Audit Report
July 2, 2021

Data Analysis of the City of Berkeley's Police Response

BERKELEY CITY AUDITOR

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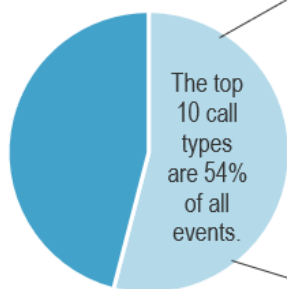
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🔍 Findings

- From 2015-2019, Berkeley police responded to an average of 70,160 events per year.

- Ten call types accounted for 54 percent of all events: traffic stops, disturbance, audible alarm, noise disturbance, security check, welfare check, suspicious circumstance, trespassing, theft, and wireless 911.

Top 10 Most Common Call Types of Events, 2015-2019

Recorded Events from 2015 to 2019

The top 10 call types are 54% of all events.

Call Types	Total Events
1. T - Traffic Stop*	44,795
2. 415 - Disturbance	35,696
3. 1033A - Audible Alarm	19,920
4. 415E - Noise Disturbance	15,773
5. SEC - Security Check	15,262
6. 1042 - Welfare Check	15,030
7. SUSCIR - Suspicious Circumstance	11,547
8. 602L - Trespassing	11,058
9. 484 - Theft	10,556
10. W911 - Wireless 911	9,899

Includes non-officer-initiated

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

- Officer-initiated responses were 26 percent of event responses, while 55 percent were the result of calls to the non-emergency line and 19 percent were from 911 calls.

- The majority, 78 percent, of officer-initiated stops were vehicle stops, and most of them occurred between 8:00pm and 1:00am. The majority of vehicle stops did not lead to a search, and most stops led to a warning.

- Events with a priority level of 1 to 2, which require personnel to be dispatched within 20 minutes of the call, made up nearly 40 percent of all events. Forty-three percent were lower priority events and required personnel to be dispatched within an hour to 90 minutes after the initial call.

Objectives

1. What are the characteristics of calls for service to which Berkeley Police respond?

2. What are the characteristics of officer-initiated stops by Berkeley Police?

3. How much time do officers spend responding to calls for service?

4. How many calls for service are related to mental health and homelessness?

5. Can the City improve the transparency of Police Department calls through the City of Berkeley's Open Data Portal?

Why This Audit Is Important

In response to the killing of George Floyd by Minneapolis police in May 2020 and subsequent protests across the nation, a national conversation ensued about policing. The Berkeley City Council initiated a robust community process to reimagine policing in Berkeley, and passed a proposal requesting analysis of Berkeley's police data. This report is intended to give decision makers and the public a broad overview of calls for service, officer-initiated stops, and police responses and to help inform the community engagement process around reimagining policing in Berkeley.

- Mirroring prior findings by Center for Policing Equity, which were based on data through 2016, data we reviewed showed that BPD stopped Black people at a significantly higher rate than their representation in the population (34 percent compared to 8 percent), while BPD was most likely to search Black and Hispanic people following a stop.

- On average, Berkeley Police Department dispatched 1.8 personnel per event. In 41 percent of personnel responses, the Communications Center dispatched three or more personnel, including officers and non-Berkeley Police Department personnel.

Number of Personnel Response per Event, 2015-2019
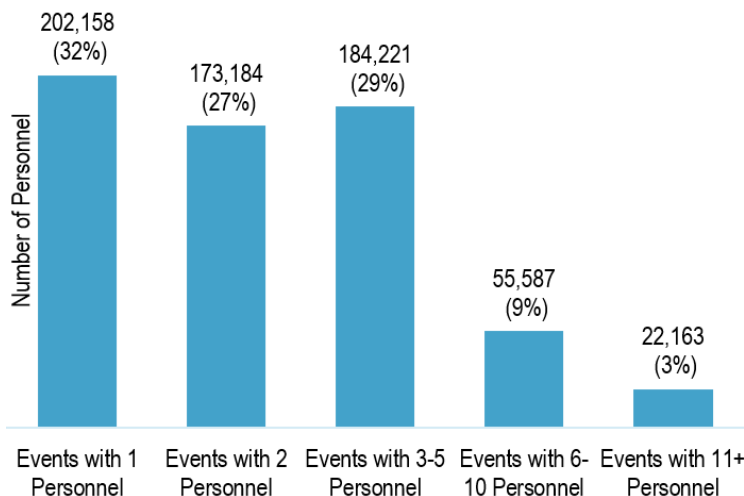
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

- The number of events that involved homelessness or mental health and the amount of time police spent responding to these events are not quantifiable due to insufficient data.

- The City's Open Data Portal provides the public with limited information about events that Berkeley Police Department responds to. There are opportunities for Berkeley Police Department to improve transparency by increasing the type and scope of data available on the portal.

✅ Recommendations

We recommend that the Berkeley Police Department identify all calls for service that have an apparent mental health and/or homelessness component in a manner that protects the privacy rights of individuals involved. We also recommend that the Berkeley Police Department expand the current calls for service data available on the City's Open Data Portal to include all call types and data fields for as many years as possible. City Management agreed with our recommendations.

The audit does not propose recommendations with regard to police activities or personnel allocations. There is a separate, ongoing community process for reimagining public safety and policing.

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For the full report, visit:
http://www.cityofberkeley.info/auditor

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I. Introduction

Following the killing of George Floyd by Minneapolis police in May 2020, a national conversation ensued about policing, race, and the proper level of resources cities should devote to law enforcement in relation to other services and approaches. The Berkeley City Council held several meetings throughout the spring and summer to discuss a variety of proposals related to policing, and hundreds of community members provided input through public comment, phone calls, and emails.

Among the items discussed was a proposal by Councilmember Ben Bartlett to analyze data on police activities in the City of Berkeley and initiate a public process to discuss various potential changes to policing in the City. The City Auditor offered to conduct analysis of police data requested as part of this proposal. Mayor Jesse Arreguín incorporated the call for this analysis into the Safety for All: The George Floyd Community Safety Act, a broader item on policing that City Council passed in July 2020.

In this audit, we present the results of our analysis. It is intended to give decision makers and the public a broad overview of calls for service, officer-initiated stops, and police responses and to help inform the community engagement process around reimagining policing in Berkeley, which is currently underway. It is also intended to provide information to the broader community around events that involve police personnel. This report is the first in a series of audits on policing. Analysis of the police budget is forthcoming.

Objectives, Scope, and Methodology

We answered the following audit objectives, the first three of which were requested in the Safety for All: The George Floyd Community Safety Act:

1. What are the characteristics of calls for service to which Berkeley Police respond?
2. What are the characteristics of officer-initiated stops by Berkeley Police?
3. How much time do officers spend responding to calls for service?
4. How many calls for service are related to mental health and homelessness?
5. Can the City improve the transparency of Police Department calls through the City of Berkeley's Open Data Portal?

We analyzed Berkeley Police Department Computer Aided Dispatch (CAD) data from 2015 to 2019. The full list of CAD data fields are in Appendix A. We explored various models for categorizing and characterizing data on police activities and consulted a range of stakeholders, including the Berkeley Police Department (BPD), the National Institute for Criminal Justice Reform hired by the City to lead the reimaging policing process, other City departments, community stakeholders, and subject matter experts to inform how we characterized the data. The purpose of this process was to ensure that we presented the data in a way that is as accurate, clear, and as easy to understand as possible.

