, November 2015)

Camden, NJ: Gunfire is down 48% from 2013 to 2014, since deploying ShotSpotter. In addition, murders are down 51%, firearm assaults down by one third, and all violent crime is down 22%, according to the Camden Police Department.

Springfield, MA: From 2013 to 2014, gunfire incidents are down 51.2%. ShotSpotter alerts come into every police cruiser, self-dispatching helps speed police response. For 90 gunfire incidents in Springfield, 340 shell casings were recovered; 28 victims located; 8 guns were recovered and 10 arrests were made.

Miami Gardens, FL: Had a 69% reduction in celebratory gunshots on Fourth of July in 2014 vs 2013. It also had an 80% decrease in New Year's Eve celebratory gunfire when comparing 2014/15 over 2013/14, where they went from 129 shots to 26.

Kruger National Park, SA: With a very small proof of concept deployment; ShotSpotter detected two rhino poaching events, which led to the capture and prosecution of several poachers as well as the recovery of a baby rhino (named Dot) whose mother rhino was poached.

Privacy: ShotSpotter uses acoustic sensors designed to detect, locate and deliver gunfire alerts, not record conversations. The acoustic sensors are located on top of buildings, rooftops and poles, roughly 30' or more above street level. The sensors are designed to trigger (or activate) on very loud noises, such as when a gun is fired. The sensors are designed to record seconds of the gunfire. If no gunshots were detected, sensors only retain audio less than 72 hours.

Court: SST data has been admissible in court cases in 17 states as well as in federal court. Federal homicide prosecutors are using ShotSpotter analysis and evidence to determine if a gunshot has or has not occurred, the location of the gunshot, and the precise location of the shooting. ShotSpotter technology has withstood challenges under Kelly-Frye and Daubert. Analysts from SST frequently testify as expert witnesses and the company also provides detailed forensic reports for trial cases upon request.

When: ShotSpotter is a Silicon Valley based; privately held venture capital backed; technology company that has a history of technology innovation including 31 issued patents. It launched its current subscription-based solution, ShotSpotter Flex, in 2011. SST SecureCampus™ and ShotSpotter SiteSecure™ for Critical Infrastructure both indoor/outdoor protection solutions launched in 2014. More information at www.shotspotter.com

Media Contact:
Liz Einbinder
Leinbinder@shotspotter.com
510-794-3147