AGENDA REPORT

TO: Jestin D. Johnson
City Administrator

FROM: Floyd Mitchell
Chief of Police

SUBJECT: OPD ShotSpotter Annual Report

DATE: September 26, 2024

City Administrator Approval

Jestin Johnson (Sep 26, 2024 15:19 PDT)

Date: Sep 26, 2024

RECOMMENDATION

Adopt A Resolution Accepting The Annual Report For The City's Gunshot Location Detection System And Making A Determination Regarding Whether The City Should Continue To Use This Technology

EXECUTIVE SUMMARY

The Surveillance Technology Ordinance (Oakland Municipal Code Chapter 9.64) imposes the following requirements for Surveillance Technology that has been approved by City Council: (1) that City staff must present an Annual Surveillance Report (Annual Report) to the Privacy Advisory Commission for their feedback; (2) that the PAC must make a recommendation to City Council on whether the technology should be continued to be used; and that (3) after reviewing such recommendation, City Council shall revisit the "cost benefit" analysis in its approval of the technology and either uphold or set aside its previous determination.

The City's Gunshot Location Detection System (GLD or ShotSpotter) 2023 Annual Report[1] **(Attachment A)** was presented April 2, 2024, to Oakland's Privacy Advisory Commission (PAC) in compliance with Oakland Municipal Code (OMC) Section 9.64.040, which among things requires the PAC to:

> "recommend to the City Council that the benefits to the community of the surveillance technology outweigh the costs and that civil liberties and civil rights are safeguarded; that use of the surveillance technology cease, or propose modifications to the corresponding surveillance use policy that will resolve concerns."

By a vote of 4 ayes, 2 noes, and 1 abstention, the PAC adopted the following motion:

> "the PAC recommends not to renew or extend the contract with ShotSpotter, which expires June 30, 2024, and that the approximately one point eight million ($1,800,000) in

---

[1] See OPD ShotSpotter 2023 Annual Report (**Attachment A**) for more detail on OPD's use of ShotSpotter in 2023

Public Safety Committee
October 8, 2024

future savings be directed towards a more effective and proven alternative with less impact to civil liberties that will improve public safety."

The reasons why the PAC recommended that City Council not renew the contract and to set aside its previous authorization of the GLD, were not based on privacy or civil liberty concerns. Rather, the PAC's deliberations focused on whether the technology was cost effective as a form of crime deterrence and as an investigative tool. The PAC's discussion with City staff covered a broad range of issues including the value the technology in aiding OPD to respond to gunshot incidents in a timely manner, whether the system helped save lives of gunshot victims, whether the system aided OPD in prosecution of persons charged with crimes or building future cases, and whether funds for the system could be better spent on other tools to deter and/or investigate crime. Members of the PAC stated that the funding, for example, could be used instead by the OPD crime lab to process the backlog of evidence and other investigative work.

