ALPR and AI Surveillance Transparency in the Bay Area

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Abstract

This project investigates the landscape of automated surveillance technologies in the California Bay Area, with a particular focus on Automated License Plate Readers (ALPRs), and how residents perceive them. Through public records requests filed with regional police departments, we gathered data on vendor contracts, budgets, and data-sharing practices to illuminate how these systems are deployed and governed. To complement this transparency work, we surveyed over 400 Bay Area residents about their awareness, support, and concerns around ALPRs and related technologies. While respondents often supported surveillance for safety, many expressed heightened concern about data sharing and profiling, especially after learning of confirmed policy violations. Together, these efforts highlight the need for transparency, accountability, and community-centered oversight in the use of AI-enabled surveillance technologies. We published the collected records and analysis through a public education website with interactive maps and visualizations.

Introduction

Project Background + Motivations

Automated surveillance technologies have become increasingly common in the Bay Area, quietly collecting information about people's movements and activities in public space. Among these tools, Automated License Plate Readers (ALPRs) are now widely deployed by local governments and private entities, capturing the time and location of vehicles at scale. While often presented as tools for public safety, ALPR systems raise important questions about privacy, equity, accountability, and oversight, particularly as their use expands with limited public visibility.

ALPR systems capture license plate numbers along with the time and location at which a vehicle is recorded. Some vendor platforms may also extract additional vehicle attributes such as make, model, color, or other distinguishing features. Contemporary vendor platforms, including systems deployed by companies such as Flock Safety, increasingly rely on computer vision techniques to infer and store this supplementary information. The routine collection of vehicle location data creates large databases of sensitive movement information that may be queried, shared, or retained for extended periods of time.

ALPRs have been used in parts of the Bay Area for over a decade, but recent years have seen a significant shift in how these systems are deployed and governed. Cities have increasingly contracted with private vendors such as Flock Safety to install

networked camera systems that store data in centralized cloud environments and enable sharing across jurisdictions. At the same time, contracts are often approved with limited public debate, and residents frequently lack access to basic information about camera locations, data retention practices, and audit mechanisms. Although California law places restrictions on data sharing and retention, enforcement and transparency vary widely by city. Public records have shown that in some cases, including in Oakland, ALPR data was shared with federal agencies such as Immigration and Customs Enforcement, even when such sharing was restricted under state policy.[1]

This project aims to make the use of ALPR systems in the Bay Area more transparent and understandable to the public. Building on prior work by civil liberties organizations and open-source mapping efforts, we combined original public records requests submitted to nine Bay Area law enforcement agencies with a survey of over 400 residents. In addition, we translated government records into accessible public resources, including a website and interactive maps. By examining both institutional practices and public perceptions, this report seeks to illuminate how ALPR systems operate in practice and how communities experience and evaluate their use.

Existing Research/Efforts

This project builds on prior transparency work conducted by organizations such as the Electronic Frontier Foundation (EFF), whose public records requests between 2021 and 2024 revealed how California law enforcement agencies deploy and share ALPR data. We also drew inspiration from DeFlock[2], an open-source mapping project that documents the locations of Flock Safety cameras across the United States and demonstrates how community-driven data collection can make surveillance infrastructure more visible and accessible to the public.

[1]The San Francisco Standard (2025), https://sfstandard.com/2025/07/14/oakland-san-francisco-ice-license-plate-readers/
[2] DeFlock, deflock.me

Public Education Website

Knowledge gathering for transparency

Our team created a website, to help community members understand how surveillance technology functions in the Bay Area, such as ALPRs, speed cameras, and other surveillance cameras in public areas.[3] In order to create a centralized resource for understanding how these technologies operate across different cities in the Bay Area, the site compiles and translates dense government documents into clear, community-facing explanations.

Using public documents obtained through city portals and California Public Records Act (CPRA) requests, we summarized each city's surveillance policies, retention policies, data-sharing agreements, and oversight mechanisms. The website also includes interactive visualizations, maps, and short explainers on how these technologies capture, store, and share data. By combining narrative summaries with open data, the platform helps residents recognize where surveillance systems exist in their neighborhoods, understand their potential benefits and risks, and engage more effectively in local conversations about privacy, accountability, and public safety.

CPRA requests

On May 28, 2025 and June 5, 2025, our team submitted a public records request to the following nine departments in varying Bay Area cities through MuckRock[4]:

- Fremont Police Department
- Palo Alto Police Department
- Oakland Police Department
- San Jose Police Department
- San Francisco Police Department
- Hayward Police Department
- Berkeley Police Department
- Sunnyvale Department of Public Safety
- South San Francisco Police Department

We requested the following information (with terms and definitions):

[3] Bay Area AI Surveillance Transparency Project, https://bayarea-surveillance.com/
[4] Muckrock, https://www.muckrock.com/accounts/profile/bayareaprivacy/

Hot list: A database of license place numbers associated with vehicles or people of interest (such as those involved in a crime).
Camera locations: Areas where ALPR cameras are installed

Image of an ALPR camera from *OpenStreetMap*

Reasons for camera location placement: Documented rationale for why each camera is put at specific sites (such as high-crime areas)
Camera contracts: Legally binding agreements between law enforcement agencies and manufacturers/vendors of ALPRs (which is mainly Flock Safety for all cities we examined)
Camera budget records: Invoices or grants that show how ALPR programs are funded
Vehicle reads: The term for detection of an ALPR camera capturing any license plate image
Data usage protocol: The policy for how ALPR data is accessed, retained, shared, and audited; this includes authorized users, access logs, and retention timing
Grant application: Funding requests to federal, state, or other agencies to implement or expand ALPR systems
Employee audit logs: Records showing who accessed ALPR data, along with the timestamp and reasoning

The following tables (Part A to Part H) display each requested information and the responses for all departments. Note that “Awaiting response” means that the department is still sending documents for our request. “Did not respond”[5] means that the department closed our request and did not send that specific piece of information.

[5] Under the California Public Records Act, each state or local agency must promptly make records available to any person upon request, unless the records are exempt from disclosure by law.

Part A. Information related to ALPR data sharing

The following requested items are available in Flock Safety software through their transparency portal function:

A1. The names of agencies and organizations with which the Agency shared ALPR data in 2025;
A2. The names of agencies and organizations from which the Agency received ALPR data in 2025;
A3. The names of agencies and organizations with which the Agency shares “hot list” information in 2025;
A4. The names of agencies and organizations from which the Agency receives “hot list” information in 2025.

Optional documents if A1-A4 cannot be provided (N/A for all departments since these were not received).
A5. All agreements, memoranda of understanding, requests, or other certifying documents that external agencies have signed to comply with Sec 1798.90.52(b) for accessing your agency's ALPR data. These documents are also often required under the "Releasing ALPR Data" subsection of a California law enforcement agency's SB 34 policy.
A6. All agreements, memoranda of understanding, requests, or other certifying documents that your agency has signed pursuant to Sec 1798.90.52(b) to access other agencies' ALPR data.
A7. All "records of access" required by Sec. 1798.90.52(a) for the periods June 5th, 2024 until the date of processing this request.

Department	A1 Outgoing “Shared Networks”	A2 Incoming “Shared Networks”	A3 Shared hotlists	A4 Received hotlists
Fremont	Did not respond.	Did not respond.	Did not respond.	Did not respond.
Palo Alto	Received 08/14/2025	Received 08/14/2025	Received 08/14/2025	Received 08/14/2025
Oakland	Sharing to 78	78 shared	Sharing to 78 networks[6]	78 shared

	networks[6]	networks[7]		networks[7]
San Jose	Sharing to 285 networks[8]	N/A; they falsely stated that the transparency portal shows this information.	Declined; "SJPD hotlists are created internally for SJPD investigations. Sharing with other agencies is limited to a case-by-case basis and would most likely require some multi-agency investigatory purpose."	170 shared networks[9]
San Francisco	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.
Hayward	Received 09/18/2025	Received 09/18/2025	N/A	N/A
Berkeley	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.
Sunnyvale	Sharing to 25 networks[10]	224 shared networks[10]	Sharing to 25 networks[10]	224 shared networks[10]
South San Francisco	Awaiting response	Awaiting response.	Awaiting response.	Awaiting response.

[6] Muckrock, https://www.muckrock.com/foi/oakland-96/automated-license-plate-reader-alpr-records-request-oakland-police-department-187609/#file-1294469
[7] Muckrock, https://www.muckrock.com/foi/oakland-96/automated-license-plate-reader-alpr-records-request-oakland-police-department-187609/#file-1294470
[8] Flock Safety, https://transparency.flocksafety.com/san-jose-ca-pd
[9] Muckrock, https://www.muckrock.com/foi/san-jose-336/automated-license-plate-reader-alpr-records-request-san-jose-police-department-187612/#file-1295345
[10] Muckrock, https://www.muckrock.com/foi/sunnyvale-733/automated-license-plate-reader-alpr-records-request-department-of-public-safety-187605/#comms

Part B - Number of “Detections” (general plate scans) and “Hits” (plate scans that match to hot lists)

- The items B1-B4 are available in Flock Safety software through their transparency portal function.

B1. The aggregate number of "detections" collected during 2025.
B2. The aggregate number of “hits” during 2025.
B3. The aggregate number of "detections" from June 5th, 2024 until the date this request is processed. If your agency has a retention period shorter than 1 year, please provide whatever data is available based on your retention period. For example, most Flock Safety systems may not have this data beyond 30 days.
B4. The aggregate number of “hits” from June 5th, 2024 until the date this request is processed. If your agency has a retention period shorter than 1 year, please provide whatever data is available based on your retention period.
B5. Average Daily Scans based on the past amount of days in which data is retained.

