



MEMORANDUM

TO: PAC

FROM: Sgt. Y. Zhou
OPD, Criminal Investigation Division

SUBJECT: Annual Report – Pen Registers

DATE: MAY 13, 2025

Background

Oakland Municipal Code (OMC) 9.64.040: Oversight Following City Council Approval requires that for each approved surveillance technology item, city staff must present a written annual surveillance report for the Privacy Advisory Commission (PAC). After review by PAC, city staff shall submit the annual surveillance report to City Council. The PAC shall recommend to City Council that:

- The benefits to the community of the surveillance technology outweigh the costs, and 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 the concerns.

Sgt. Y. Zhou is currently the program coordinator for OPD's pen register system.

2024 Annual Report Details

- A. A description of how the surveillance technology was used, including the type and quantity of data gathered or analyzed by the technology:

The pen register operates in real-time, recording meta-information about outgoing and incoming communications as they occur. It helps investigators to establish connections between individuals, track patterns of communication, and gather evidence related to the timing and frequency of calls. It may help establish connections between individuals and gain insights into the relationships and activities of the suspects. Pen register data also further corroborates other evidence, provides leads for further follow-up investigations, and assists with tracking of wanted suspects.

OPD utilizes the Gladiator pen register system to receive and analyze data provided by telecommunication companies. OPD began tracking its pen register usage in May 2024 as required. All usage of the pen register system in 2024 involved cell phones.

From May 2024 to December 2024, OPD's pen register system was used 118 times across 61 separate investigations. OPD obtained search warrants prior to the usage of the system for all but one incident, in which a danger to the public required the system to be used under exigency, but a post-hoc warrant was obtained. The majority of the investigations involved violent crimes.

In May 2024, a suspect committed two separate sexual assaults in two days. OPD identified the suspect and was attempting to locate/arrest this person. Given the risk to the public, OPD applied for an exigent pen register to facilitate the apprehension of the suspect. A post-

hoc search warrant was obtained for the exigent usage of the system within the required timeline.

Pen Register Usage by Crime Type – 2024

Crime Type	Installations (Uses)	Investigations
Felony Assaults (non-fatal shooting / stabbing)	14	11
Burglary	3	3
Death Threat	1	1
Vehicular Manslaughter	1	1
Stolen Vehicle	1	1
Sexual Assault / Rape	4	1
Illegal Firearm Possession	4	3
Human Trafficking	2	2
Robbery	13	11
Homicide	75	27
Total	118	61

- B. Whether and how often data acquired through the use of the surveillance technology was shared with outside entities, the name of any recipient entity, the type(s) of data disclosed, under what legal standard(s) the information was disclosed, and the justification for the disclosure(s):

OPD shares data obtained through its pen register system with prosecutorial agencies as part of ongoing criminal prosecutions. The data is shared with agencies such as the Alameda County District Attorney's Office and federal prosecutorial office as part of the routine discovery process. These disclosures are made at the request of the prosecuting attorney and are standard practice during the course of prosecution. OPD does not maintain separate records of each instance in which data is shared for discovery, as these requests are part of the broader prosecution effort and not tracked independently by OPD. OPD has not shared any pen register data with U.S. Immigration and Customs Enforcement (ICE), the Department of Homeland Security (DHS), or U.S. Customs and Border Protection (CBP).

- C. Where applicable, a breakdown of what physical objects the surveillance technology hardware was installed upon; using general descriptive terms so as not to reveal the specific location of such hardware; for surveillance technology software, a breakdown of what data sources the surveillance technology was applied to:

The surveillance technology is a web-based interface that displays metadata provided to OPD by telecommunication companies, specifically outgoing and incoming call logs, dialed numbers, timestamps, and associated subscriber information where permitted. No content of communications is captured. The system interfaces with data sources from these companies as authorized through search warrants or other applicable legal processes.

D. Where applicable, a breakdown of where the surveillance technology was deployed geographically by each police area in the relevant year:

N/A. This technology is not deployed in the field. It is a web-based interface.

E. A summary of community complaints or concerns about the surveillance technology and an analysis of the technology's adopted use policy and whether it is adequate in protecting civil rights and civil liberties. The analysis shall also identify the race of each person that was subject to the technology's use. The Privacy Advisory Commission may waive this requirement upon making a determination that the probative value in gathering this information to evaluate the technology's impact on privacy interests is outweighed by the City's administrative burden in collecting or verifying this information and the potential greater invasiveness in capturing such data. If the Privacy Advisory Commission makes such a determination, written findings in support of the determination shall be included in the annual report submitted for City Council review.

