

ShotSpotter[®] Missions[™]

Product FAQ

How can Missions[™] benefit a police department?

- Police departments are constantly being asked to do more with less and ShotSpotter Missions helps agencies make their patrol resources more efficient and effective in reducing crime. The software provides intelligence to direct patrol and task force units in a more precise and impactful way based on daily AI-driven risk assessments for multiple crime types in their service area. The system also suggests specific tactics to use that are appropriate for the situation. Missions collects data that can be analyzed to determine the impact that these directed patrols and tactics have on crime so that they can be optimized over time. Specifically, Missions:
 - **Detects** areas at highest risk for crime on a shift-by-shift and beat-by-beat basis
 - **Protects** the community by ensuring patrols are placed at the right place before crime occurs to create a deterrent effect, leading to lower crime rates
 - **Connects** the tactics and dosage to their crime impact so police can continually assess and optimize their patrol strategies and create safer communities

What crime types does it forecast?

- Part 1 Crimes: Gunfire, homicide, aggravated assault/battery, robbery, burglary, motor vehicle theft, and theft

Can it track only crime types that are of interest to me?

- Yes, crime forecasts can be configured based on those crimes of interest to a police department. For larger agencies, each district may have their own crime type priorities and that can be easily accommodated.
- A separate risk model is created for each crime type enabling the technology to have a unique configuration for each agency and their jurisdictions that use it

What data feeds into the crime risk models?

- Missions uses historical and current ShotSpotter detected gunfire incidents, other crime incidents, calls for service, seasonality, time of day, day of week, census data, upcoming events, and environmental features (e.g., density of bars, density of vacant parcels, etc.).
- ShotSpotter Missions does not include any race, educational, or home ownership data from the census
- ShotSpotter Missions does not use any personally identifiable information about specific residents, such as whether a neighborhood has a certain number of parolees or sex offenders. It is focused on creating risk assessments for where and when crimes will occur, not who will commit the crime.

What kind of protections does Missions have to avoid bias or discrimination?

The company has incorporated new technology and policy protections to avoid bias or discrimination yet still yield a significant public safety benefit. These protections include:

- Incorporating objective, non-crime data into risk models such as weather, geospatial features such as density of bars or vacant lots, event schedules, census data and ShotSpotter verified gunfire data
- Automatically randomizing patrol assignments to avoid oversaturating high-risk areas and ensure that lower risk areas receive adequate crime deterrence treatment
- The company has made a policy decision to not allow the system to create risk assessment models for crime types that are susceptible to enforcement bias. This can occur when police presence in an area can lead to more crime being recorded in that area which in turn can create runaway feedback loops that will continually return police to the same area.
- In addition, Missions does not use any personally identifiable information (PII) for crime forecasting.

Will Missions cause oversaturation of patrolling and cause community dissatisfaction?

- Many police agencies have either the same patrol plans for several months in a row or leave it entirely to the discretion of officers. This can result in patrol oversaturation in some areas. ShotSpotter Missions recommends patrolling only the highest risk areas for the most important crime types as deemed by the agency. The system intelligently meters out when those missions occur, randomizes patrol assignments and limits their duration to prevent oversaturation.

How often are the crime forecasts updated?

- The forecasts are generally updated for each shift, but this is configurable and can be updated often.

Does Missions replace human experience and intuition?

- Officers know their beats well and may be skeptical of an analytical tool that can provide further benefits. The product supplements officer knowledge and hunches with data that is constantly being collected and analyzed. It enables officers to hit the street with the added intelligence to be on the lookout for and prepare them for what they might face.

How does Missions support crime analysts?

- The system automates routine labor-intensive data input and analytical tasks that crime analysts would typically spend hours on. This creates time for higher value-added activities like assisting with investigations and developing effective strategies to address crime.
- Analysts or other authorized users can add or suppress directed patrols based on new events or intelligence or swings in patrol capacity

What kind of tactical advice does the product have?

- The product proactively recommends tactics to officers once they arrive at the mission area such as foot patrol, talking to business owners, knocking on doors, etc. These tactics are based on the crime type, other agency best practices and the local agency's preferences. The system also tracks the tactics so they can be analyzed and correlated to the impact on crime and help optimize operational practices.

Why choose ShotSpotter Missions?

- Missions uniquely uses combines historical crime data with non-crime data such as calls for service, seasonality, time of day, day of week, census data, upcoming events, and environmental features. This provides more precise and accurate crime risk assessments than standard hotspot mapping and competitive products and avoids enforcement bias.
- Missions exclusively uses real-time ShotSpotter gunfire data to create and continuously update gunfire forecasts makes risk assessments more comprehensive and accurate since only 20% of gunfire is reported by citizens
- The system is highly flexible and can configure to an agency's needs such as choosing which crime types to focus on, weighting those crime types relative to each other, which tactics to use and track.
- ShotSpotter has the resources and commitment to ensure your use of Missions is a success for your department and community. We have a team of data scientists, engineers, customer success and support team members to ensure your satisfaction.

How long does it take to deploy?

- It is a relatively straightforward and streamlined deployment process. Step one is getting data integration feeds from police CAD and RMS with historical and real time crime data. There is an option to include vehicle location data via AVL to track officer engagement.
- Step two is ShotSpotter setting up the system using the police mapping and beat data and configuring the system to an agency's needs
- Step three is having ShotSpotter load and set up the logic for patrol tactics and activities
- The deployment process can be completed in a matter of weeks with onboarding of officers and go live following soon thereafter

How much does ShotSpotter Missions cost?

- There is a tiered annual subscription fee based on the size of the agency that includes 24x7x365 customer support and best practices consulting help
- There is also a one-time set up fee that includes provisioning the account; agency data integrations; configuration of maps, crimes types, and tactics; model creation; and training and best practices.