Department [11]	**B1 - Total Detections in 2025***	**B2 - Total Hits in 2025***	**B3 - Maximum Detections Retained***	**B4 - Maximum Hits Retained***	**B5 - Average Daily Scans**
Fremont	3,454,919 (05/14/2025 to 06/11/2025)	6679 (01/01/2025 to 05/31/2025)	Did not respond.	Did not respond.	Did not respond.
Palo Alto	11,394,619 total detections; 4,300,953 unique detections (05/13/2025 to 06/10/2025)	Did not respond.	Did not respond.	27563 (06/01/2024 to 06/01/2025)	Did not respond.
Oakland	Did not respond.	Did not respond.	Did not respond.	Did not respond.	Did not respond.
San Jose	181,345,270 unique plate detections from	706,000 hits from 01/01/2025 to 06/24/2025	423,357,590 unique plate detections from	1,425,763 hits from 01/01/2025 to 06/24/2025	2,703 scans

[11] Note that some detections do not specify unique or total plate detections unless specified by the department.

	01/01/2025 to 06/24/2025 2,569,900 (10/11/2025 to 11/11/2025)	161,535 (10/11/2025 to 11/11/2025)	01/01/2025 to 06/24/2025		
San Francisco	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.
Hayward	7,113,871	260,389		375,434	
Berkeley	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.
Sunnyvale	7965615 (8/20/2025 to 9/17/2025)	18885 (01/1/2025 to 9/18/2025)	7965615 (8/20/2025 to 9/17/2025)	22523 (10/1/2024 to 9/18/2025)	Awaiting response.
South San Francisco	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.	Awaiting response.

Part C - Assistance, description, and recommendations

C1. A description of the information technology and physical location in which the records exist.
C2. Assist us identifying records and information that will help the public understand how ALPR data and hotlists are shared, how much data is collected year-to-year, and how much of that data matches a hot list; and
C3. Provide suggestions for overcoming any practical basis for denying access to the information sought.

Department	**C1 - Description of where records exist**	**C2 - Identify records and information of ALPR data and hotlists**	**C3 - Suggestions for overcoming bases for denying access to information**
Fremont	Did not respond.	Did not respond.	Did not respond.
Palo Alto	Did not respond.	Did not respond.	Did not respond.

Oakland	Did not respond.	Did not respond.	Did not respond.
San Jose	“All Flock data is owned by the subscriber. In this case, the Department ALPR data is stored by Flock on a CJIS compliant cloud server.”	“SJPD officers log into the Flock User Interface either in their patrol car, on a department desktop computer, or from their department issued mobile device. Hot lists are maintained within that system and are not exported or shared in another manner. As explained in SJPD Response#A3, officers may share hotlist results on a case-by-case basis with partnering law enforcement agencies upon request. However, this process is not automated”	N/A
San Francisco	Awaiting response.	Awaiting response.	Awaiting response.
Hayward	Did not respond.	Did not respond.	Did not respond.
Berkeley	Awaiting response.	Awaiting response.	Awaiting response.
Sunnyvale	“City will defer the questions to Flock Safety.”	“City will defer the questions to Flock Safety.”	“City will defer the questions to Flock Safety.”
South San Francisco	Awaiting response.	Awaiting response.	Awaiting response.

Part D - Information Related to New Changes

D1. Flock Safety has announced that they are building a product called Flock Nova, which combines information from agencies into one place, such as "Unify CAD, RMS, video, LPR, and public records." It is mentioned by 404 Media[12] that the tool is being used by some law enforcement agencies in an early access program[13]. Is/was your Agency part of, invited to, or booked a demo for the early access program? Is/has your Agency utilized Flock Nova? If yes, have you used the tool in any police investigations?
D2. Please send a document of the most up-to-date ALPR policy that your Agency uses.

Department	**D1 - Received Flock Nova Invitation**	**D1 - Participated in Flock Nova**	**D2 - Most up-to-date ALPR Policy Date**
Fremont	Did not respond.	Did not respond.	Received[14] 07/01/2025.
Palo Alto	No.	N/A	Received[15] 08/14/2025
Oakland	Did not respond.	Did not respond.	Did not respond.
San Jose	"Flock Nova was pitched to some department members informally and the department has no plans to buy/use Flock Nova	N/A	Received (1)[16] and Received (2)[17] 06/24/2025

[12] 404 Media, https://www.404media.co/license-plate-reader-company-flock-is-building-a-massive-people-lookup-tool-leak-shows/
[13] 404 Media, https://www.flocksafety.com/devices/flock-nova#:~:text=Flock%20Nova%20Early%20Access%20Now%20Open
[14] Fremont PD CA Policy Manual, https://drive.google.com/file/d/1UL1Yxl-ZAmURHd7-eK0nFODwWIpjsbb9/view?usp=sharing
[15] City of Palo Alto ALPR policy, https://www.paloalto.gov/Departments/Police/Public-Information-Portal/Automated-License-Plate-Recognition-ALPR
[16] SAN JOSE POLICE DEPARTMENT DUTY MANUAL, https://www.sjpd.org/home/showpublisheddocument/314/638161981357100000
[17] Muckrock, https://www.muckrock.com/foi/san-jose-336/automated-license-plate-reader-alpr-records-request-san-jose-police-department-187612/#file-1295346

	at this time.”		
San Francisco	Awaiting response.	Awaiting response.	Awaiting response.
Hayward	Did not respond.	Did not respond.	Received[18] 08/05/2025; Last Revised 01/10/2024
Berkeley	Awaiting response.	Awaiting response.	Received[19] 07/03/2025.
Sunnyvale	Yes; via a phone call.	No; declined.	Received[20] 06/19/2025.
South San Francisco	Awaiting response.	Awaiting response.	Awaiting response.

Part E – Information Related to ALPR Camera Locations

E1. The location (address, intersection, coordinates, or nearest landmark) of each ALPR camera operated, maintained, or accessed by the Agency as of the date of this request.
E2. If your agency uses mobile ALPR cameras (e.g., on patrol cars), please indicate how many mobile units are currently deployed, and describe any policies that govern how locations of scans from mobile units are logged or stored.
E3. If exact addresses or coordinates are withheld, please provide general placement descriptions (e.g., "fixed camera at Main St & 2nd Ave," or "mobile ALPR unit assigned to Northern District patrol vehicle").
This information is typically accessible within ALPR system management software. For example:
- In Flock Safety camera location information is visible through the camera dashboard and deployment maps.

[18] Muckrock, https://www.muckrock.com/foi/hayward-377/automated-license-plate-reader-alpr-records-request-hayward-police-department-187607/#file-1307722
[19] Muckrock, https://www.muckrock.com/foi/berkeley-295/automated-license-plate-reader-alpr-records-request-berkeley-police-department-187610/#file-1297184
[20] Sunnyvale ALPR policy, https://www.sunnyvale.ca.gov/home/showpublisheddocument/536/637819071264600000

Department	E1 - Location of all ALPRs operated	E2 - Number of and policy of mobile ALPR cameras	E3 - General placement of ALPRs if needed
Fremont	19 BOSS ALPRs; 9 Flock ALPRs.[21]	97 cameras.	Exempt due to E1's answer.
Palo Alto	N/A; they stated "Camera location information is exempt from the (CPRA) pursuant to Cal. Gov. § 7923.600."	N/A; they stated that they only have fixed cameras.	N/A; they stated "Camera location information is exempt from the (CPRA) pursuant to Cal. Gov. § 7923.600."
Oakland	Did not respond.	Did not respond.	Did not respond.
San Jose	485 ALPRs[22]	N/A; they stated that they do not have mobile ALPRs.	Exempt due to E1's answer.
San Francisco	Awaiting response.	Awaiting response.	Awaiting response.
Hayward	Did not respond.	Did not respond.	Did not respond.
Berkeley	Awaiting response.	Awaiting response.	Awaiting response.
Sunnyvale	16 ALPRs; listed[23]	N/A; they stated that they do not have mobile ALPRs.	Exempt due to E1's answer.
South San Francisco	Awaiting response.	Awaiting response.	Awaiting response.

[21] 25-970 E3 Camera Locations, https://docs.google.com/spreadsheets/d/1hOBDWQ8FVaif2IoWIpvnoyZfxQpNBYpi/edit?gid=1786354378#gid=1786354378

[22] Muckrock, https://www.muckrock.com/foi/san-jose-336/automated-license-plate-reader-alpr-records-request-san-jose-police-department-187612/#file-1295347

[23] Muckrock: https://www.muckrock.com/foi/sunnyvale-733/automated-license-plate-reader-alpr-records-request-department-of-public-safety-187605/

Part F - ALPR Vendor Contracts and Purchase Agreements

F1. All contracts, purchase orders, service agreements, statements of work, or memoranda of understanding between the Agency and any vendor of ALPR technology (including Flock Safety, Vigilant Solutions/Motorola, etc.) in effect during January 1, 2024–June 5, 2025.
F2. All invoices, receipts, and payment records related to the purchase, installation, operation, or maintenance of ALPR systems during January 1, 2024–June 5, 2025.
F3. Any grant applications or grant award documents (e.g., from DHS, DOJ, or private foundations) that funded or supported the acquisition or expansion of ALPR systems.

Department	**F1 - Contracts, purchase agreements, and other documents**	**F2 - ALPR invoices, receipts, and payment records**	**F3 - ALPR grant applications and grant award documents**
Fremont	Did not respond.	Did not respond; there were links to invoices that are inaccessible.	Federal Community Oriented Policing Services Grant[24]: Cameras, installation, and maintenance totaling $963,000 for 2024.
Palo Alto	Did not respond.	Did not respond.	*Organized Retail Theft Grant: 10 additional cameras using part of the $5,176,812 grant for 2024 to 2027.
Oakland	Did not respond.	Did not respond.	Did not respond.
San Jose	Sent[25].	Sent[26].	Organized Retail

[24] 2024 COPS TEP Applicatioin, https://drive.google.com/file/d/1Zpkykrug-VwiujwPoCFZ4EvNPgwwy6n1/view?usp=sharing
[25] Muckrock, https://www.muckrock.com/foi/san-jose-336/automated-license-plate-reader-alpr-records-request-san-jose-police-department-187612/#file-1295349
[26] Muckrock, https://www.muckrock.com/foi/san-jose-336/automated-license-plate-reader-alpr-records-request-san-jose-police-department-187612/#file-1295349

			Theft Grant[27]: 300 additional cameras $3,090,000 for 2024 to 2027.
San Francisco	Awaiting response.	Awaiting response.	Awaiting response.
Hayward	Flock contract & FY25 expansion contract.	Flock & Vigilant Solutions invoices.	2024 Homeland Security Grant[28]: $162,360 for 30 Flock ALPRs. $20,891; upgrading internal and external security camera systems[29]
Berkeley	Sent[30].	$165,000.00 for traffic signal cameras + $58,586.72 electrical services for Flock cameras + $3705.95 for camera installation labor	Awaiting response.
Sunnyvale	Awaiting response.	Awaiting response.	Awaiting response.
South San Francisco	Awaiting response.	Awaiting response.	Awaiting response.