The audit does not propose recommendations with regard to police activities or personnel allocations. There is a separate, ongoing community process for reimagining public safety and policing. Given the timing of that process and the scope of this report, we did not do an in-depth analysis of alternative policies or approaches to policing. However, we do make recommendations aimed at making data more transparent and available to the public.

The following describes the scope and limitations of data included in this report:

- **Focus on 2015 to 2019 time period.** Given the anomalies in patrol team staffing and other impacts of the COVID-19 pandemic, we analyzed data from January 01, 2015 to December 31, 2019.

- **Responses that include sworn BPD officers.** We analyzed data for responses that have at least one sworn BPD officer. Some responses also include other units in addition to sworn BPD officers, such as non-sworn BPD personnel, or non-police personnel from other City departments.

- **Emphasis on patrol officers.** The CAD data source primarily documents responses by patrol officers who are usually the first and primary responders to calls for service. As such, our analysis focuses on the patrol functions of the Berkeley Police Department. There are additional activities within BPD that are not captured in the CAD data and therefore were outside the scope of this audit.

- **Partial snapshot of response from other non-patrol units.** We show data about other units involved in calls, but only if they are documented in CAD. As such, we do not include all calls by these other units, such as the Mobile Crisis Team.

- **Call types are not proof of a crime.** In CAD, dispatchers assign calls for service to a call type based on the nature of the call. In many cases, the assigned call type may reference a certain type of crime. However, assigning calls to these call types does not constitute proof of a crime. Further, any type of call may result in a crime report from the primary BPD officer assigned to the event.

- **Geography not included.** We did not conduct a geographic analysis. Patrol officers are assigned to work in a specific geographical area, called a beat, typically with up to 10 or 11 officers and two sergeants on each patrol team. A deep dive geographic analysis would have required significant additional time and was beyond the scope of our audit.

- **Caller may be from any jurisdiction.** The callers and individuals involved in events may or may not be Berkeley residents.

- **Does not include number of calls received for each event.** This report does not include the number of calls that were made to the Communications Center for each individual event. Data about individual callers is excluded from the report because we did not receive this information in the data. However, we describe the type of call source, such as whether a call came from the emergency line or was initiated by the officer.

For more information on our methodology, see .

II. Background

Organizational Context

Berkeley's City Charter established the Berkeley Police Department (BPD) and its functions, which operate under the direction of the Chief of Police and the administrative direction of the City Manager. According to its website, BPD's mission is to safeguard Berkeley's diverse community through proactive law enforcement and problem solving, treating all people with dignity and respect.[1]

BPD's fiscal year 2020 budget includes 285.2 full-time equivalent positions including 181 who are sworn in as law enforcement officers (sworn officers) and another 104.2 professional employees, serving a city of over 120,000 people.

Figure 1. Berkeley Police Department Organization Chart
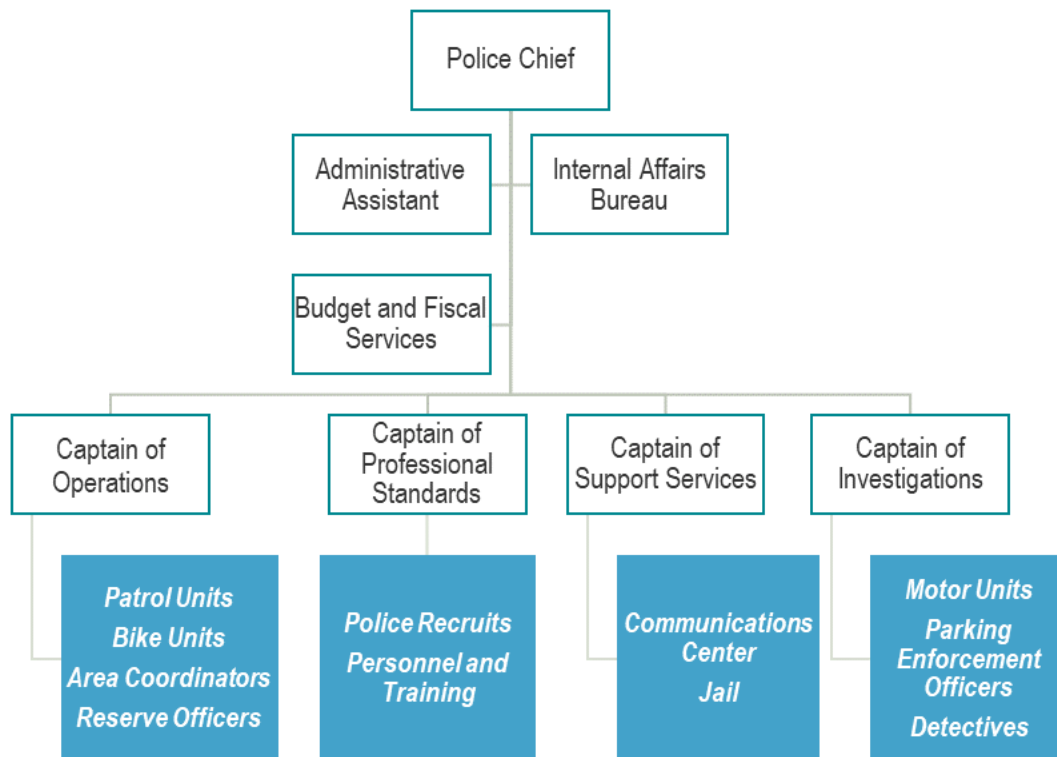
Source: Berkeley Police Department

BPD personnel that respond to calls for service may be sworn officers or professional personnel, and the latter are also referred to as "non-sworn" or "civilian." According to BPD Policy 102, sworn officers take or affirm an oath of office expressing commitment and intent to respect constitutional rights in discharging the duties of a law enforcement officer as specified in the California Constitution. The California penal code grants sworn officers the authority to wear a badge, carry firearms, and make arrests in performing their police duties as authorized and under the terms specified by their employing agencies.

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[1] Berkeley Police Department Mission, Vision, and Values: https://www.cityofberkeley.info/Police/Home/About_Our_Department.aspx

Event Response Personnel

BPD Patrol Teams. BPD patrol teams are the primary responders dispatched to events. They provide services 24 hours a day, seven days a week. BPD policy states that the function of patrol teams are to respond to calls for service and reports of criminal activity, act as deterrent to crime, enforce state and local laws, identify community needs, provide support and assistance to the community, and respond to emergencies. Patrol officers may also self-dispatch based on their geographic proximity or seriousness of the event depending on priority level.
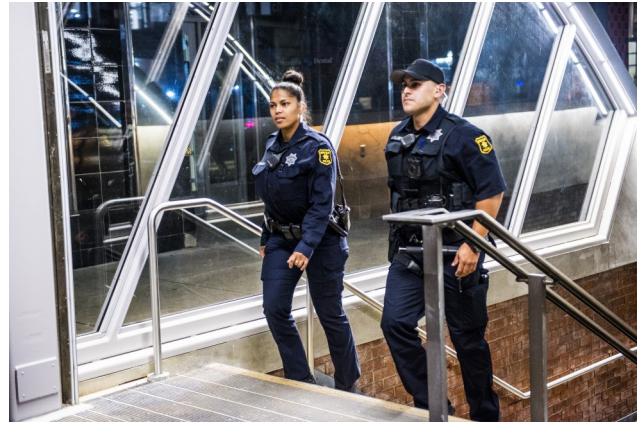
BPD Communications Center. The call takers and dispatchers working in the BPD Communications Center have the important role of answering emergency and non-emergency calls and dispatching police officers to events. Call takers accept and processes inbound 911 and administrative calls for police, fire, and medical services as well as other services such as animal control. They also input call information into the Computer Aided Dispatch (CAD) system and transfer the information to fire and police dispatcher staff. Dispatchers coordinate all police-related calls requiring a response from law enforcement and enter all officer-initiated incidents into CAD such as pedestrian and traffic stops. They also maintain radio contact with field staff.