While the Oakland Police Department (OPD) understands the reasoning behind the PAC's recommendation, the OPD respectfully disagrees and recommends that the City Council approve the Surveillance Use Report for the GLD and authorize OPD to continue to use the system, based on the following considerations. GLD Service Coverage enhances the ability of the OPD to provide the residents and visitors of Oakland with a long-term crime deterrence and investigative tool. Awareness of gunfire incidents and cumulative data collection enables proactive crime analysis and strategic deterrence. In 2023, ShotSpotter alerted OPD to 8,318 unique gunshot incidents – 8,318 (99%) were not called in by the community and OPD would not have known about them nor have been able to respond in a timely fashion. In many cases, ShotSpotter has allowed for the rapid response to shooting scenes where injured victims are able to receive immediate and potentially lifesaving medical aid. Also, Oakland's Operation Ceasefire leverages ShotSpotter data to identify active gang/group conflicts, which enhances laser-like focus on those individuals at great risk of violence, for both preventative and proactive enforcement.
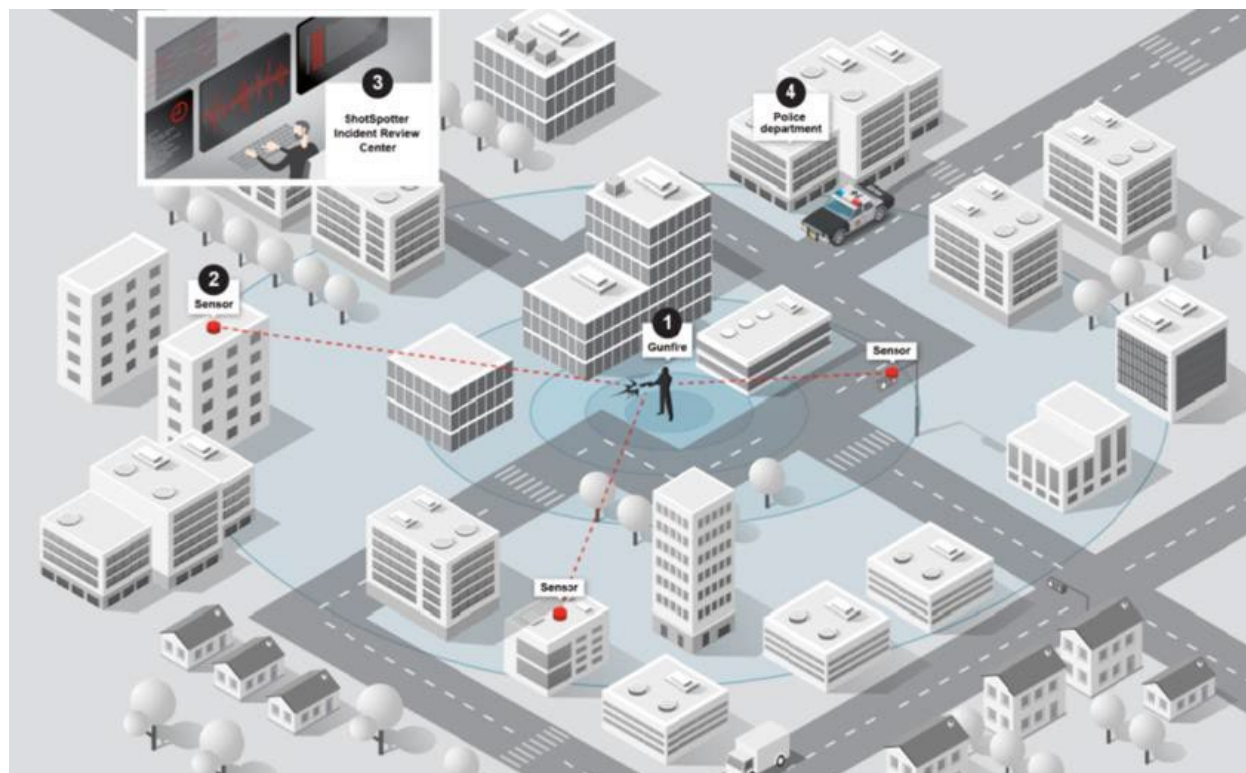
BACKGROUND / LEGISLATIVE HISTORY

ShotSpotter System

The ShotSpotter System is composed of outdoor acoustic sensors placed strategically to detect gunshots. The sensors can identify and time-stamp impulsive acoustical noises in the acoustic range of gunshot types; the system triangulates the location of the sound source to within 25 meters and runs features of the sound through machine classification. ShotSpotter's Incident Review Center (IRC) is manned by trained experts who confirm the machine classification and publish an alert - typically within 30-45 seconds of the trigger pull (see **Figure 1** below).

Gun-related crimes that occur in Oakland often go unreported, and many times gunshot reports to OPD dispatch are not accurate. ShotSpotter gunshot detection data shows that <u>less than 1 percent of gunshot alerts are matched by 9-1-1 calls for service received</u> within a reasonable distance and timeframe of gunfire incidents (within 300 feet and 3 minutes of the incident).

Figure 1 – How the ShotSpotter System Works

ShotSpotter provides near-instant notifications to officers of gunshot crimes in progress with real-time data delivered to OPD Communications Section and patrol vehicles. Officers can use their vehicle computers for real-time access to maps of shooting locations and gunshot audio. Between ShotSpotter data and communications with OPD dispatch, patrol personnel also receive actionable intelligence detailing the number of shooters and the number of shots fired; this type of information is incredibly important for officer safety. The system pinpoints precise locations for first responders.