*The cost per camera for Palo Alto's 10 additional cameras of the grant is not specified.

[27] City of San Jose Police Department, https://www.bscc.ca.gov/wp-content/uploads/88-San-Jose-Police-Dept.pdf
[28] Muckrock, https://www.muckrock.com/foi/hayward-377/automated-license-plate-reader-alpr-records-request-hayward-police-department-187607/#file-1307732
[29] Muckrock, https://www.muckrock.com/foi/hayward-377/automated-license-plate-reader-alpr-records-request-hayward-police-department-187607/#file-1307726
[30] Muckrock, https://www.muckrock.com/foi/berkeley-295/automated-license-plate-reader-alpr-records-request-berkeley-police-department-187610/#file-1332958

Part G – Internal Communications and Rationale for Placement

G1. Any internal memos, emails, reports, or presentations from 2022–2025 discussing where ALPR cameras should be placed or were ultimately placed. This includes communications from officers, command staff, city officials, or vendor representatives regarding:
- Placement location recommendations
- Crime statistics or justifications used to determine placement
- Community concerns or opposition
- Equity or privacy impacts
- “High crime” area designations or related targeting rationale

G2. Any communications with Flock Safety, Vigilant Solutions, or other ALPR vendors from 2022–2025 regarding camera placement, pilot programs, early access programs, or system expansion.

Department	**G1 - Internal documents from 2022-2025 discussing camera placement rationale**	**G2 - Communications between ALPR vendors**
Fremont	Internal emails asking for crime statistics nearby residential, shopping, and commercial areas. Additionally, emails of Peregrine maps of areas with retail and theft counts.	Did not respond.
Palo Alto	Did not respond; sent ambiguous information that does not answer the request.	Did not respond; sent ambiguous information that does not answer the request.
Oakland	Did not respond.	Did not respond.
San Jose	Internal emails of retail theft- and burglary-dense area maps from 01/01/2023 to 06/30/2023; discussing placement on city infrastructure to prevent camera theft.	Internal emails of camera installation logistics such as dates with SJPD and Flock Safety.
San Francisco	Awaiting response.	Awaiting response.

Hayward	Did not respond.	Did not respond.
Berkeley	Awaiting response.	Awaiting response.
Sunnyvale	Awaiting response.	Awaiting response.
South San Francisco	Awaiting response.	Awaiting response.

Part H – ALPR Audit Logs & Access Records (More Detail)

H1. A list of all ALPR database users employed by the Agency between June 5, 2024 and the present, including job titles, divisions, and access levels. If your agency has a retention period shorter than 1 year, please provide whatever data is available based on your retention period.
H2. Audit logs showing ALPR database access by Agency personnel from June 5, 2024 to the present. If your agency has a retention period shorter than 1 year, please provide whatever data is available based on your retention period. Please include:
1. Organization Audit in Flock.
The report should include data logged from the date above, to the date this request is processed. Per Flock's documentation, the Organization Audit is available within the Insights tab and is defined as searches done within the agency.
- Date and time of access
- Name and Job Title of User
- Search parameters (e.g., plate number or geographic query)
- Stated reason for access, if logged
2. Network Audit in Flock.
The report should include data logged from the period from the date above, to the date this request is processed. Per Flock's documentation, the Network Audit is available within the Insights tab and is defined as searches of the organization’s Flock network by any agency in the Flock System.

Department	**H1 - ALPR database users between June 5, 2024 and present**	**H2 - ALPR database audit logs between June 5, 2024 and present**
Fremont	150 users (as of 07/01/2025).	Did not respond.
Palo Alto	Did not respond.	Did not respond.

Oakland	Did not respond.	Did not respond.
San Jose	1251 users (*only current as of 06/18/2025[31]).	**San Jose**: 268047 internal searches from 06/04/2024 to 06/10/2025. **External Networks**: 954376 external searches from 06/04/2024 to 09/30/2025
San Francisco	Awaiting response.	Awaiting response.
Hayward	Did not respond.	Did not respond.
Berkeley	Awaiting response.	**Berkeley:** 642527 internal searches from 12/13/2024 to 11/06/2025. **External Networks:** 899907717 external searches from 12/13/2024 to 11/06/2025.
Sunnyvale	Awaiting response.	Awaiting response.
South San Francisco	Awaiting response.	Awaiting response.

[31] Muckrock, https://www.muckrock.com/foi/san-jose-336/automated-license-plate-reader-alpr-records-request-san-jose-police-department-187612/#file-1317036

Request status notes

“**Status**” is whether a department has closed the request on us or kept it open, as all departments still have remaining items to send.

“**Updated**” is the most recent date that a department sent a requested document

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Agency	Notes	Status	Updated
Oakland	The department responded to part A fully on 06/18/2025 then immediately closed the request without providing the remaining items.	Closed	June 18, 2025
Fremont	The department closed our request without giving rationale for the lack of response on remaining items.	Closed	July 1, 2025
Palo Alto	In their responses, the department stated their response would answer questions regarding G1, G2, but the answers were unclear. They marked the request complete without answering about sections C and D, H, along with requests F1 and others. They also mentioned the transparency portal would answer B1–B4, but the portal only shows vehicle detections, hotlist detections, and searches of the last 30 days.	Closed	August 14, 2025
San Jose	We found San Jose to be communicative and well-organized in sending the requested information.	Closed	September 16, 2025
Hayward	No additional notes.	Open	October 21, 2025

San Francisco	The department forwarded our request to their Legal division on 05/29/2025, but we have not received any response.	Open	—
Berkeley	As of November 29, 2025, the department has not closed the request, and the most recent document was given on 11/07/2025.	Open	November 7, 2025
Sunnyvale	In our process, Sunnyvale has been the most organized at allowing us to request a list and find the information.	Open	November 19, 2025
South San Francisco	The department has not provided any files or communication. They have also extended the response 13 times since 06/18/2025, as seen in this request[32].	Open	December 4, 2025

Note: Request statuses are current as of December 4, 2025.

Mapping

As part of this project, we used open source data gathered from deflock.me to conduct analysis based on Flock camera locations in the Bay Area. The website allows anyone to input locations, orientations, manufacturers, and operators of ALPR cameras they know the whereabouts of in the United States. A large number of ALPR cameras have been mapped, with California, currently having ~8000 cameras mapped.

Using the ALPR location data, we pulled from March 2025, we built maps for several counties in the Bay Area which overlay the camera locations with median income, race, crime, and traffic data on county maps. Median income and race are segmented by zip code in the maps and crime and traffic are placed on the maps using heat maps. The counties include Alameda County, San Francisco County, San Mateo County, and Santa Clara County[33]. Users can use filters to toggle between the data displayed.

[32] Muckrock, https://www.muckrock.com/foi/south-san-francisco-3459/automated-license-plate-reader-alpr-records-request-south-san-francisco-police-department-187606/
[33] Bay Area Surveillance, https://bayarea-surveillance.com/visualizing-alpr-cameras-in-the-bay/alpr-camera-locations

In addition, using the CPRA requests we described above, we were able to add locations back to the deflock.me source database. We found ALPR locations from the documents that the cities of Sunnyvale and San Jose provided us that had not previously been mapped, and added them to deflock.me.

Finally, we built an interactive surveillance story walkthrough which lets users interactively walk through real-life impacts and privacy violations experienced by individuals in the Bay Area as a result of ALPR camera surveillance[34].

Survey

Methodology

We conducted a survey of approximately 400 respondents across the Bay Area, capturing attitudes towards various surveillance technologies, including ALPRs and traditional security cameras. We used Positly to reach out to Bay Area participants and GuidedTrack to host the questions. While the survey items varied in content, each was answered using a Likert-like scale ranging from 1 to 5. In addition to the questionnaire, we collected demographic information associated with responses, including race, gender, education level, political views, and household income.[35]

The survey data was cleaned and analyzed using Python, with categorical responses recoded into numeric scales for quantification. Results were aggregated and visualized using bar charts, summary tables, and word clouds to identify patterns in awareness, support, and trust across demographic groups. Results should be interpreted as descriptive and may not be representative of the full Bay Area population.

Analysis Results

Awareness of surveillance technologies

We identified the surveillance tools that are most commonly recognized across the Bay Area. While most people have heard of security cameras and speed cameras in their communities, less have knowledge of ALPRs, drones, facial recognition technology, and red light runner cameras (Figure 1). Despite the presence of hundreds of ALPR units across the Bay Area, fewer than half of respondents recognize the technology as present in their communities.

[34] Bay Area Surveillance, https://bayarea-surveillance.com/visualizing-alpr-cameras-in-the-bay/surveillance-story-walkthrough
[35] Participants' demographic and location breakdowns can be found in the appendix.