Other Units. Other personnel may be dispatched as needed to support patrol officers responding to an event. Other units can include other BPD personnel such as Area Coordinators, Bike Unit Officers, Parking Enforcement Officers, and Crime Scene Technicians. Other personnel dispatched to support patrol teams may also include non-BPD personnel such as Animal Control, the Mobile Crisis Team, and University of California Officers.[2] As an example, if the Communications Center receives a call about a situation that involves a person experiencing a mental health crisis, they may dispatch BPD officers and also dispatch the Mobile Crisis Team of non-police mental health professionals from the City's Mental Health Division.

All other units are described in greater detail on .

Process for Responding to Calls

BPD's process for responding to events reflects the interactions between community members, the Communications Center, and the responding BPD officers. The response process heavily influences the integrity of the data that informs this report.[3] BPD uses a CAD software system to prioritize and record events, track the status and location of officers in the field, and effectively dispatch personnel.

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[2] While some calls may involve the Berkeley Fire Department, we do not have data on Fire personnel who responded to these BPD events.

[3] We conducted this analysis based on data pulled from CAD, but we did not verify the error rate of data in CAD. We did not attempt to match up the thousands of records in the system with other internal and external documents.

It is crucial to remember that the response process involves situations that are evolving and often require fast action before all the information about the situation is known. CAD is not optimized to give responders all the information they need before arriving at the scene. There are several roles responsible for entering data into CAD throughout the response process. We detail the police department's response process in Figure 2 below.

Figure 2. Berkeley Police Department's Response Process
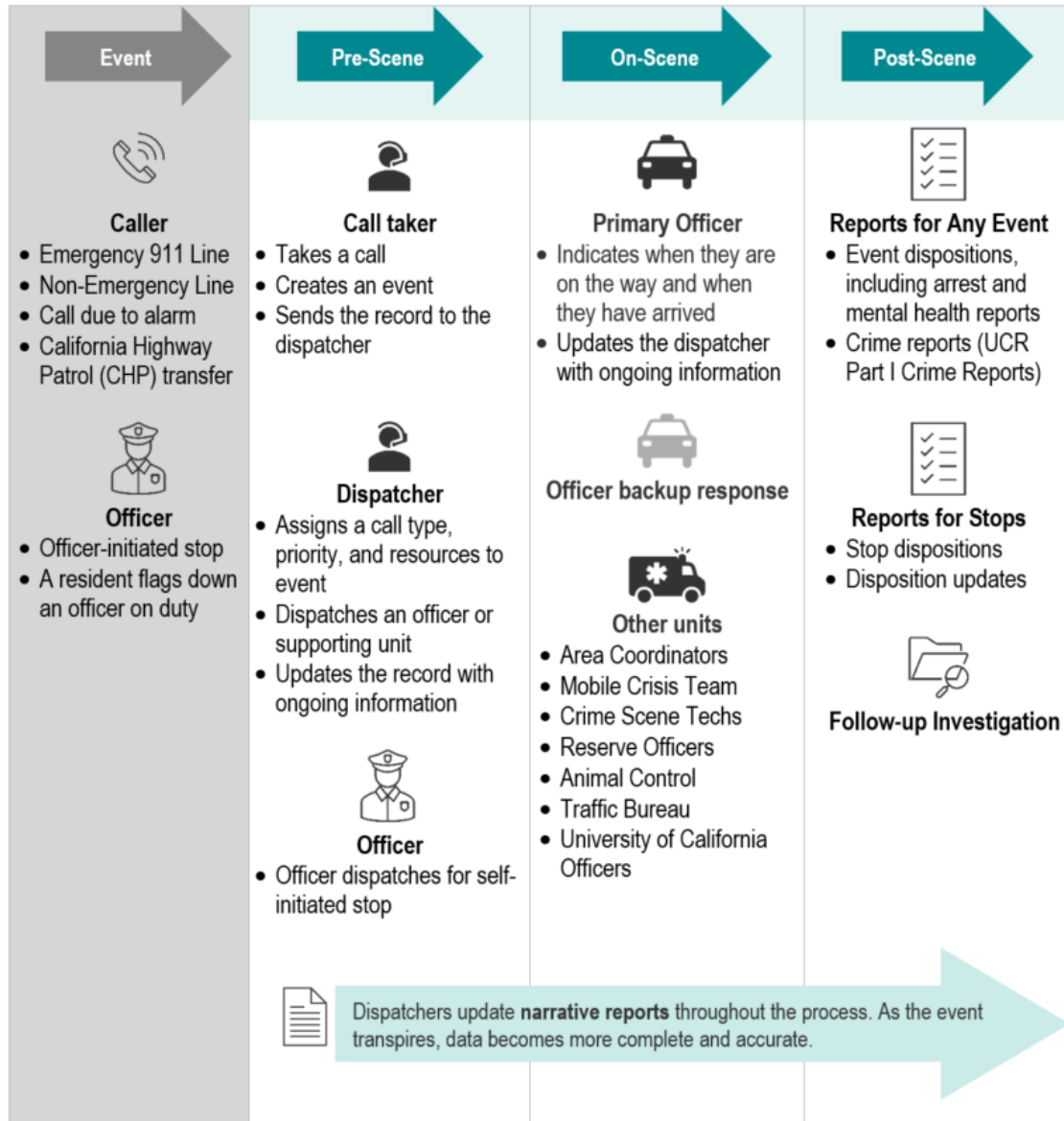
Note: We did not analyze responses by Berkeley Fire Department, Emergency Medical Services, or other such units that may provide support for BPD patrol officers that were not included in the dataset provided by BPD.

Source: Berkeley City Auditor

Event. In context of this report, "events" refer to situations that are entered in the CAD system that resulted in a response by at least one sworn officer. There are several ways an event is initiated. Community members initiate events by calling the 911 emergency or non-emergency lines, or by flagging down an on-duty officer. Police officers may initiate events on their own. Events are also initiated when an alarm goes off or when CHP transfers a call. It is possible to have multiple incoming calls for one event.

Pre-scene. When someone calls 911 or the non-emergency line, a dispatcher receives the call and collects specific information, such as the address of the event, the possible issue, if there is a weapon, and the people involved to begin dispatching the appropriate personnel to the scene. The initial call taker enters this information into the CAD database. Dispatchers assign a call type and priority, then dispatch officers accordingly. The dispatcher has the ability to enter narrative data at any time to provide ongoing information to the officer regarding the nature of the event.

Information entered into CAD at this stage may not always match the information entered later in the response process. By the time an officer arrives, a burglary may no longer be in progress, a noisy party may have dispersed, or, if the delay between call and response is long enough, the caller may have left the location.

