



1. What is ShotSpotter?

Police rely on the community to call 911 if gunshots are fired, but only an average of 20% of incidents are ever reported. 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 data 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 more than 90 cities and is used by police to: 1) increase response rates to gunfire incidents; 2) improve response times to a crime scene to more quickly aid victims and identify 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 full automatic weapon was fired or whether there are multiple shooters. This process takes less than 60 seconds and typically between 30 to 45 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 more than 90 cities across the United States 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; medium-sized cities such as Boston, Denver, and Oakland; and small cities with populations less than 50,000 such as Richmond, CA and Glendale, AZ. 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. Do citizens still need to call 9-1-1 if ShotSpotter is deployed in their city?

Yes, we always recommend citizens call 9-1-1 if they hear a gunshot as it may have come from an area not covered by ShotSpotter. However, studies have shown that only 1 in 5 gunfire



incidents are called into 911, which is why ShotSpotter is so important to help law enforcement be aware of gunshots and be able to respond quickly and accurately.

6. 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.

7. 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 separately pan, tilt and zoom an IP addressable camera in the appropriate area or direction. By combining these technologies, ShotSpotter enables law enforcement agencies to benefit from the best in video monitoring technology, while also benefiting from the best in acoustic gunshot detection and location technology.

8. Does ShotSpotter listen in on private conversations?

No. Human voices do not trigger the sensors. The sensors detect only loud, impulsive sounds. Only when a short, explosive sound is detected - essentially a bang, boom or pop - does the system activate and permit a short snippet of audio to be sent for evaluation by a machine, and in some cases, a human, to determine if it is indeed a gunshot or another sound such as a firecracker or car backfire. Otherwise, the audio will be flushed from the sensor's buffer and permanently deleted within 72 hours. The sensors do not have the ability to live stream audio. The technology provides only a few seconds of audio just before and after a gunshot. On rare occasions, if voices are concurrent with the gunshot, and are loud enough and close enough to a sensor, then they may be captured in the brief audio alert snippet.

9. 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.

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.

11. 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
- **Investigator Portal** – provides data analytics on incidents for investigatory purposes and to develop Hot Spots reports
- **ShotSpotter Forensic Services** – Supports customer investigation efforts and strengthens court cases, including: Forensic Audio Search, Enhanced Incident Reports, Detailed Forensic Reports, Expert Testimony for court cases
- **ShotSpotter Integration Services** – Enables customers to export ShotSpotter data to other law enforcement agency systems
- **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

12. Does ShotSpotter have products for other applications beyond cities/police departments?

Yes. In the last few years, ShotSpotter has taken its market-leading 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™.

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

ShotSpotter is currently operating outside the U.S. in Cape Town, South Africa. The technology can be adapted to work in many international locations and the company has stated plans to expand into Latin America over the coming years.