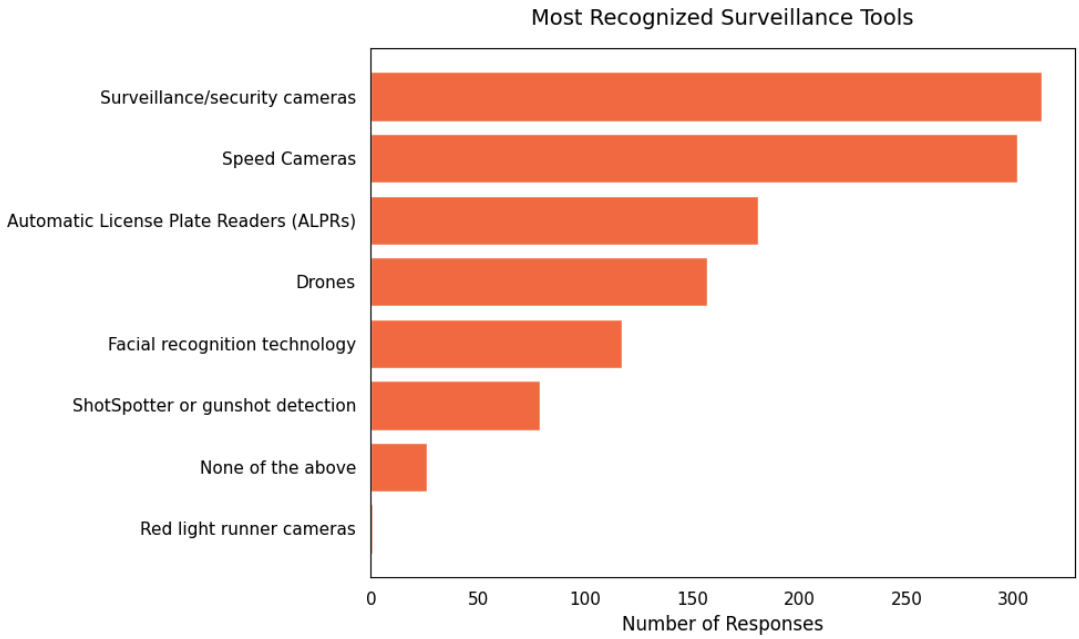

Figure 1

Support for ALPRs across communities

We measured support on a 1-5 scale for government and private ALPRs across different demographic groups.[36]

Political ideology: Support for government use of ALPRs remains relatively stable across the political spectrum (Figure 2). Respondents from all ideological groups show moderate support on average, with some internal variation but no clear partisan divide. Support for privately operated ALPRs declines steadily as respondents become more liberal. Conservatives show more mixed but generally higher support, while liberals are more consistently skeptical. Compared to government use, private surveillance elicits broader concern across the spectrum (Figure 3).

[36] Support is measured with 1 at strongly do not support and with 5 at strongly support, with 3 being neutral.

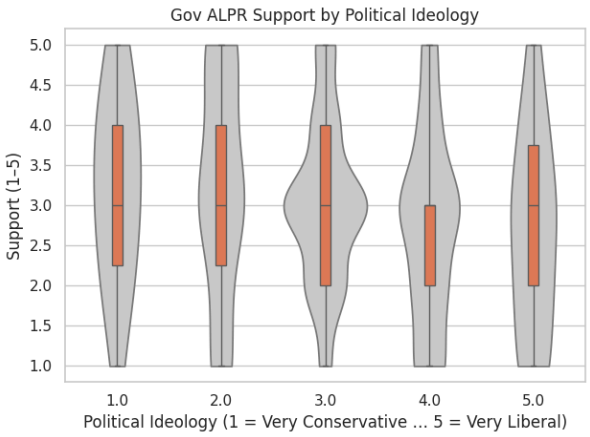

Figure 2

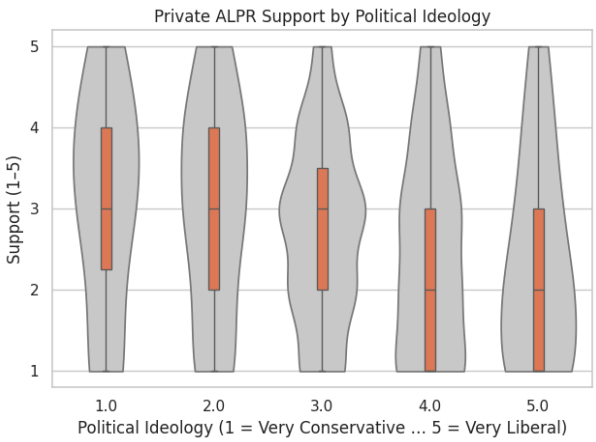

Figure 3

Race: Across racial groups, support for government ALPRs centers around the mid-range of the 1-5 scale, but several groups display noticeably lower median support. Across both Figure 4 and Figure 5, Black, Latino, Middle Eastern/North African, Native American/Indigenous, and “Prefer not to say” respondents tend to have lower median support compared to groups like White, Asian/Pacific Islander, or Multiracial, whose medians appear slightly higher.

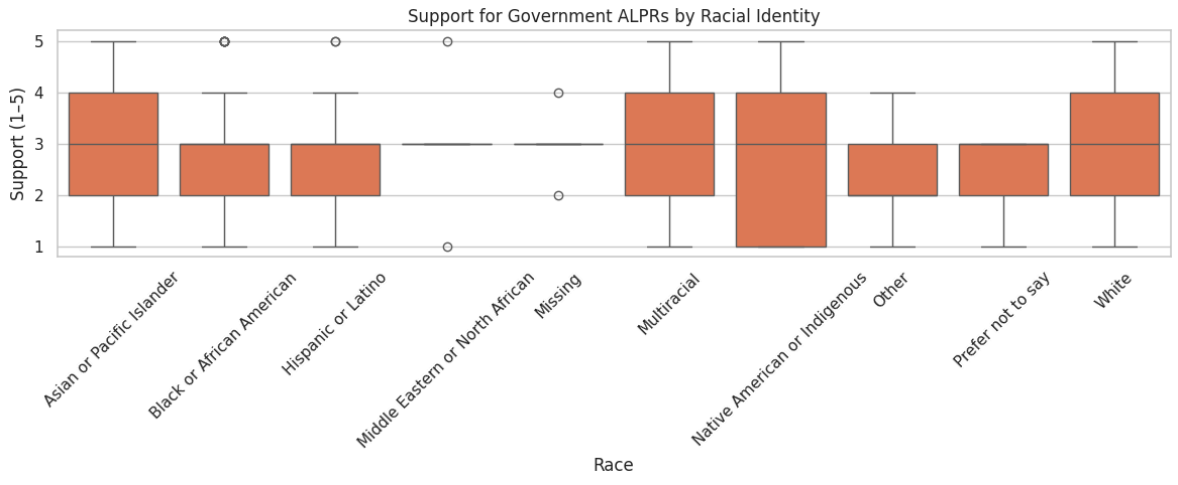

Figure 4

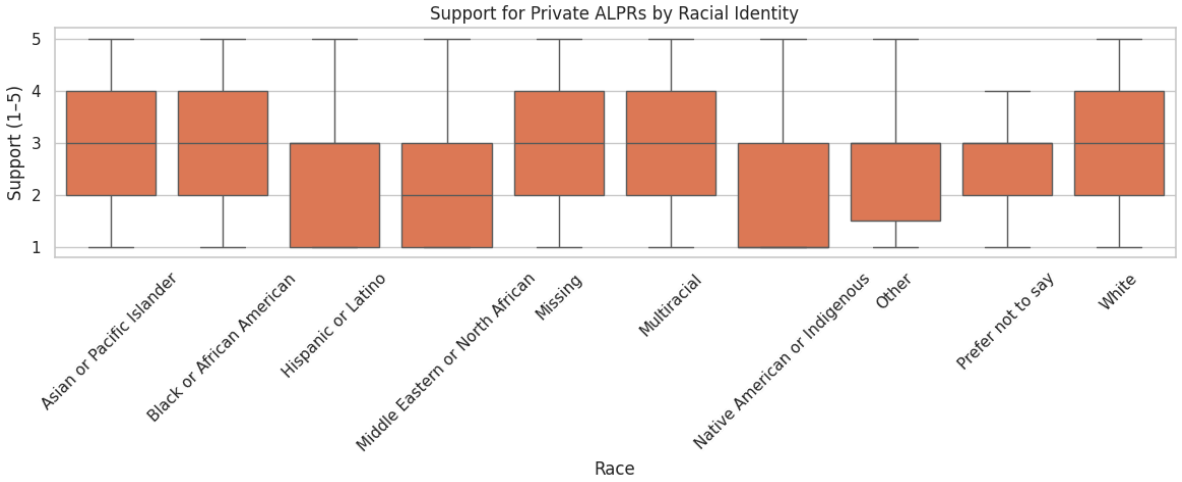

Figure 5

Household income: For government ALPRs in Figure 6, we see support remaining relatively consistent across household incomes. For private ALPRs in Figure 7, respondent group opinions tend to remain the same as government ALPRs. Still, support among the middle household income brackets of $40,000-$59,999 and $60,000-84,999 drop considerably. Lower income respondents, such as $9,999 and less, display a mixed range of support for government and private ALPRs.