On-scene. Police officers notify a dispatcher when they are on their way to the scene and when they arrive. Due to the changing nature of events, the police officer assigned as the primary unit also collects additional information on scene. The CAD event will be updated as information becomes available by either the officer or dispatcher, however, the call type is final once the officer arrives and a responding officer cannot change the call type in CAD. The evolving situation of a call may lead to a dispatcher assigning additional police or other units to the scene, or officers nearby may self-dispatch to provide backup.

Post-scene. Once the event is closed, the primary officer on scene completes an incident report if required by the severity of the event, and updates the CAD file with any new information. Those reports are submitted to the patrol shift supervisor and either approved or revised. Typical revisions include clarifying dates, police codes, or providing additional details. According to BPD, disposition codes are most often entered by an officer. However, an officer may also radio into the Communications Center about the event and a dispatcher will enter disposition information.

Quality control. Each day, a records clerk reviews the BPD Communications Center reports for clarity and completeness. This includes verifying call codes, addressing typos, confirming addresses using Global Positioning System (GPS), and identifying where there may be missing information. Once the record has met their quality control requirements, the call is uploaded into the separate Law Enforcement Records Management System (LERMS) where it is stored along with the raw CAD file from the call.

Assigned Call Types

Dispatchers at the BPD Communications Center assign each event a call type that describes important information about the events unless the event is officer-initiated. BPD uses many call types. Some describe a potential crime (e.g., robbery, assault, gambling), while others describe the location (e.g., fall on city property), people involved (e.g., missing juvenile), or a situation that may not be related to crime (e.g., welfare check, vehicle stop). In addition, the Communications Center uses call types in order to assign priorities and resources to the event, as discussed further in the section on priority levels. Call types for events are assigned prior to arrival of BPD staff, and they may differ from the actual event that took place after the event has concluded.

Call Type Classifications

According to the data, BPD used 137 unique call types. We consolidated these call types into nine descriptive categories for reporting purposes. Similar call type classifications have been used to organize call for service data for reporting purposes in similar jurisdictions such as Portland,[4] Austin,[5] and Oakland.[6] Building on these efforts, we organized BPD's call types into categories through input from external subject matter experts, the BPD Communications Center, and BPD officers with relevant experience (Table 1).

The City Auditor call type classifications are descriptive. They do not, by themselves, imply a recommended policy change. Further, assigned call types under the crime classifications may not necessarily mean a crime has taken place. Specific call types within each classification are listed at the end of the report under Appendix G. For more information on the methodology used to classify call types, see page 65.

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[4] City of Portland Police Bureau, "Introduction to Calls for Service," https://www.portlandoregon.gov/police/article/676725
[5] AH Datalytics, "Assessment of Austin Police Department Calls for Service," https://austinjustice.org/wp-content/uploads/2020/07/Analysis-of-Austin-Police-Department-Calls-for-Service-3.pdf
[6] Center for Public Safety Management. "Police Data Analysis Report," https://cao-94612.s3.amazonaws.com/documents/CPSM-Oakland-CFS-Report-Dec-2020.pdf

Table 1. Description of City Auditor Call Type Classifications

Classification	Description
Violent Crimes (FBI Part I Crimes)	Events that fall into the definition of Part I crimes by the Federal Bureau of Investigation (FBI) Uniform Crime Reporting (UCR) Program that are crimes against a person. The FBI UCR program defines these crimes as criminal homicide, rape, robbery, and aggravated assault. Only assaults specifically identified as aggravated are included as a Part I offense.
Property Crimes (FBI Part I Crimes)	Events that fall into the definition of Part I crimes by the FBI UCR Report that are property crimes. These include arson, burglary, motor vehicle theft, and larceny theft. This does not include theft by fraud, forgery, or embezzlement.
FBI Part II Crimes	FBI Part II crimes include all other crimes that are not included as Part I crimes. While some of these crimes are very serious, including kidnapping and child molestation, the majority of these crimes are crimes such as disturbing the peace and trespassing, which in some cases may be infractions and not actually criminal.
Community	Calls that assist the community in managing events that pose a potential threat to safety or public order. They are most often not initiated by an officer. These include but are not limited to: • Civil matters where police presence is requested to ensure the situation does not escalate (e.g., advice, extra surveillance, civil standby). • Calls related to disturbances or other problems that result in a police response to assess and resolve the situation. • Contacts with the community, such as aid to citizen.
Medical or Mental health	Events primarily related to medical assistance to the community. They may involve a dispatch from Emergency Medical Services (EMS) for added support.
Traffic	Events that typically involve enforcement of traffic and parking laws, and management of traffic flows. In addition, these calls may involve events pertaining to vehicles, such as collisions or road hazards. This classification also includes pedestrian, bike, suspicious vehicle, and vehicle stops.
Informational or Administrative	Calls that are non-investigative assistance or administrative in nature, such as property damage or information.
Investigative or Operational	Calls that require investigative or operational input, such as a wireless 911 call or outside agency assist.
Alarm	Calls initiated by the activation of an audible, silent, duress, and/or monitored alarm of a vehicle, residence, business, or other premise. Example alarms include audible alarm, GPS tracker alarm, silent alarm, Pronet (bank) alarm, or video alarm.

Note: These are the events classified by call types, not the final report or crime.

Source: Berkeley City Auditor

III. Characteristics of Events

Analysis of 350,800 events from 2015-2019

This section offers an overview of the events in the City of Berkeley that resulted in a police response from 2015 to 2019. In context of this report, "events" refer to situations that are entered into the CAD system that resulted in a response by at least one sworn officer. We present information about the characteristics of events in Berkeley, including the frequency of events over time, types of events, how events are initiated, priority level, outcomes, and events that result in crime reports. The figures in this section draw from a sample of 350,800 events within the CAD files we obtained from BPD.

The City has averaged 70,160 events per year, and more occurred during summer months and on Friday and Saturday evenings. This report classifies most of those events, 72 percent, as Traffic, Community, and FBI Part II Crimes and those events have consistently been the majority from 2015 to 2019. Community and FBI Part II Crime events were mostly initiated by calls to the non-emergency line, and the non-emergency line accounted for 55 percent of the initiated calls. These most frequent call types include traffic stop, disturbance, and audible alarms. The most frequent officer-initiated events include traffic stop, security check, and pedestrian stop. While only 6.7 percent of events resulted in a Part I UCR crime report linked to a CAD event, larceny theft was by far the most common Part I UCR crime reported to the FBI. Traffic stops were the call type that resulted in the most arrests.

The characteristics of events shape the priority and extent of BPD's response. For instance, the number of officers that are available to respond to the call varies depending on the location, time of day and day of the week. Events vary in complexity, and can include anything from a request for a security check to a report of a serious crime. Characteristics such as the severity of the situation and number of people involved also influence the priority level and the number of officers dispatched, along with their sense of urgency about the situation. Additionally, the assigned call type for the events in this report may not necessarily be the actual event outcome since call types are assigned prior to personnel arriving on scene.

We review the following components related to events:

1. Overall Event Frequency
2. Events by Time and Day of the Week
3. Events by Call Type Classification
4. Event Initiation Source
5. Assigned Call Type
6. Priority Levels
7. Events that Result in an Arrest
8. Events that Result in a UCR Part I Report

Overall Event Frequency

Figure 3 demonstrates the total number of events in the City on a monthly basis, from January 2015 to December of 2019, in order to show seasonal changes in the frequency of events over time.