Near-real time notifications translate into quicker access to gunshot victims – potentially providing a response that means the difference between life and death. In 2023, ShotSpotter alerted OPD to 8,318 unique gunshot incidents – 8,318 (99%) were not called in by the community and OPD would not have known about them nor have been able to respond in a timely fashion. There were 199 shooting victims related to ShotSpotter alert notification, 29 of which were homicides and 170 were injured. It is highly likely that some of the 170 injured shooting victims may have lost their lives or suffered greater injury without a ShotSpotter notification that leads to subsequent emergency response. The fact that a rapid and focused response may lead to an injured victim, thus allowing first responders to provide immediate medical aid, ShotSpotter's utilization as a life-saving tool cannot be ignored.

The notifications also allow responding personnel to locate critical gun crime evidence (e.g., guns and bullet casings). ShotSpotter activations in 2023 led to 1,870 crime incident reports; 987 (53%) of these incidents resulted in OPD Crime Lab requests for further firearm forensic analysis. Historically, officers would have to spend significant amount of time driving the areas and block by block looking for evidence without knowing exactly where to respond. This

additional time provides criminals ample time to leave the shooting scene and potentially

discard and/or destroy evidence. Additionally, officers need to canvas areas and potentially leave communities feeling uncomfortable with a less focused presence and a much larger police footprint. ShotSpotter activations also lead to the location of expended casings at shooting scenes. Expended casings are then analyzed to determine links between shooting events, providing investigators with intelligence and evidence that often leads to the identification of a shooting series, trigger puller(s), and/or gang/group involvement.

ShotSpotter Forensic Reports

ShotSpotter's forensic reports have provided evidence to support criminal cases as well as evidence in liability cases for the City such as officer involved shootings. In 2023, ShotSpotter provided twenty detailed and enhanced forensic reports for OPD[1] that provided law enforcement and criminal justice professionals with detailed audio and incident analysis. These reports contain scientific, court-admissible evidence and are used in court cases and prosecutions.

ANALYSIS AND POLICY ALTERNATIVES

ShotSpotter Area

The ShotSpotter Gunshot Location Detection (GLD) system is a proven gun crime response tool. The system ultimately serves as a tool of deterrence, rapid response, operational support, evidence collection, and a high potential of saving lives. This practically instantaneous awareness of gunfire incidents – combined with cumulative data collection - enables proactive crime analysis and strategic deterrence. The City has expanded the system over several contracts:

Phase I with red borders (Activated in 2006): 6.0 square miles*
East Oakland: East of High Street to 106th Avenue
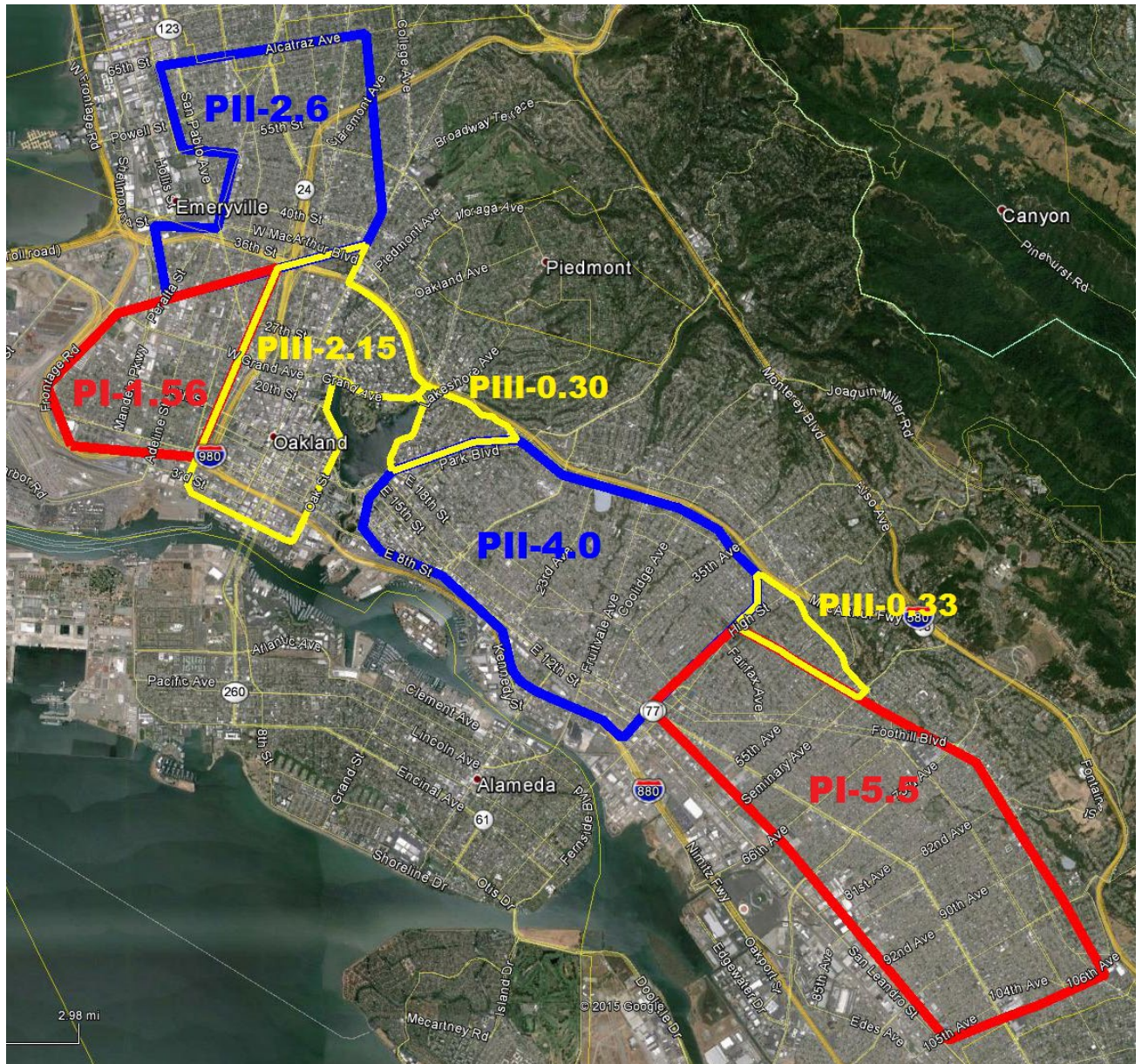West Oakland: East of Highway 980 to Frontage Road

Phase II with blue borders (Activated in 2013): 6.64 square miles
East Oakland: West of High Street to Park Boulevard
North Oakland: North of Highway 580 to Alcatraz Avenue