There were no community complaints or concerns reported in 2024 related to the use of the pen register system. All uses of the technology were conducted under valid legal authority. Of the 118 uses:

117 were executed after obtaining a search warrant in advance.

1 use was conducted under exigent circumstances, followed by a post-hoc search warrant. The race of the owner of the phone was Black.

The adopted use policy requires a legal process for every deployment and includes supervisory and judicial oversight to ensure compliance with civil rights protections. Based on our review, the policy remains adequate in safeguarding civil liberties and ensuring due process.

The race of the phone owner was identified in each of the 118 uses, with the following breakdown:

Race / Ethnicity	Number of Uses
Black	101
Hispanic	12
Asian	3
White	1
Other	1

No misuse or discriminatory application of the technology was identified.

F. The results of any internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response unless the release of such information is prohibited by law, including but not limited to confidential personnel file information:

Internal audit is conducted on a monthly basis. The program coordinator compares the invoices from phone companies to the audit usage log maintained by OPD. All invoices were correlated to an entry in the OPD audit log. There was no unauthorized usage of the pen register service.

- G. Information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response:

There were no identifiable data breaches or known unauthorized access during 2024.

- H. Information, including crime statistics, that helps the community assess whether the surveillance technology has been effective at achieving its identified purposes:

Pen registers and trap and trace devices (hereby collectively referred to as pen registers) support OPD investigations by assisting with the apprehension of wanted suspects and furthering criminal investigations by identifying communication patterns and connections between individuals. These tools are not used to identify suspects, but rather to track communication activity once a known suspect has been identified through other investigative means.

Homicide Case

During the investigation of a homicide in the second quarter of 2024, officers obtained a pen register order for the suspect's phone. Real-time data from the device showed repeated activity near a specific neighborhood. Surveillance was set up in that area, leading officers to observe the suspect entering a residence. A perimeter was established and the suspect was taken into custody. A follow-up search warrant at the residence yielded valuable evidence to the homicide case.

Robbery Case

In the third quarter of 2024, a robbery suspect was evading capture after a series of armed incidents. Investigators obtained a pen register on the suspect's cell phone. Call data suggested the suspect was frequently in contact with individuals in East Oakland. Officers conducted surveillance based on the pen register activity and located the suspect at a convenience store. The suspect was arrested without incident.

Attempted Homicide Case

Following a shooting in the first quarter of 2024, officers identified a suspect and secured a pen register search warrant. Activity on the phone helped confirm the suspect was still in the Bay Area and led to focused surveillance in a particular corridor. While conducting surveillance, officers observed the suspect in a vehicle. A felony stop was conducted, and the suspect was taken into custody.

Burglary Case

Investigators were attempting to locate a suspect wanted for numerous residential burglaries. A pen register search warrant was served on the suspect's significant other's cell phone. After analyzing the data, a phone number for the suspect was developed. Another pen register search warrant on that phone number helped OPD with locating the suspect and arresting him/her.

- I. Statistics and information about public records act requests regarding the relevant subject surveillance technology, including response rates:

There are no existing or newly opened public records requests relating to the technology.

J. Total annual costs for the surveillance technology, including personnel and other ongoing costs, and what source of funding will fund the technology in the coming year:

ITEM DESCRIPTION	SKU	QTY	UNIT PRICE \$	SUB-TOTAL \$
Enterprise Pkg - Real Time ESPA/ST/PRTT (1) concurrent license includes total of three named users	E-RT-PKG-ANN	3	4,725.00	14,175.00
Enterprise ESPA (1) concurrent license includes total of three named users	E-ESPA-ANN	4	1,575.00	6,300.00
Enterprise IQ Express Portal OSS - IQ Express Portal - Sold annually	E-IQ-ANN	1	2,500.00	2,500.00
Enterprise Mobile App G-Scout Mobile App - Single User License	E-APP-ANN	3	350.00	1,050.00
Period of Performance : One year from date of purchase order.				
	SUBTOTAL			24,025.00
	TAX			0.00
	TOTAL			\$24,025.00

K. Any requested modifications to the Surveillance Use Policy and a detailed basis for the request:

No requests for changes at this time.