Figure 3. Events Captured in CAD by Month, 2015-2019 (n = 350,800 events)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

The number of events for the City of Berkeley has hovered around an average of 70,160 events per year. The trend line indicates that more events occur in the summer, while events decline during the winter. In addition, the data show a notable decline in events in 2018. This drop in events is reflected in other time series throughout this report. We did not investigate the reason for the drop in the calls as this extended beyond the scope of analysis for this audit.

Events by Time and Day of the Week

Figure 4 shows all of the events from 2015 to 2019 in which the Communications Center created a CAD event to demonstrate the frequency of events by the time of day and day of week. The chart is organized by the time of day on the bottom (x axis) and the day of the week on the left side (y axis). The blue color reflects fewer events, while a deeper red reflects more events. The largest number of events occur on Friday and Saturday evenings with a spike between the hours of 8:00 pm and 1:00 am. The majority of weekday events (Monday-Thursday) with a police response occur between the hours of 9:00 am and 9:00 pm.

Figure 4. Number of Events by Time and Day of Week, 2015-2019 (n = 350,800 events)
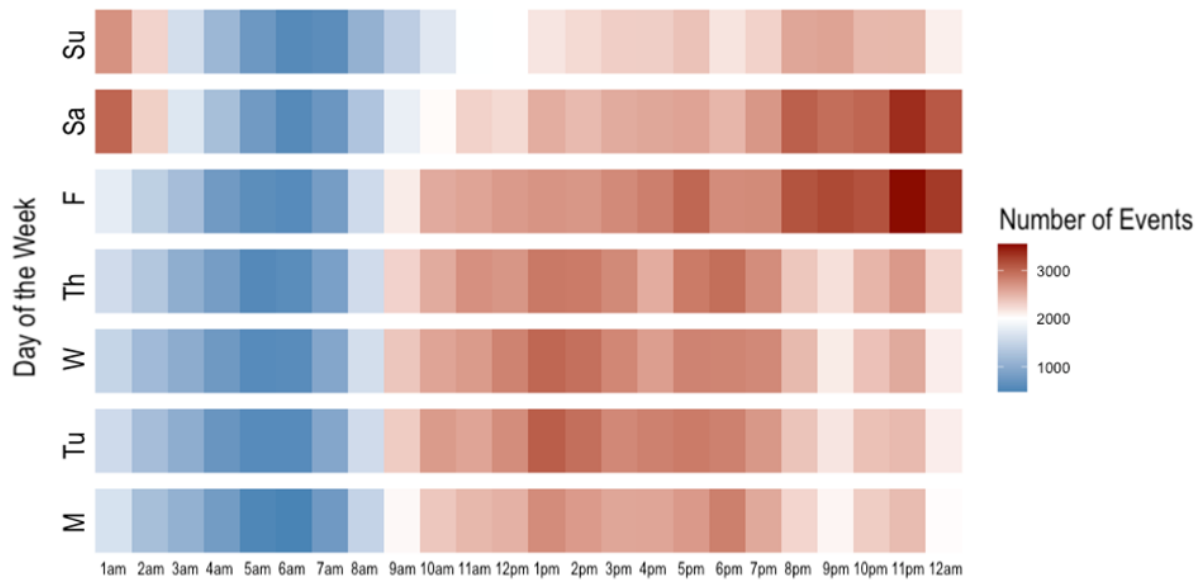
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Events by Call Type Classification

In this section, we present events grouped by classification. We describe call types related to mental health and homelessness in more depth in section VI. Appendix G provides the full list of call types and their corresponding classifications.

Figure 5 shows the frequency of events organized by classification as discussed on page 12. Note that while many crime call types fall within Part II crimes, the majority, or 60 percent, of the events are either disturbance or trespassing.

Figure 5. Events by City Auditor Classifications, 2015-2019 (n = 350,800 events)
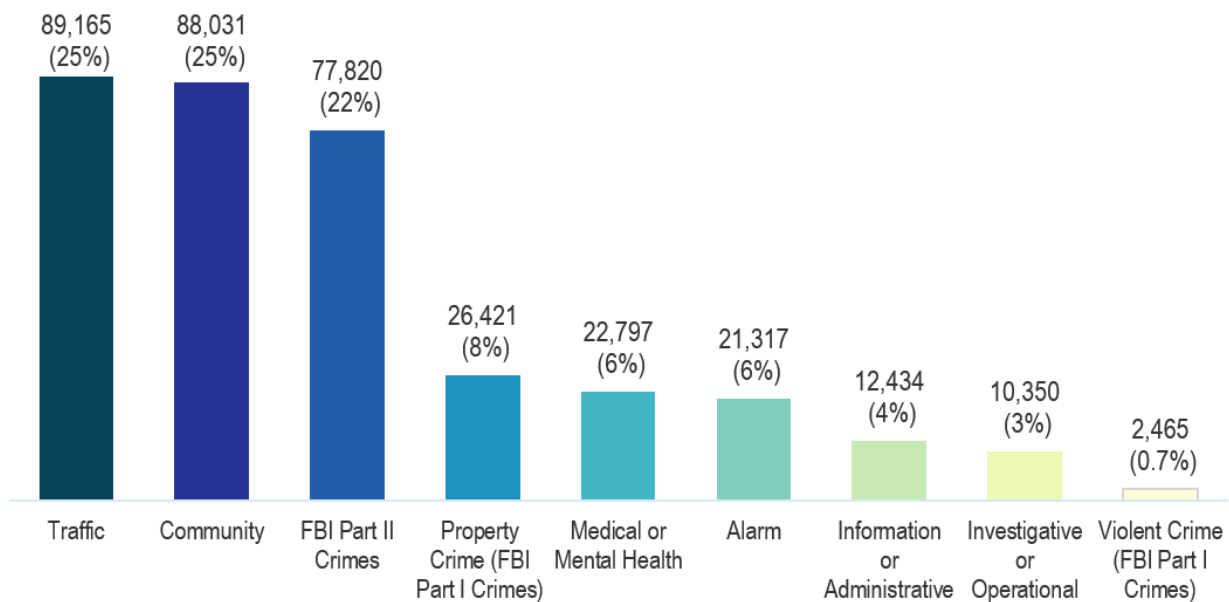
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 6 shows the number of events that fall into each call type classification over the years. The figure demonstrates whether there have been changes in some of the call type classifications over the years. It is important to note that the BPD has the authority to add or eliminate call types. The removal or addition of call types can be a contributing factor in the increase or decrease of call types in the data. We did not assess the impacts of changing call types as this extended beyond the scope of analysis for this audit.
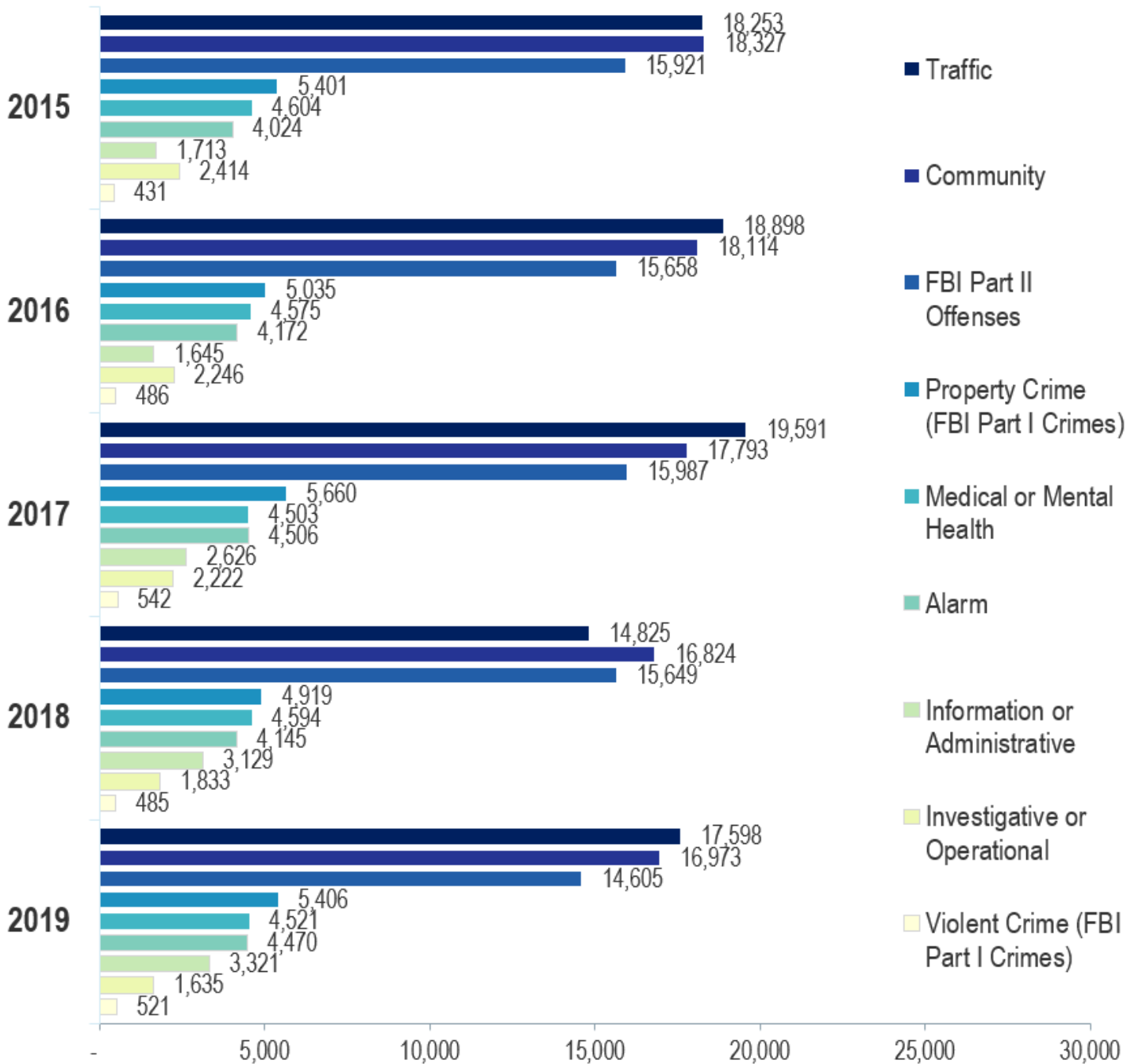
Figure 6. Events by City Auditor Classification and Year, 2015-2019 (n = 350,800 events)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Event Initiation Source