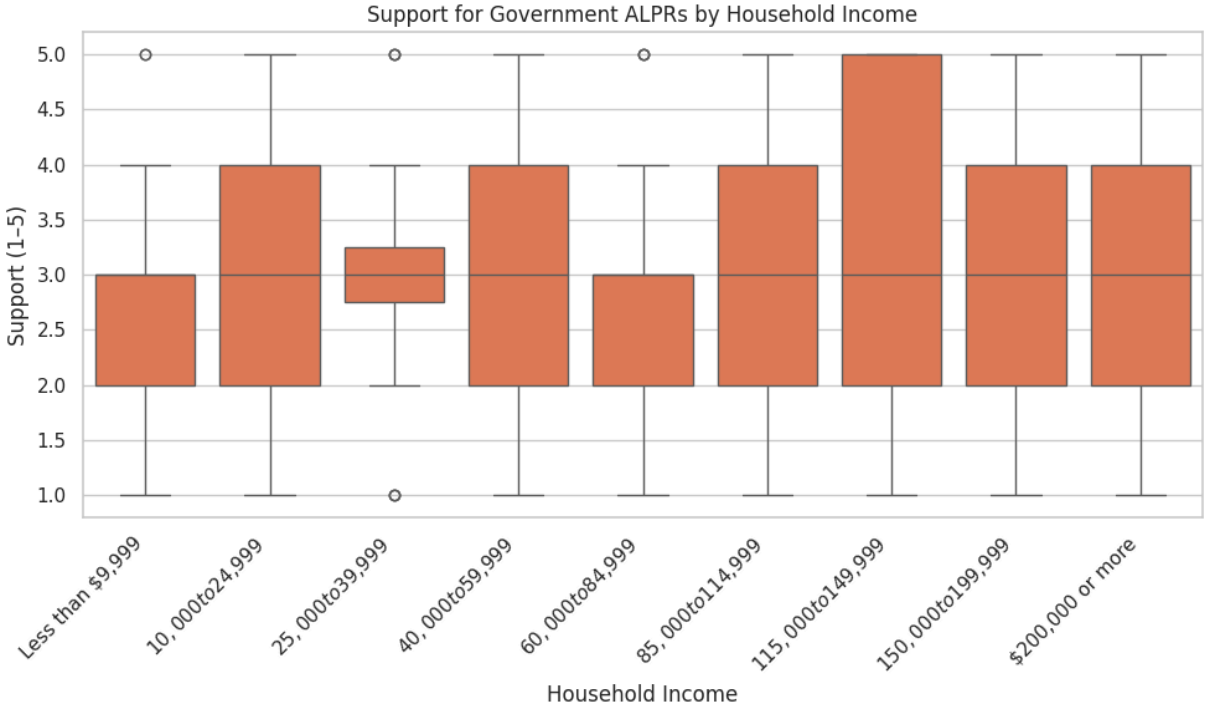

Figure 6

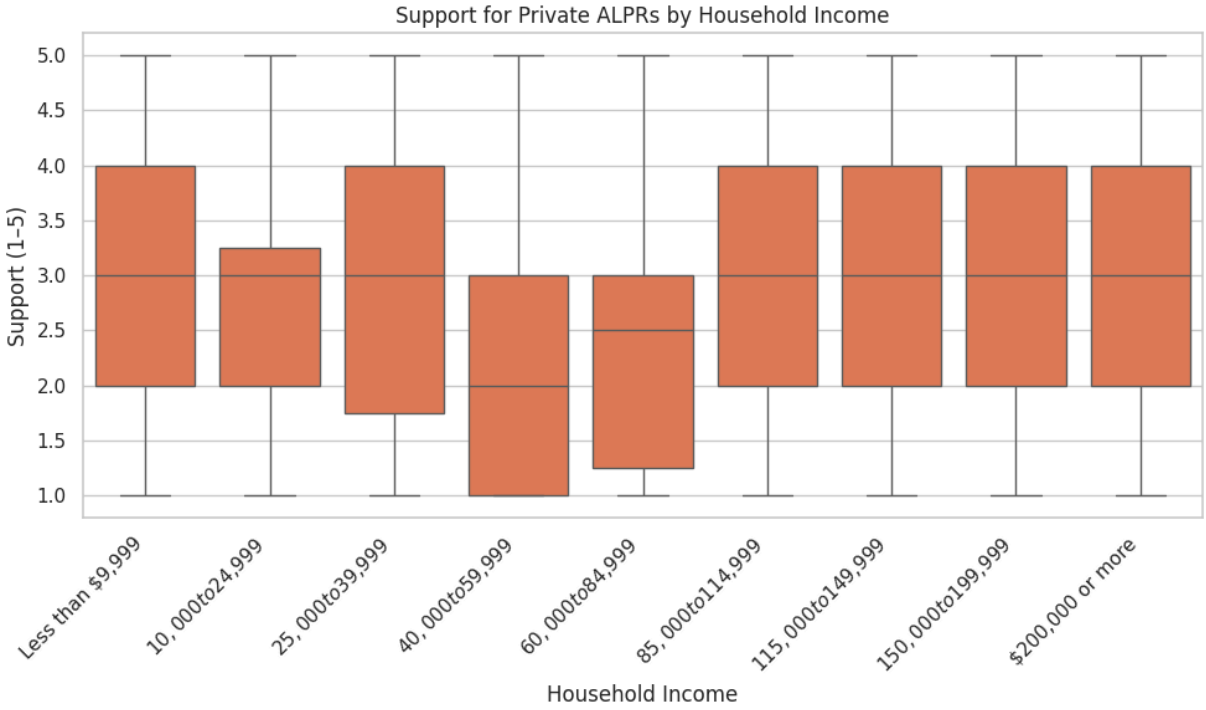

Figure 7

Gender: Both Male and Female groups show a wide range of opinions across the scale in both private and government contexts. Male respondents still show slightly higher median support, while Female respondents tend to cluster around the middle. In the private context, both respondents showcase greater hesitancy towards ALPR usage.[37]

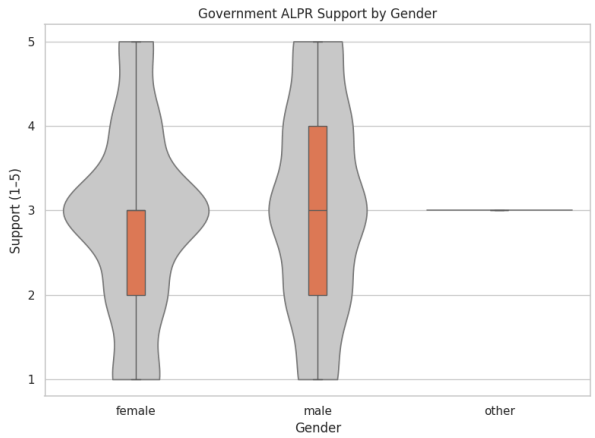

Figure 8

Figure 9

[37] Notably, there is only one “Other” respondent.

Perceptions of harm and trust

We asked participants about their support for government and private ALPRs, as well as their opinions on if these ALPRs harm marginalized individuals and if they have concerns around ALPRs harming others. Concerns for surveillance technologies remained widespread.[38] Even when respondents supported the government usage of ALPRs, they displayed concern for the impact these technologies could have on marginalized groups (Figure 10). However, respondents who supported ALPRs, whether operated by public agencies or private entities, were less likely to believe that these technologies harm marginalized groups (Figure 11). This contrast indicates that support for surveillance may coexist with skepticism about its potential inequities.

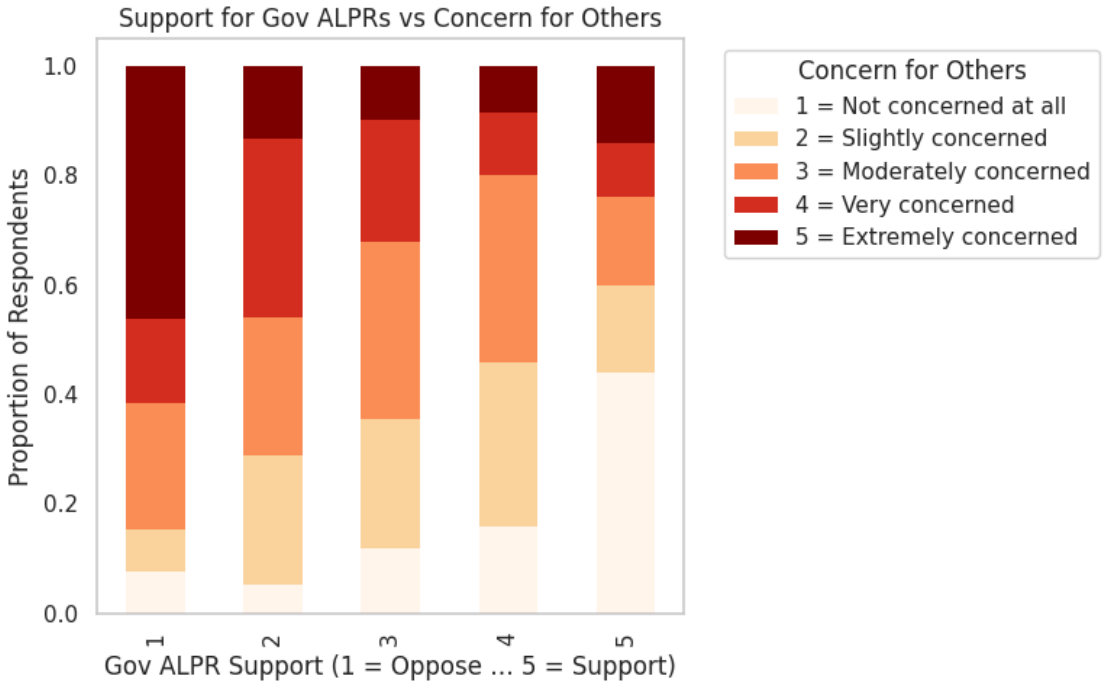

Figure 10

[38] Concern is measured through a survey question: "'How concerned are you that surveillance technologies may harm others (e.g., unhoused people, immigrants, protesters), even if they don't affect you personally?"
Harm belief is measured through a survey question: "

