City of Seattle

2024 Surveillance Impact Report Executive Overview

Acoustic Gunshot Location Systems

Seattle Police Department

DRAFT

Overview

This Executive Overview documents information about the collection, use, sharing, security, and access controls for data that is gathered through Seattle Police Department's (SPD) Acoustic Gunshot Location System (AGLS). All information provided here is contained in the body of the full Surveillance Impact Review (SIR) document but is provided in a condensed format for easier access and consideration.

1.0 Technology Description

The SPD proposes deploying AGLS in select areas to accelerate the response capabilities of police and EMS personnel to aid victims, locate and preserve evidence, and hold accountable those responsible for gun violence. AGLS will only record gunfire. It does not record conversations or sounds that are not gunfire.

Acoustic Gunshot Location Systems are acoustic sensors that utilize microphones placed in a defined geographic area that are programmed to detect the sound of gunshots and alert police and 9-1-1 when and where the incident has taken place. The system may or may not have human involvement.

The sensors are approximately the size of a lunchbox and generally placed on building rooftops or utility poles. There are typically no markings disclosed in efforts to mitigate vandalism or destruction. Some sensors have solar-powered capabilities; others need direct access to electricity.

2.0 Purpose

Gun violence, human trafficking, and other serious felony crimes are concentrated at specific geographic places, and long-time efforts to prevent these crimes have not been consistently successful. SPD is experiencing unprecedented patrol and investigations staffing shortages which hinders police effectiveness.

Deploying AGLS would mitigate patrol and investigations staffing shortages by leveraging evidence-based and industry-standard technologies to deter gun violence where it is concentrated. AGLS would also accelerate the response capabilities of police and EMS personnel to aid victims, locate and preserve evidence and hold accountable those responsible for gun violence.

3.0 Data Collection and Use

The information collected with the AGLS system are audio recordings with a short segment before and a short segment after a detected gunshot incident, as well as the estimated location of where the shot occurred. The audio recordings include only gunshots (no conversations) and only records if the technology detects a sound of 120 decibels or above (much louder than the normal range of human conversation which is typically 60 – 70 decibels). The recordings and associated locations are retained for as long as SPD needs based on investigative and operational requirements.

SPD Policy 7.010 governs the submission of evidence and requires that all collected evidence be documented in a General Offense (GO) Report. Evidence is submitted to the Evidence Unit and associated with a specific GO Number and investigation.

4.0 Data Minimization & Retention

Most AGLS vendors use multiple acoustic sensors to locate a potential gunshot incident, which is then filtered using machine algorithms to identify and classify the event. Additionally, some AGLS vendors employ human acoustic analysts in a 24/7 review center as an additional accuracy check for each incident (for example, listening for common sounds that are mistaken for gunfire, like a vehicle "backfire").

The retention period for detected gunshot incidents will depend on whether the data gets used as evidence. Data that is not associated with a suspected gunfire incident will be overwritten every 30 days.

Audits from the Office of Inspector General or other official auditors will be allowed as needed.

5.0 Access & Security

Access

Only authorized SPD, OIG and OPA users can access the AGLS data while it resides on the devices. Access to the systems/technology is limited to authorized personnel via password-protected login credentials or through the single sign-on method.

Data extracted from the system/technology and entered into investigative files is securely input and used on SPD's password-protected network with access limited to authorized detectives and identified supervisory personnel.

All SPD employees are backgrounded and access is controlled by SPD Manual Title 12 provisions governing Department Information Systems including SPD Policy 12.040 - Department-Owned Computers, Devices & Software, SPD Policy 12.050 - Criminal Justice Information Systems, SPD Policy 12.080 – Department Records Access, Inspection & Dissemination, SPD Policy 12.110 – Use of Department E-mail & Internet Systems, and SPD Policy 12.111 – Use of Cloud Storage Services.

Vendors will have knowledge of the client and access to sound and location data only, no personal information.

Security

AGLS data will be securely stored in a cloud-based environment. As an example, one major AGLS vendor stores data in Amazon Web Services (AWS), utilizing two-factor authentication and single sign-on (SSO) with Active Directory (AD) integration. The storage configuration will vary from vendor to vendor, but SPD expects similar industry standards when it comes to cloud storage and access controls.

6.0 Data Sharing and Accuracy

Data obtained from the technology may be shared outside SPD with the other agencies, entities, or individuals within legal guidelines or as required by law. Data may be shared with outside entities in connection with criminal prosecutions.

Data may be made available to requesters pursuant to the Washington Public Records Act, Chapter 42.56 RCW ("PRA"). SPD will apply applicable exemptions to the data before disclosing to a requester. Individuals have the right to inspect criminal history record information maintained by the department (RCW 10.97.030, SPD Policy 12.050). Individuals can access their own information by submitting a public disclosure request.

Per SPD Policy 12.080, the Crime Records Unit is responsible for receiving, recording, and responding to requests "for General Offense Reports from other City departments and from other law enforcement agencies, as well as from insurance companies."

Discrete pieces of data collected by AGLS systems may be shared with other law enforcement agencies in wanted bulletins, and in connection with law enforcement investigations jointly conducted with those agencies, or in response to requests from law enforcement agencies investigating criminal activity as governed by SPD Policy 12.050 and 12.110. All requests for data from Federal Immigration and Customs Enforcement (ICE) authorities are referred to the Mayor's Office Legal Counsel in accordance with the Mayoral Directive, dated February 6, 2018.

SPD shares data with authorized researchers pursuant to properly execute research and confidentiality agreements as provide by SPD Policy 12.055. This sharing may include discrete pieces of data related to specific investigative files collected by the devices.

7.0 Equity Concerns

The mission of the Seattle Police Department is to prevent crime, enforce the law, and support quality public safety by delivering respectful, professional, and dependable police services. SPD Policy 5.140 forbids bias-based policing and outlines processes for reporting and documenting any suspected bias-based behavior and other accountability measures. This pilot will be data-informed and guided. It will terminate if data suggests the technology is ineffective. Utilizing the abilities of the Performance Analytics and Research Unit, the Seattle Police Department has a plan to actively manage performance measures reflecting the "total cost of ownership of public safety," Equity, Accountability, and Quality ("EAQ"), which includes measures of disparate impact and over policing. In addition to a robust Continuous Intervention Assessment designed to inform, in real-time, the active development of a safer and more effective, Evidence-Based Policing (EBP) competency, the EAQ program assures just right policing is achieved with undue collateral harm.

It's worth noting that many factors can contribute to disparate impacts in policing, most of which occur early in a person's life, long before there is engagement with the police. For example, systems and policies that perpetuate poverty, the failure to provide children with the strong and fair start they deserve in the crucial birth-to-five years, inadequate public education, and a lack of economic opportunity can all contribute to disparate outcomes. In addition, family dynamics and peer pressure can also create negative outcomes. We recognize these factors and strive to do our part to mitigate them, but we can't expect our police officers by themselves to cure these contributory factors. However, we do expect our officers to do their jobs respectfully and fairly as they interact with community members.

These technologies are location-specific, with a place-based focus, meaning they will record people

who choose to be in a public place where the technologies are being used. This mitigating factor reduces, to an extent, the possible disparate impact of potential police actions.