As discussed in Section II, multiple callers may call in to the Communications Center to report an event. The data does not indicate the number of calls received by the Communications Center to report an event. However, according to BPD, dispatchers can add additional information from multiple callers to one CAD event record. If more than one CAD record is created for one event, the records will be merged into one record retaining all information. The CAD data we received does include the source of information that led to the event being created. Figure 7 breaks down the share of callers by three main categories: the emergency line, non-emergency line, officer- initiated, and other.

Figure 7. Initiation Source of Events, 2015-2019 (n = 350,800 events)
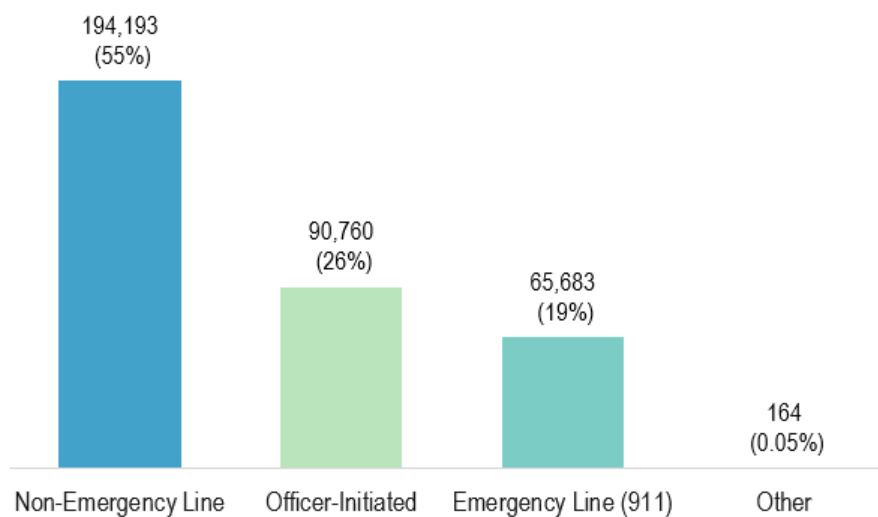
Note: "Other" includes: some alarm calls, some cell phones, California Highway Patrol, Counter, OnLine, and Voice Over Internet Protocol (VolP). Officer-initiated includes traffic stops.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 8 shows the initiation source for each of the call type classifications. The majority of traffic stops are officer-initiated. The Traffic classification includes call types in addition to stops, such as parking violations and traffic hazards.