Phase III with yellow borders (Activated in 2016): 2.78 square miles
Downtown Oakland: Jack London Square to about West MacArthur Boulevard
Cleveland Height area: East of Lake Merritt to Highway 580 & Park Boulevard
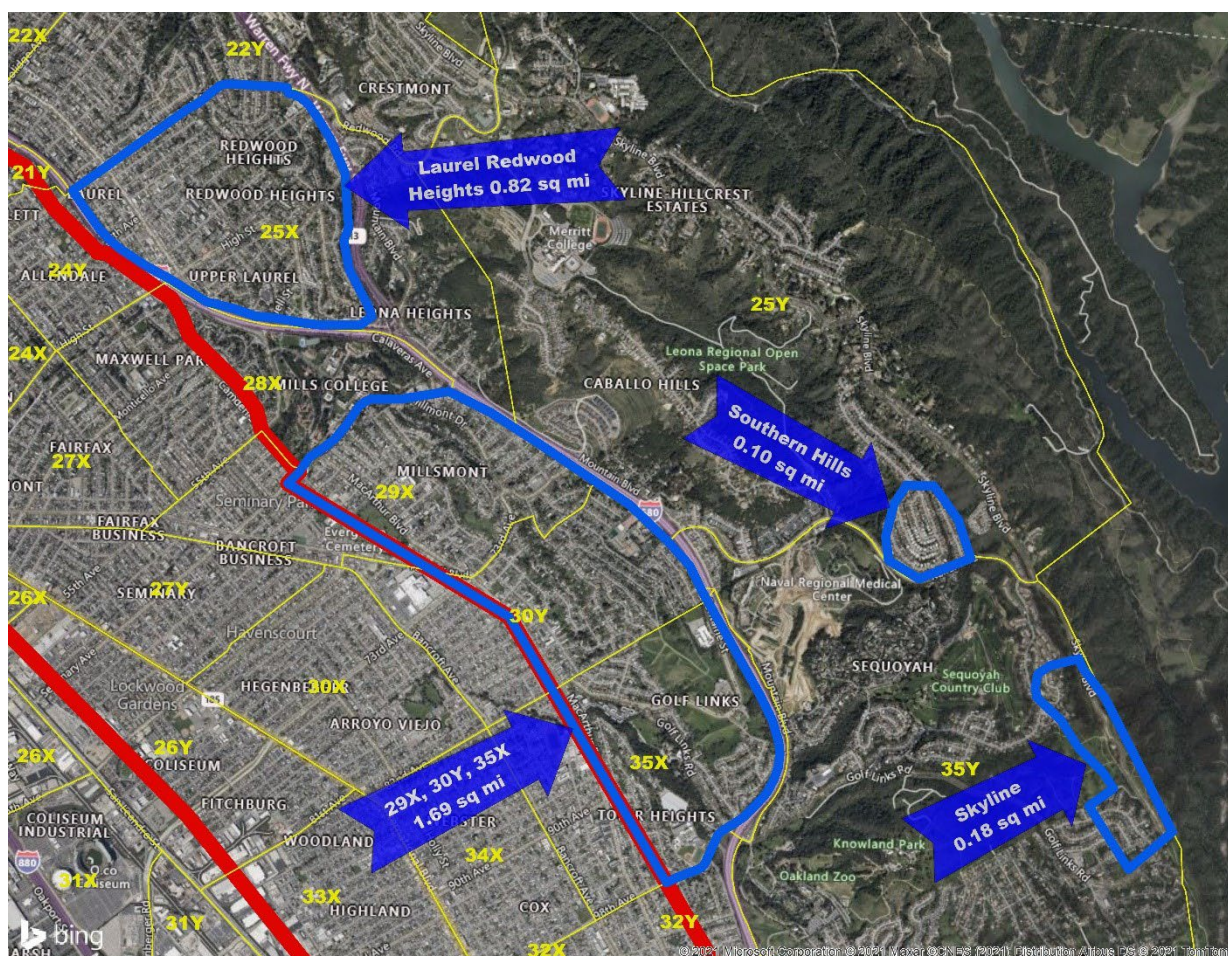Maxwell Park: East of High Street to Highway 580 & Mills College

While the original contracted coverage total for Phase I was 6.0 mi², an additional 1.06 mi² of ShotSpotter coverage was added, at no charge, for a total of 7.06 mi² when Phase I service was upgraded and converted to the newer subscription platform in 2011.

Phase IV with blue borders (Activated in 2021): 2.79 square miles
Laurel Redwood Heights: Covering a portion of Beat 25X
Southern Hills: Covering a portion of Beat 25Y
Millsmont/Golf Links: Covering Beats 29X, 30Y, and 35X
Skyline: Covering a portion of Beat 35Y

ShotSpotter has proven to be an effective and accurate technology for evidence collection and improved investigations. ShotSpotter has a quick response and an alert to OPD takes less than 60 seconds. Additionally, in 2023 OPD was able to recover 56 firearms and 980 casings from ShotSpotter cases. SoundThinking approximates 400 lives have been saved with the use of the technology from 2020-2023. In each of these victims' cases, there were no 911 calls placed within the 15 minutes of the ShotSpotter activation. Please see **Attachment B** for more information about ShotSpotter. Additional information can be found at this link.

ShotSpotter Frequently Asked Questions – SoundThinking

This policy advances the Citywide priority of holistic community safety. Continued utilization of the ShotSpotter System will increase the likeliness of apprehending suspects involved in a violent crime. All Oakland residents and visitors benefit from efforts to decrease crimes using guns. Oaklanders in less advantaged communities often face higher rates of gun violence and thus stand to benefit greatly from these gun violence deterrence efforts.