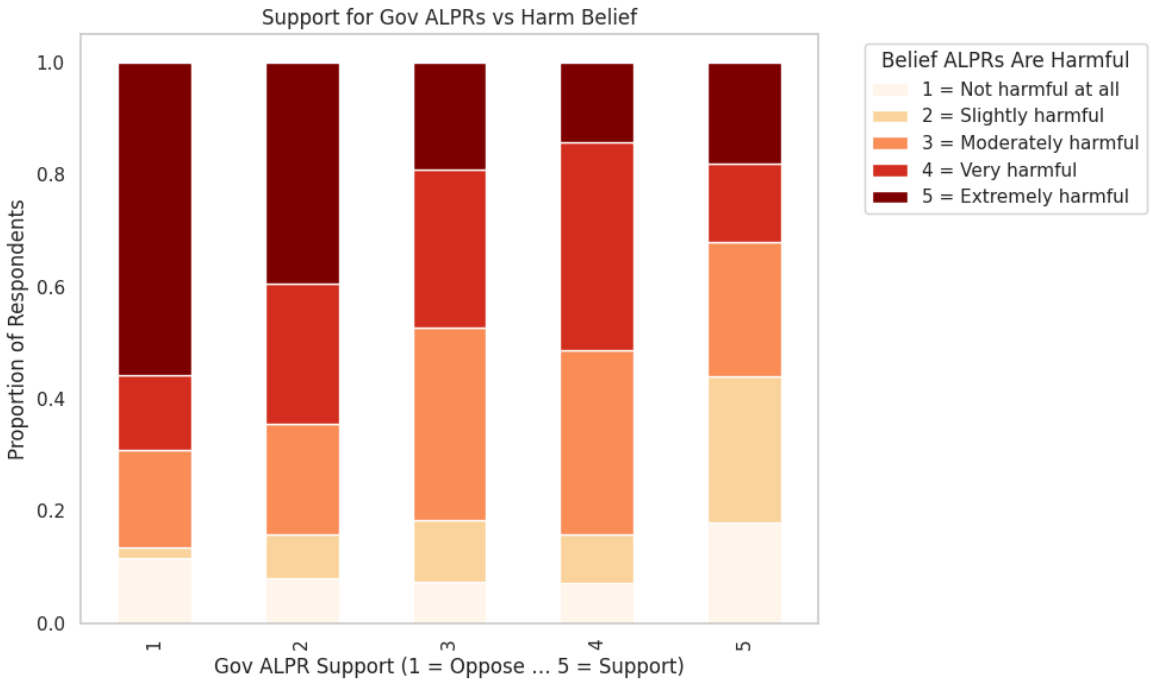

Figure 11

When asked about trust in who could be responsible for managing surveillance cameras, respondents across racial and ethnic groups expressed relatively high confidence in police and local elected officials to oversee surveillance use (Figure 12). However, they also reported significant trust in community members and community-based organizations, revealing that accountability and oversight can be viewed as shared responsibilities. Notably, Black or African American, Hispanic or Latino, and Middle Eastern or North African respondents demonstrated the highest support for community-based oversight.[39]

[39] There are very few Middle Eastern or North African respondents in the survey.

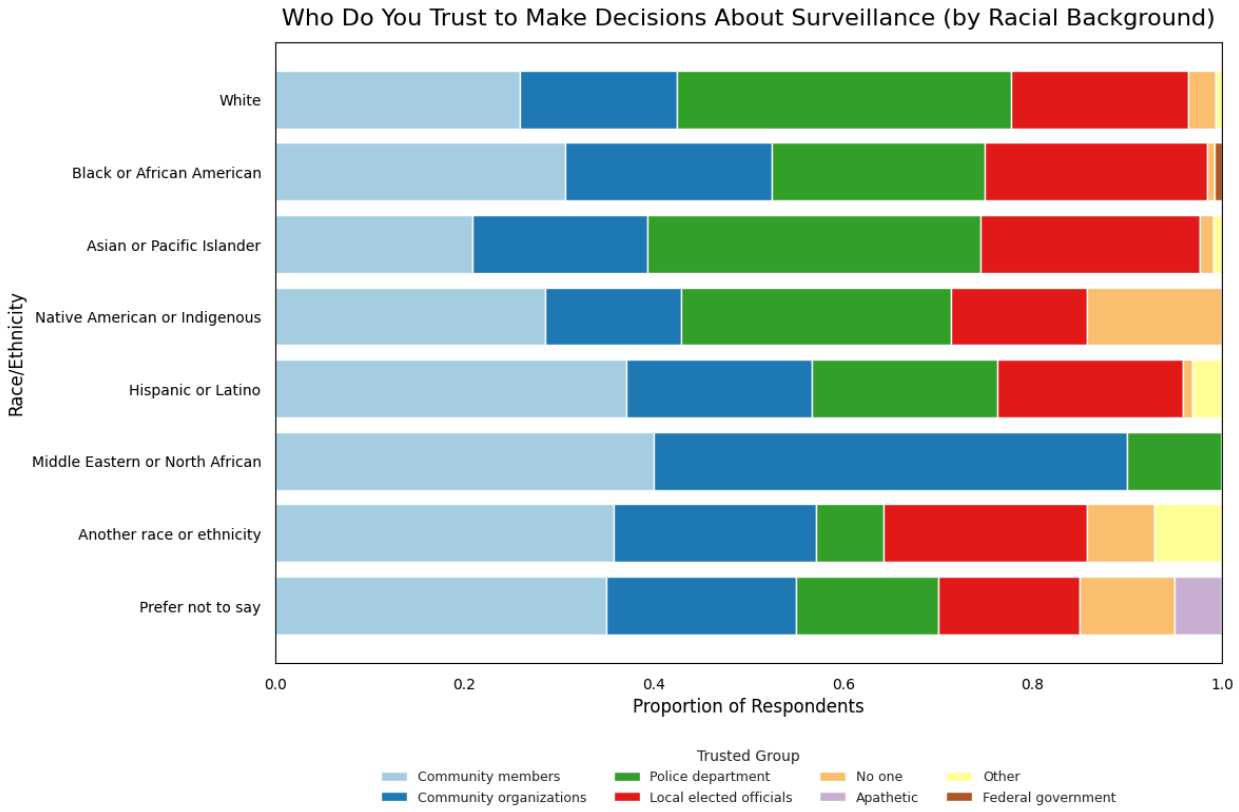

Figure 12

Concerns around data sharing

Across open-ended responses, participants consistently emphasized feelings of being watched and unsafe, but the language and emphasis varied by race. While there are mentions of criminals and security, many participants bring up concerns around profiling, accusation, and targeting (Figures 13, 14, 15, 16).

Figure 13

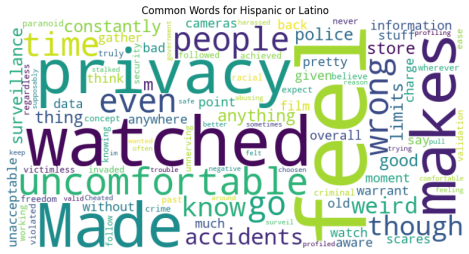

Figure 14

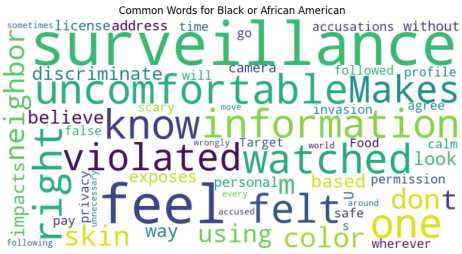

Figure 15

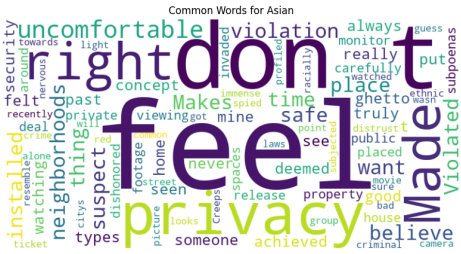

Figure 16

We asked participants about their concern around ALPR data sharing across federal agencies, such as with ICE and the FBI. We asked them about their concern a second time after revealing a report about San Francisco's unlawful data sharing with these federal agencies. While average concern is relatively high across racial groups to begin with, average concern generally increases across racial groups (Figure 17).

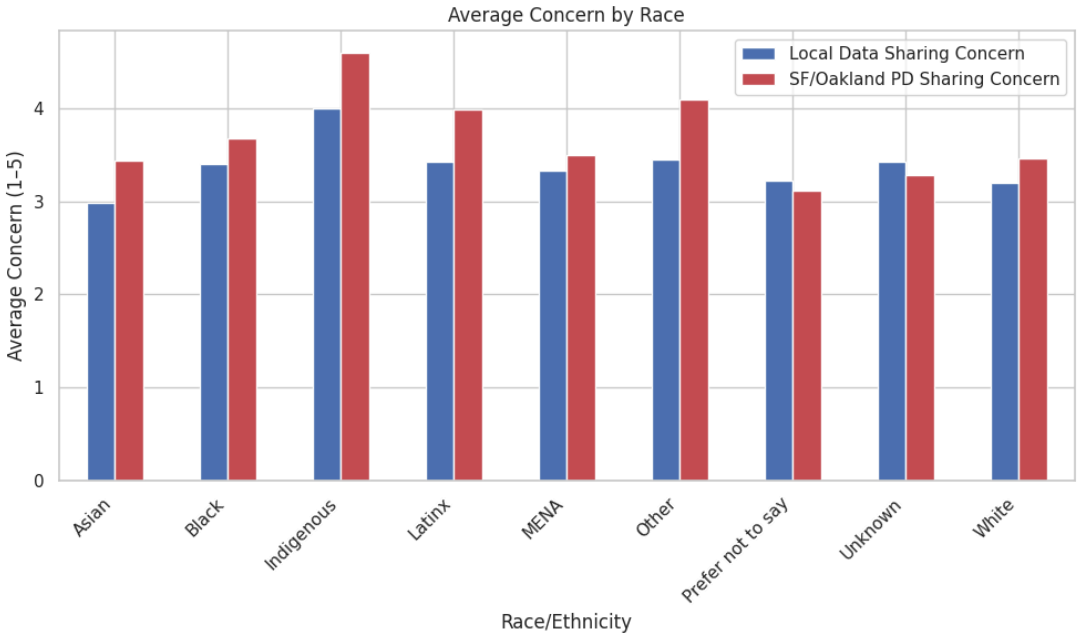

Figure 17

Despite the amount of recent news coverage of Flock Safety cameras, we found that many respondents were not aware of Flock Safety when asked "After being approved by local governments, private companies like Flock Safety install Automatic License Plate Reader (ALPR) cameras in neighborhoods and share data with police. Before today, how aware were you of that fact?"