Figure 8. Initiation Source of Events by City Auditor Classifications, 2015-2019 (n = 350,800 events)
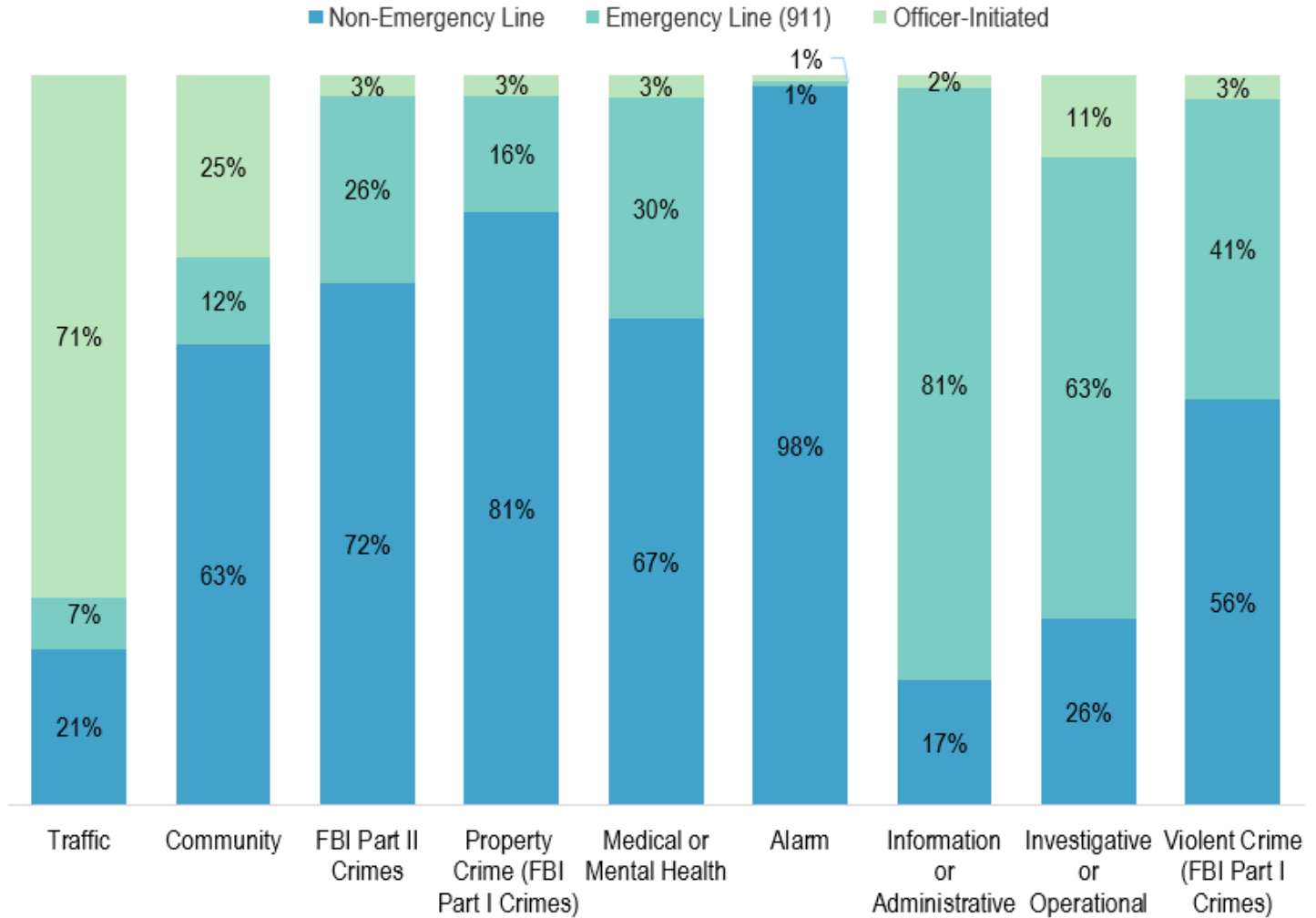
Note: Less than 1 percent of calls also come from an "other" source which includes: some alarm calls, some cell calls, California Highway Patrol, Counter, OnLine, Voice Over Internet Protocol (VoIP), and Other. Officer-initiated includes On View and Traffic stops.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 9 shows the initiation source for calls over a five year period. It reflects the consistent trend that the non-emergency line is by far the top initiation source, followed by officer-initiated, emergency line, and other.

Figure 9. Initiation Source of Events by Month, 2015-2019 (n = 350,800 events)
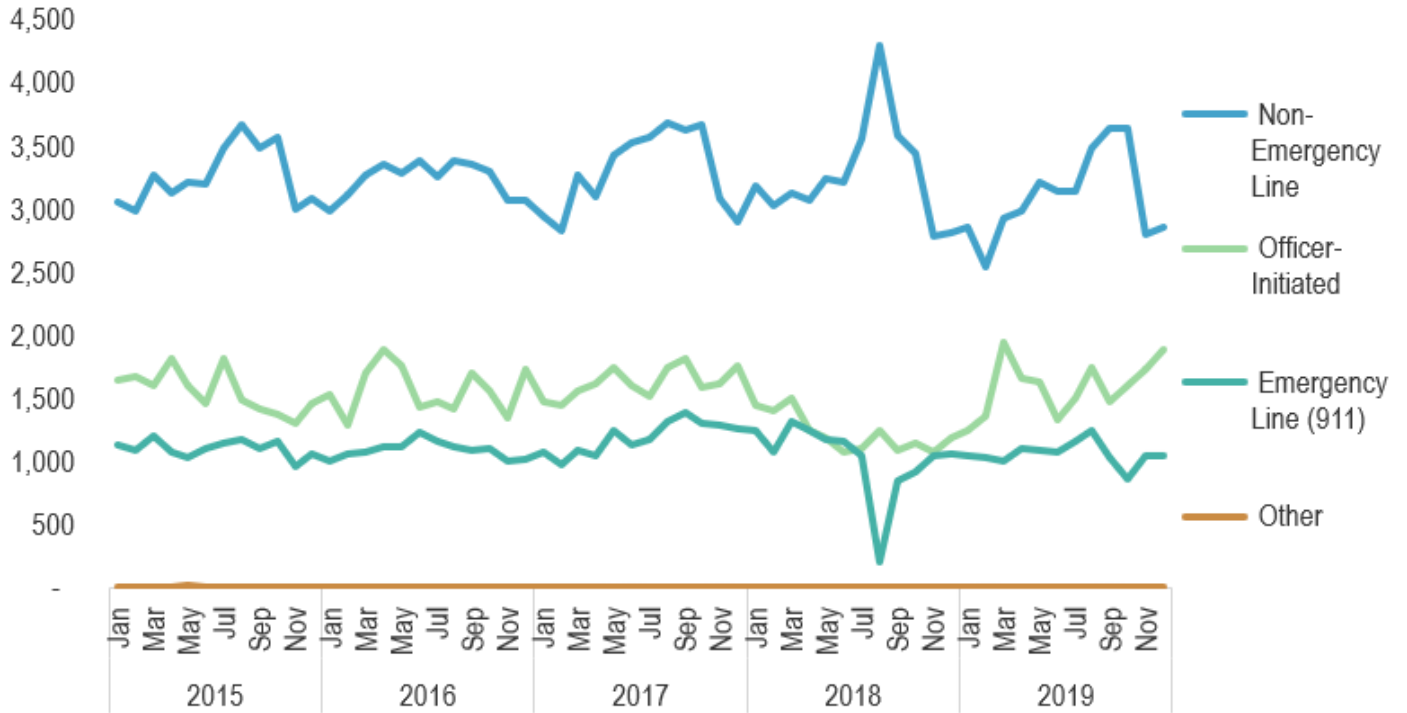
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Assigned Call Types

Figure 10 shows the ten most common call types, which describe about 54 percent of all events. This table includes data for both events initiated by calls to the Communications Center and officer-initiated events.

Figure 10. Top 10 Most Common Call Types of Events, 2015-2019 (n = 189,536 out of 350,800 events)
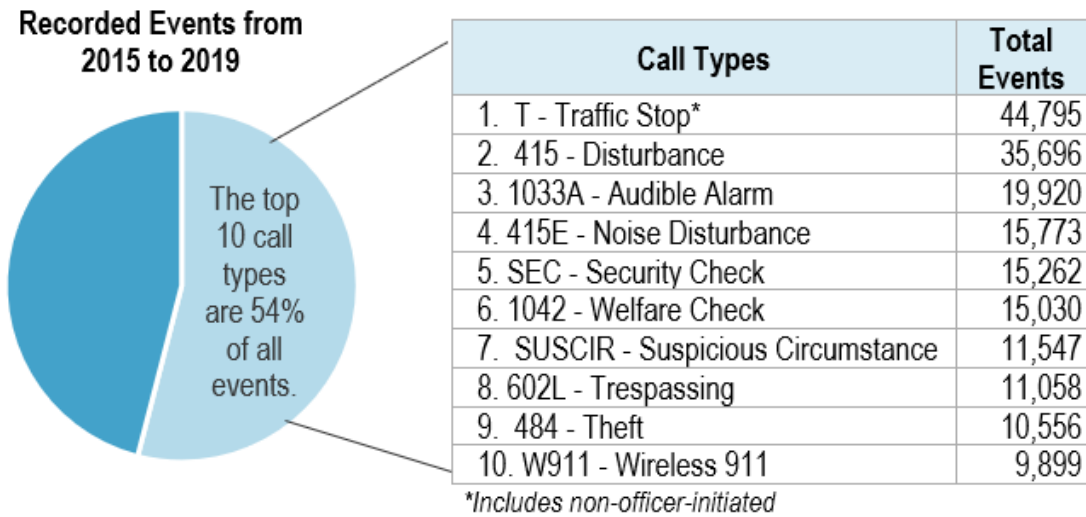
Recorded Events from 2015 to 2019

The top 10 call types are 54% of all events.