FISCAL IMPACT

The technology costs a total of $841,670 a year for a total of three years starting July 1, 2024.

Funding for FY2024-25 will be available through the General-Purpose Fund (1010), Information Technology Unit Org. (106410), Contract Services Account (54919), ShotSpotter Project (1000752) in the amount of $499,084, ShotSpotter Project (1000789) in the amount of $297,402 and Department Administrative Project (1000008) in the amount of $45,184, Agency-wide Administration Program (PS01). This funding totals $841,670. Funding for additional years will be contingent on future approval of Council's adopted budget for FY 2025-26 and FY 2026-27.

PUBLIC OUTREACH / INTEREST

An important part of SoundThinking's Customer Success team is their Community Engagement group. Their team engages with Community Groups to help them understand the ShotSpotter technology and its value in saving lives. In addition, they have significant data on the hot spots for gun violence including time of day, days of week, and proximity to schools, etc. This information be used by community organizations to help them shape their violence prevention strategies. They make concerted efforts to reach impacted communities for discussion. In Oakland to date, they have met with members of Faith in Action, Youth Alive, and the NAACP, and others to educate them on the value of this tool for OPD and public safety.

COORDINATION

The ShotSpotter system's 2023 annual report[2] **(Attachment A)** was presented April 2, 2024, to Oakland's Privacy Advisory Commission (PAC) in accordance with the City's Surveillance Technology Ordinance memorialized in Oakland Municipal Code (OMC) Section 9.64. Although the PAC did not recommend renewal of the ShotSpotter subscription by a vote by commissioners of 4 ayes, 2 noes, and 1 abstaining, the reason why PAC recommended not renewing the contract was not for privacy or civil liberty concerns. They acknowledged that the OPD response due to the ShotSpotter technology does save lives. Additionally, in the meeting PAC stated, "the PAC recommends not to renew or extend the contract with ShotSpotter, which expires June 30, 2024, and that the approximately one point eight million ($1,800,000) in future savings be directed towards a more effective and proven alternative with less impact to civil liberties that will improve public safety."

PAC stated that the funding, for example, could be used by the OPD crime lab to process the backlog of evidence and other investigative work.

The Office of the City Attorney reviewed this report and accompanying resolution.

SUSTAINABLE OPPORTUNITIES

Economic: Timely response to crime scenes and improved crime analysis capability will result in

---

[2] See OPD ShotSpotter 2023 Annual Report (**Attachment A**) for more detail on OPD's use of ShotSpotter in 2023

resource optimization. OPD can focus efforts on crime trends and patterns while enhancing police services delivery. This will provide a safer environment for Oakland residents, visitors, and for economic activity.

Environmental: There are no environmental issues associated with this report.

Race and Equity: Continued utilization of the ShotSpotter System will increase the likeliness of apprehending suspects involved in a violent crime. All Oakland residents and visitors benefit from efforts to decrease crimes using guns. Oaklanders in less advantaged communities often face higher rates of gun violence and thus stand to benefit greatly from these gun violence deterrence efforts.
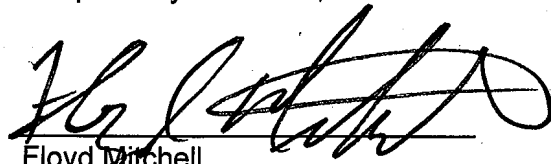
ACTION REQUESTED OF THE CITY COUNCIL

Adopt A Resolution Accepting The Annual Report For The City's Gunshot Location Detection System And Making A Determination Regarding Whether The City Should Continue To Use This Technology

For questions regarding this report, please contact A/Captain Steve Valle at svalle@oaklandca.gov.

Respectfully submitted,

Floyd Mitchell
Chief of Police
Oakland Police Department

Reviewed by:
Fred Shavies II, A/Deputy Chief of Police
OPD, Bureau of Investigations

Steve Valle, A/Captain
OPD, Ceasefire Division

Prepared by:
Dr. Tracey Jones, Police Services Manager
OPD, Research and Planning Section

Attachments (2):
A: OPD ShotSpotter 2023 Annual Report
B: ShotSpotter Infographic