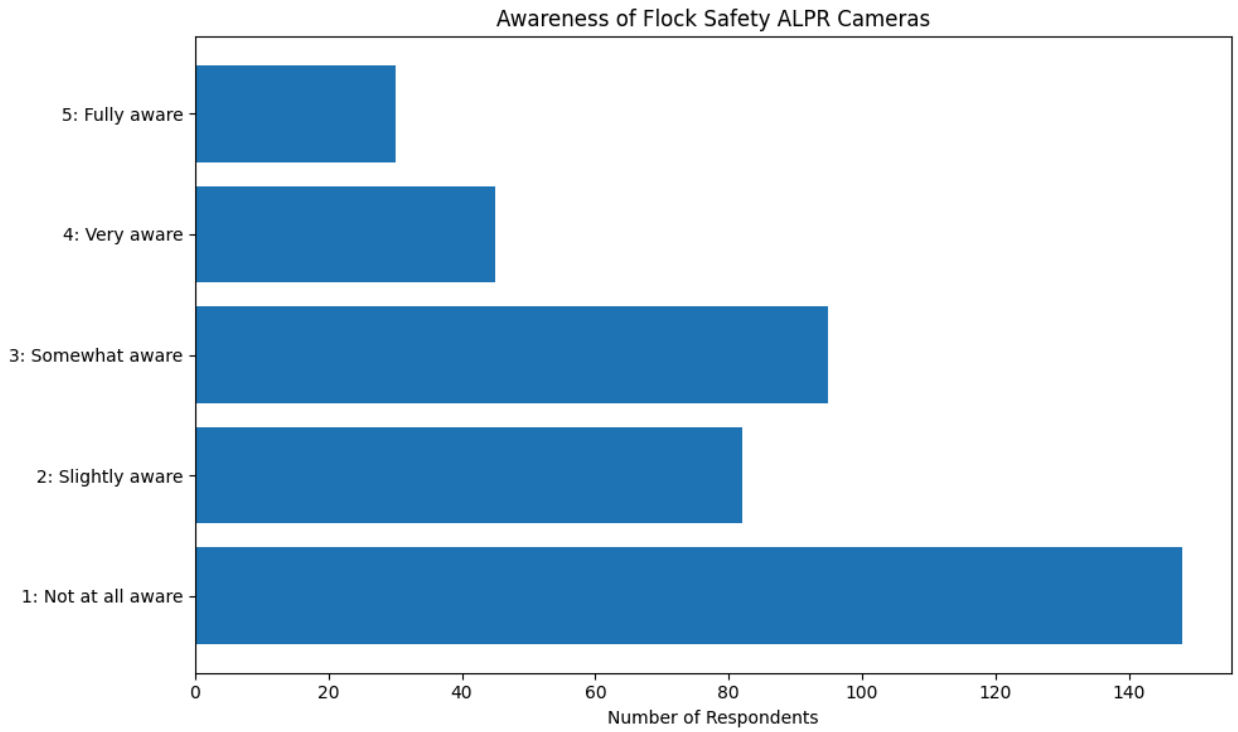

Figure 18

The paired slope plots (Figure 19) visualize this within-person change: each line represents a single respondent's shift in concern, with the left point showing their initial response and the right point showing how their concern changed after learning about the confirmed violation. Across nearly all racial groups, the average lines trend upward, revealing that most respondents became more concerned once the scenario was grounded in a real, local incident. These results suggest that awareness of specific institutional misconduct, not just hypothetical surveillance, heightens public concern, particularly among communities historically over-policed or surveilled.

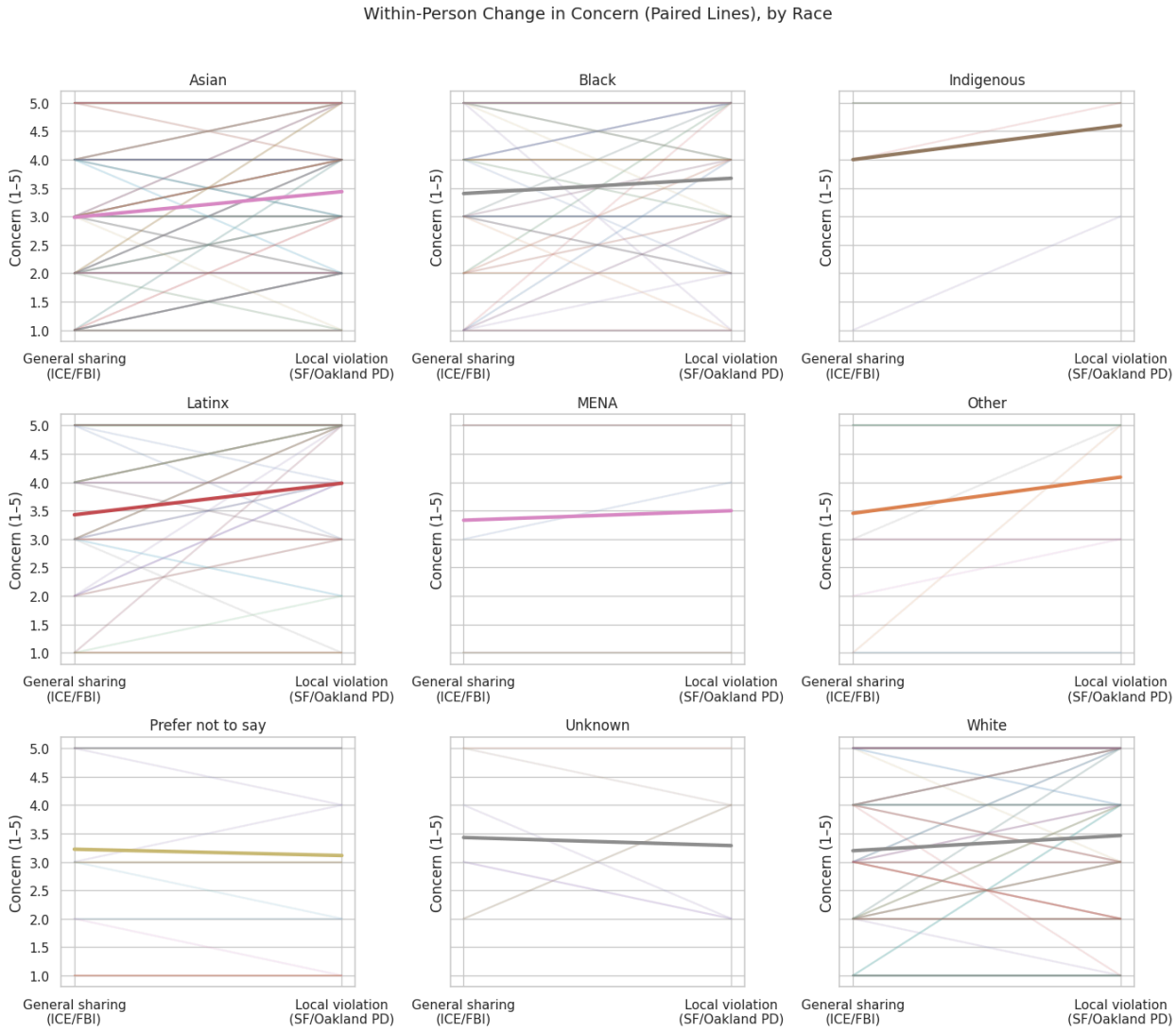

Figure 19

Raw Results

The raw results of the survey can be found in CSV format on the Bay Area Surveillance website[40]. A quick visual overview of survey results in the form of a Streamlit app has also been created[41]. Demographic information of respondents can also be found in both the raw data and the Streamlit app.

[40] Bay Area Surveillance Survey Raw Results, https://bayarea-surveillance.com/survey-about-flock
[41] Bay Area Surveillance Survey Visual Results, https://bay-area-alpr-survey-analysis.streamlit.app/

Conclusion

Information Requests

Across the nine Bay Area agencies we contacted, our CPRA requests showed much variation in transparency practices, data, and willingness to disclose ALPR-related records. Only some agencies like San Jose, Sunnyvale, Hayward, and Berkeley provided proper datasets or audit logs. Some departments such as Fremont, Oakland, and South San Francisco closed our request without explanation or are still continuously extending the response deadline. Some documents such as camera locations, audit logs, and placement rationale were often vaguely reported or absent from the responses. Our findings and experience with the CPRA request process indicates that public transparency of ALPRs is inconsistent across agencies, which makes research, policy, and community awareness difficult. We cannot determine whether the delayed and incomplete responses from agencies are intentional, but under the California Public Records Act, agencies must provide responses in a timely manner. We believe that future approaches can supplement the CPRA request route, such as by combining transparency portal data, public-facing budget reports, and seeking support from other nonprofits in receiving a request response.

Survey

Across different demographic groups, respondents express both concern about data misuse and a desire for greater accountability, especially when learning about genuine surveillance interventions.

In identifying correlational relationships in our survey, we found that individuals tended to trust government ALPRs more than private ALPRs, if presented with the distinction between both. Respondents identified community members and community-based organizations as potential leaders of decision-making around surveillance usage, which reflects a greater desire for information to remain out of the control of private companies. These findings highlight the potential for strengthening public transparency and expanding surveillance insight that reflect collective values of the Bay Area community.

While our dataset gathers 400 respondents across the Bay Area, the sample lacks complete demographic diversity, with noticeably uneven participation in education, race, geographical location, and household income. While this survey is an essential starting

point, our next steps involve surveying more individuals. Demographic breakdowns of the survey dataset can be viewed via the Streamlit[42] feature on the website.

Outreach and Future

This project's findings have already been used in educational workshops and shared with organizations engaged in local campaigns addressing the use of ALPR and Flock Safety camera systems. We presented this work in a public workshop at Stanford University and have shared findings with community organizations in Oakland and the South Bay that are examining or challenging ALPR contracts at the local government level.

