ShotSpotter

ShotSpotter Q&A

1. What is ShotSpotter?

Police rely on the community to call 911 if gunshots are fired, but only 20% of incidents are ever reported on average. This creates a situation where police departments have a large data gap that makes it difficult to be able to effectively "serve and protect" when it comes to gun violence. ShotSpotter fills the gap with a network of acoustic sensors that can detect, locate and alert police to nearly all gunshot incidents. The system is in operation in 100 cities and is used by police to: 1) be able to respond to a higher percentage of gunfire incidents; 2) improve response times to crime scenes to better aid victims and find witnesses; and 3) help police locate key evidence to identify and prosecute suspects.

2. How does ShotSpotter work?

ShotSpotter uses an array of acoustic sensors that are connected wirelessly to ShotSpotter's centralized, cloud-based application to reliably detect and accurately triangulate (locate) gunshots. Each acoustic sensor captures the precise time and audio associated with impulsive sounds that may represent gunfire. This data is used to locate the incident and is then filtered by sophisticated machine algorithms to classify the event as a potential gunshot. Acoustic experts, who are located and staffed in ShotSpotter's 24x7 Incident Review Center, ensure and confirm that the events are indeed gunfire. They can append the alert with other critical intelligence such as whether a fully automatic weapon was fired or whether there are multiple shooters. This process takes less than 60 seconds from the time of the actual shooting to the digital alert popping onto a screen of a computer in the 911 Call Center or on a patrol officer's smartphone or mobile laptop.

3. What types of cities use ShotSpotter?

ShotSpotter is used in 100 cities and is highly regarded by law enforcement as a critical component of gun violence prevention and reduction strategies. ShotSpotter protects a wide range of city types and sizes ranging from urban metropolitan cities such as Chicago and New York City; to medium-sized cities such as Boston, Denver, and Oakland; and small cities with populations less than 50,000 such as Richmond, CA and Pleasantville, NJ. A list of all ShotSpotter cities can be found here.

4. How effective is ShotSpotter?

Gunshot detection by itself is not a panacea for gun violence, but if used as part of a comprehensive gun crime response strategy, it can contribute to a reduction. The vast majority of cities that have adopted ShotSpotter have done so as part of an overall strategy and have seen great value and experienced positive outcomes such as reduced gun violence, an increase in arrests, and an improvement in police-community relations. Please visit Results for more details.

5. Does ShotSpotter detect gunshots from gun silencers?

Yes, it does. "Silencers" are more accurately called suppressors as they suppress the impulsive sound of gunfire, but do not wholly eliminate it. The ShotSpotter sensors are designed to pick up the sound of gunfire from suppressors, but it does make it more challenging.

6. Does ShotSpotter have video monitoring capability?

No. ShotSpotter is an acoustic-based system, but it is designed to integrate with widely used video monitoring systems. ShotSpotter can integrate by sending an alert to a video management system, which can then use the information to pan, tilt and zoom an IP addressable camera in the appropriate area or direction.

7. **Does ShotSpotter listen in on private conversations?**

ShotSpotter has developed its technology and policies to enhance public safety while respecting individual privacy. The company is able to limit the risk of audio surveillance through the way its technology works along with strict controls and policies that have evolved over the years including an independent privacy audit.

It is important to note that human voices and street noise will never trigger a sensor because they do not produce an instantaneous, sharp sound. Live streaming of sensor audio is not possible by company employees, police or third parties.

Please visit our privacy protections [page](#) for a more comprehensive discussion of this important topic.

8. Does ShotSpotter replace police officers?

No. Today's police departments need both manpower *and* technology. ShotSpotter is a tool that augments and enhances the existing personnel to both improve police response time and quality of response. By pinpointing the precise location of gunshot incidents and tracking geographic patterns of gun violence, law enforcement resources can be deployed more effectively and more proactively.

9. How much does ShotSpotter cost and what does it include?

ShotSpotter is an affordable, cloud-based service with an annual subscription fee that covers valuable services, as well as licenses and maintenance. The subscription fee varies based upon the scope and complexity of a customer's targeted coverage area.

There is a one-time fee for service initiation and customer onboarding. A ShotSpotter subscription includes:

- **Gunshot Alerts** – delivered 24/7/365 to desktops, mobile phones or patrol car MDTs within 60 seconds of trigger pull. Alerts uniquely provide precise location of incident, number of rounds, audio of gunfire, and tactical intelligence such as "multiple shooters" or "automatic weapons"
- **Apps for Dispatch and Patrol Officers with Unlimited Number of Users** – to receive and review alerts
- **Incident Review Center** – Staffed 24/7/365 by trained acoustic experts who review and classify gunfire to minimize false positives or negatives and add tactical data
- **Investigative Lead Summary (ILS) –** The ILS provides useful details about the location, timing and sequence of each shot fired during an incident immediately after it happens. This report provides helpful information to find shell casings and arm officers with powerful data to conduct witness interviews and confront suspects on scene. It is available as part of an alert immediately after the incident happened and can be accessed from the mobile, web or desktop versions of the ShotSpotter Respond app.
- **Investigator Portal** – provides data analytics on incidents for investigatory purposes and to develop Hot Spots reports
- **End User Training, 24/7/365 Technical Support and Software Upgrades**
- **Customer Success Program** – a team of former law enforcement executives, analysts and trainers are available as part of the ongoing subscription to assist the agency in utilizing the full potential of the system, adopting best practices and annual Account Reviews

10. How is ShotSpotter data being used in court?

District attorneys and federal prosecutors rely on ShotSpotter evidence to assist them in prosecuting gun crimes. ShotSpotter provides Detailed Forensic Reports as evidentiary documents which include precision positioning calculations of each gunshot, exact timing of shots, and map placements of firing locations for every shot fired. This evidence has received favorable rulings in Daubert and Frye challenges, and as a result has been used in trials at both the local and federal level. ShotSpotter provides expert witnesses to present the data at trial. These are optional services available for a fee. Details on these services are available on Forensic Services [page](#).

11. Does ShotSpotter integrate with other products and services?

Yes. ShotSpotter has an optional API that sends gunfire data to devices like cameras to instruct them to turn in the direction of detected gunfire. The company has integrated with VMS, LPRs, real-time crime center software, CAD and other systems.

12. What other products does ShotSpotter have?

In the last few years, ShotSpotter has taken its market-leading gunshot detection technology and adapted it to help protect America's campuses and universities with SecureCampus™ as well as corporations, government buildings, hospitals and highways with SiteSecure™.

In addition, the company purchased the crime forecasting and patrol management software application HunchLab. Renamed ShotSpotter® Missions™, this service enables agencies to plan patrol missions based on the highest risk of various crime types in defined locations such as beats or districts during each shift. The service also helps command staff better track and manage their patrol resources. More information on Missions can be found here.

13. Is ShotSpotter available outside the U.S.?

Yes. ShotSpotter is currently operating outside the U.S. in Cape Town, South Africa and in Nassau on the Island of the Bahamas. The technology can be adapted to work in many international locations and the company has stated plans to expand into Latin America.