Beyond these initial engagements, this project is intended to serve as an ongoing public resource. Community advocates can use the findings and datasets in this report to identify gaps in local ALPR oversight and to follow up with agencies that declined to disclose records or provided incomplete responses. Policymakers and government staff may use this analysis to assess inconsistencies in governance, transparency, and enforcement across jurisdictions. Researchers can reuse the published data and open-source scripts to conduct further analysis, replicate findings, or extend this work to additional regions or surveillance technologies.

The data collected through this project will continue to be hosted at https://bayarea-surveillance.com, and the analysis code is publicly available on GitHub.[43] We encourage members of the public, researchers, and organizers to build on this work by reviewing the data, conducting independent analyses, and using these findings to inform future research, policy discussions, and community organizing efforts

Key Takeaways

This report began by highlighting concerns about the scale, opacity, and governance of ALPR systems in the Bay Area, particularly as these technologies expand through private vendor platforms and inter-agency data sharing. Our findings reinforce these concerns in concrete ways. Through public records requests, we observed substantial variation in how agencies disclose ALPR usage, sharing practices, and audit records, with several departments failing to provide information required under California law. Survey results further suggest that while residents often express conditional support for surveillance technologies, that support declines and concern increases when data sharing practices and documented policy violations are made visible. Together, these

[42] Bay Area Surveillance Survey Visual Results, https://bay-area-alpr-survey-analysis.streamlit.app/
[43] Github, https://github.com/osolis9/alpr-data-analysis

findings indicate that public attitudes toward ALPRs are closely tied not only to perceived safety benefits, but to transparency, accountability, and trust in governance.

Acknowledgments

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Appendix

Demographic breakdowns

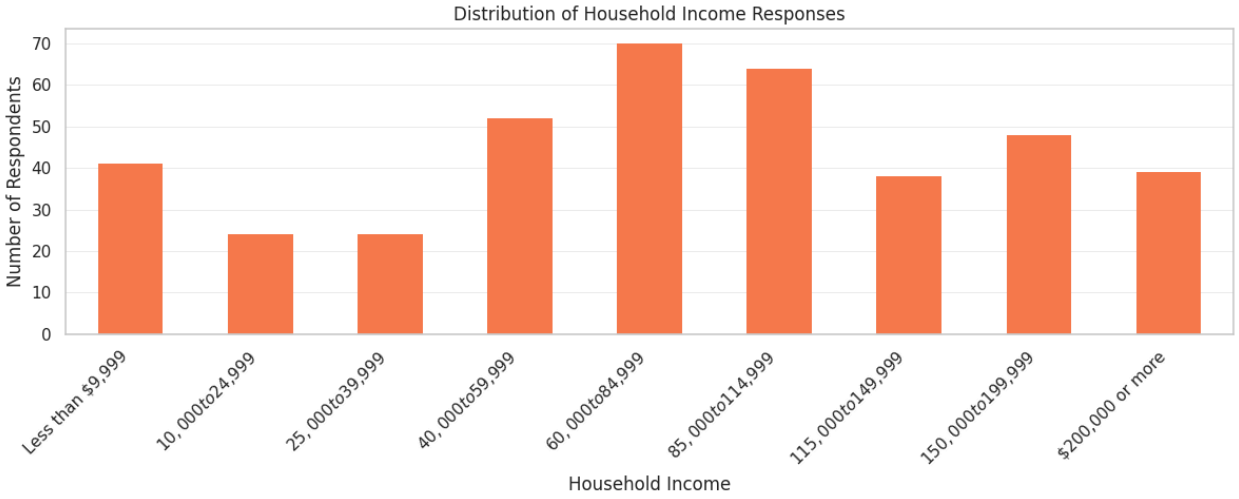

Figure 1A

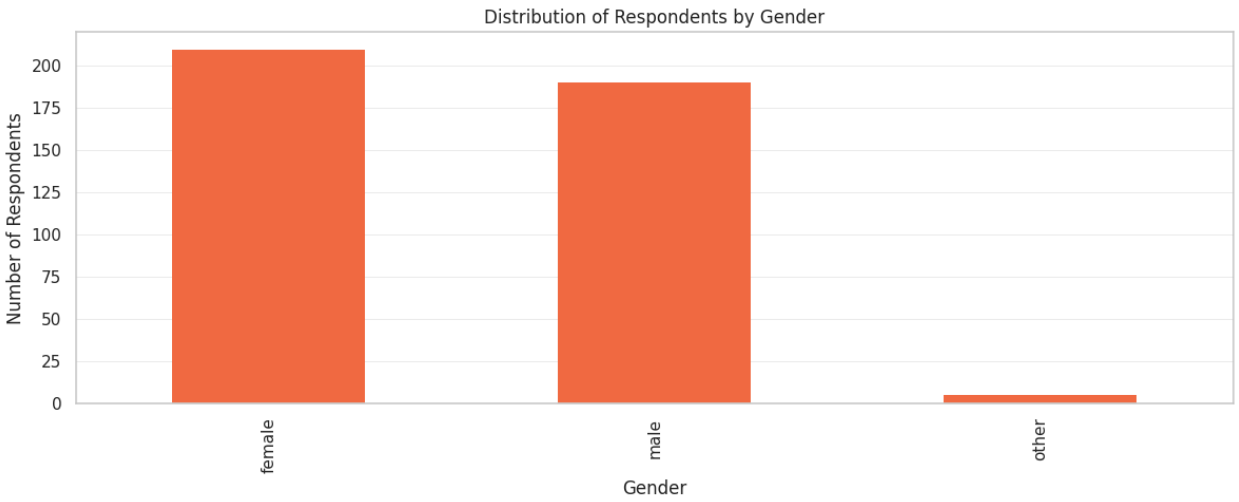

Figure 2A

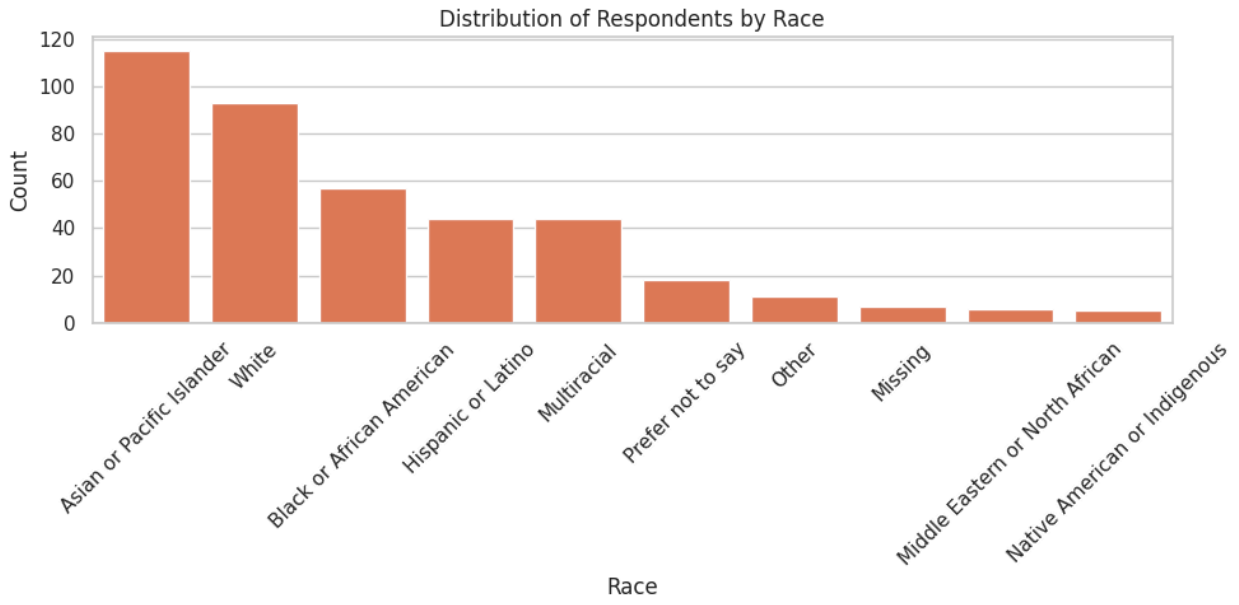

Figure 3A

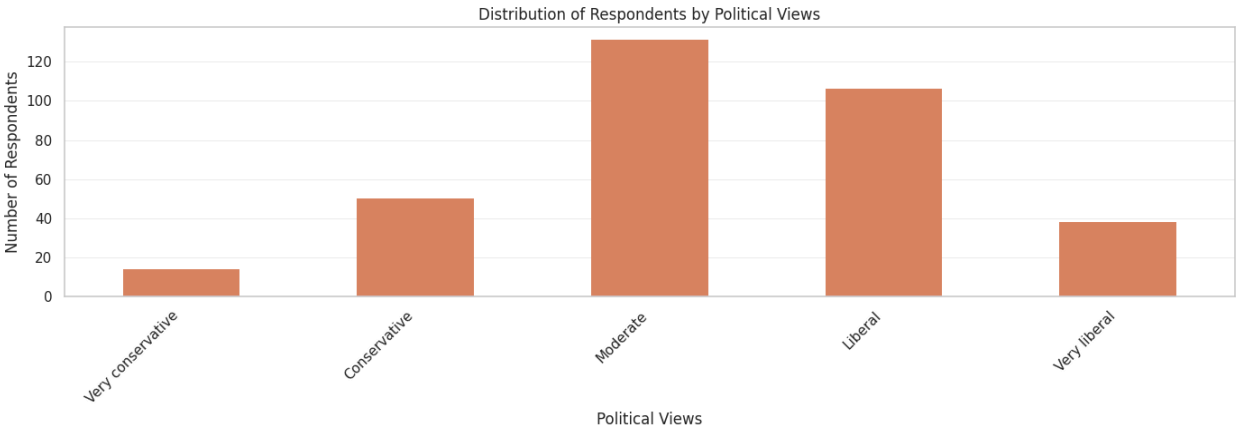

Figure 4A