Call Types	Total Events
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9. 484 - Theft	10,556
10. W911 - Wireless 911	9,899

Includes non-officer-initiated

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Table 2 breaks out the top calls by initiation source.

Table 2. Top 10 Call Types of Events for Officer-Initiated and Phone Lines, 2015-2019

Total Emergency and Non-Emergency Events		Total Officer-Initiated Events	
1. 415 - Disturbance	35,145	1. T - Traffic Stop	44,765
2. 1033A - Audible Alarm	19,812	2. SEC - Security Check	14,927
3. 415E - Noise Disturbance	15,699	3. 1194 - Pedestrian Stop	9,135
4. 1042 - Welfare Check	14,560	4. FLAG - Officer flagged down	5,181
5. SUSCIR - Suspicious Circumstance	11,380	5. 1196 - Suspicious Vehicle	4,347
6. 602L - Trespassing	10,926	6. 1194B - Bike Stop	2,782
7. 484 - Theft	10,277	7. PRKVIO - Parking Violation	994
8. W911 - Wireless 911	9,898	8. AID - Aid to Citizen	544
9. ADVICE - Advice	8.382	9. FOUND - Found Property	530
10. SUSPER - Suspicious Person	8,177	10. 415 - Disturbance	528

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Priority Levels

Dispatchers are responsible for collecting adequate information in order to determine the appropriate response action based on the nature and priority of the event, and the available resources. Dispatchers assign all events a priority level which aligns with guidelines for how soon the Communications Center should dispatch police personnel to the event based on the urgency or severity of the circumstances. For an event with a priority level 1, dispatchers are expected to dispatch officers within one minute, whereas they have up to 90 minutes from the time of the initial call to dispatch an officer to a priority level 4 event.

According to BPD, priority levels are one of several factors that inform the number of personnel that are dispatched to an event. Other factors include call types, officer's proximity to the event, and officer's discretion. BPD stated that dispatchers have the authority to dispatch officers to events, but they do not play a role in reducing or diverting officers from responding to an event.

Priority levels range in urgency from Priority 1 as the most urgent to Priority 9 as the least. Priority 0 is used when officers initiate a stop and they are already on scene. Priority levels 4 through 9 each have the same time frame of 90 minutes, but the additional levels allow dispatchers to prioritize resources among lower level calls. Table 3 lists all the priority levels and corresponding dispatch times.

Table 3. Priority Level Guidelines for Time Between Initial Call and Dispatching Units[7]

Priority Level	Time
0	0 Minutes
1, 1F	Immediately
2	Within 20 minutes
3	Within 60 minutes
4	Within 90 minutes
5	Within 90 minutes
6	Within 90 minutes
9	Within 90 minutes

Source: Berkeley Police Department

[7] Priority level 1F indicates an event with a fire and that Berkeley Fire Department personnel were dispatched as well.

Priority level recommendations are coded into the CAD system based on call types, but a dispatcher can change the priority if there is reason to based on the information they have. For example, a dispatcher may assign a family disturbance event as a priority level 1 or 2 depending on the circumstances and their professional judgement. Additionally, dispatchers' assessment of priorities can diverge from the guidelines due to additional information gathered about the event. For instance, in their list of call types and priority codes, BPD lists disturbance with a typical assignment of priority 1 or priority 4. Nevertheless, disturbance is listed in the CAD data with call types ranging from 0, 1F, 1, 2, to 3. Appendix B provides a list of priorities for each call type as they appear in the data.

Figure 11 breaks down events by the assigned priority level.

Figure 11. Events by Priority Level, 2015-2019 (n = 350,800 events)
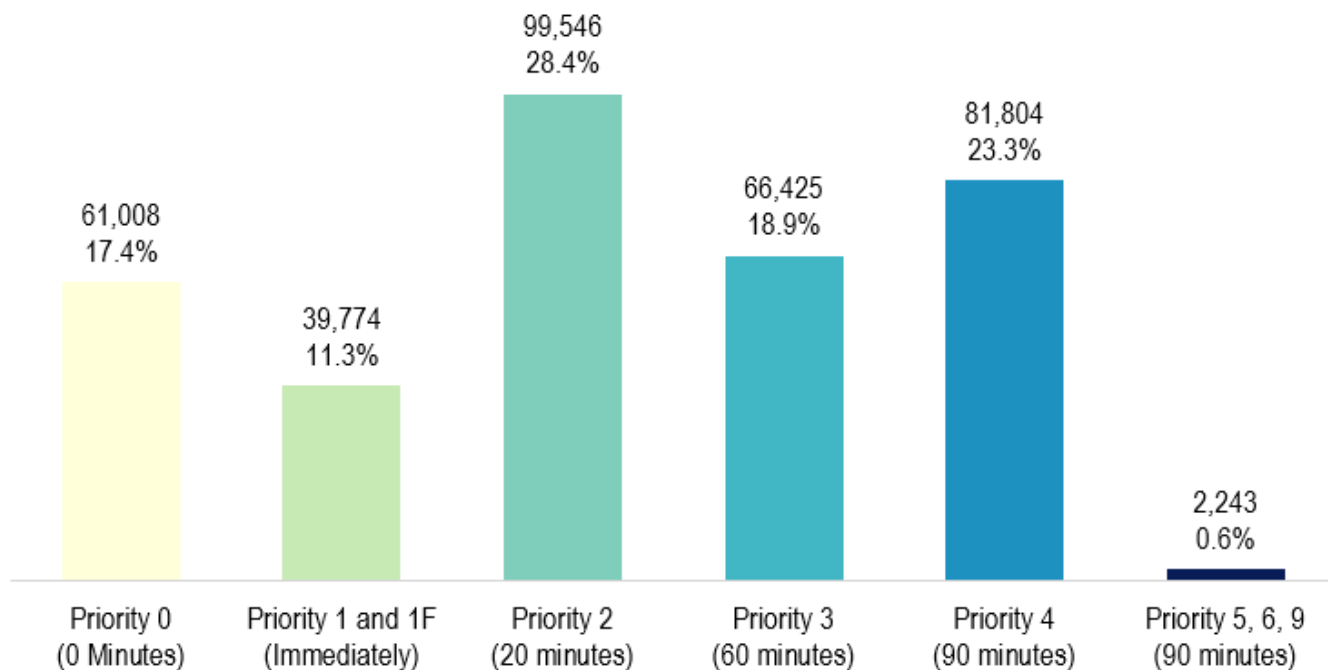
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 12 shows a breakdown of events by classification and priority level.

Figure 12. Events by Auditor Classifications and Priority Level, 2015-2019 (n = 350,800 events)
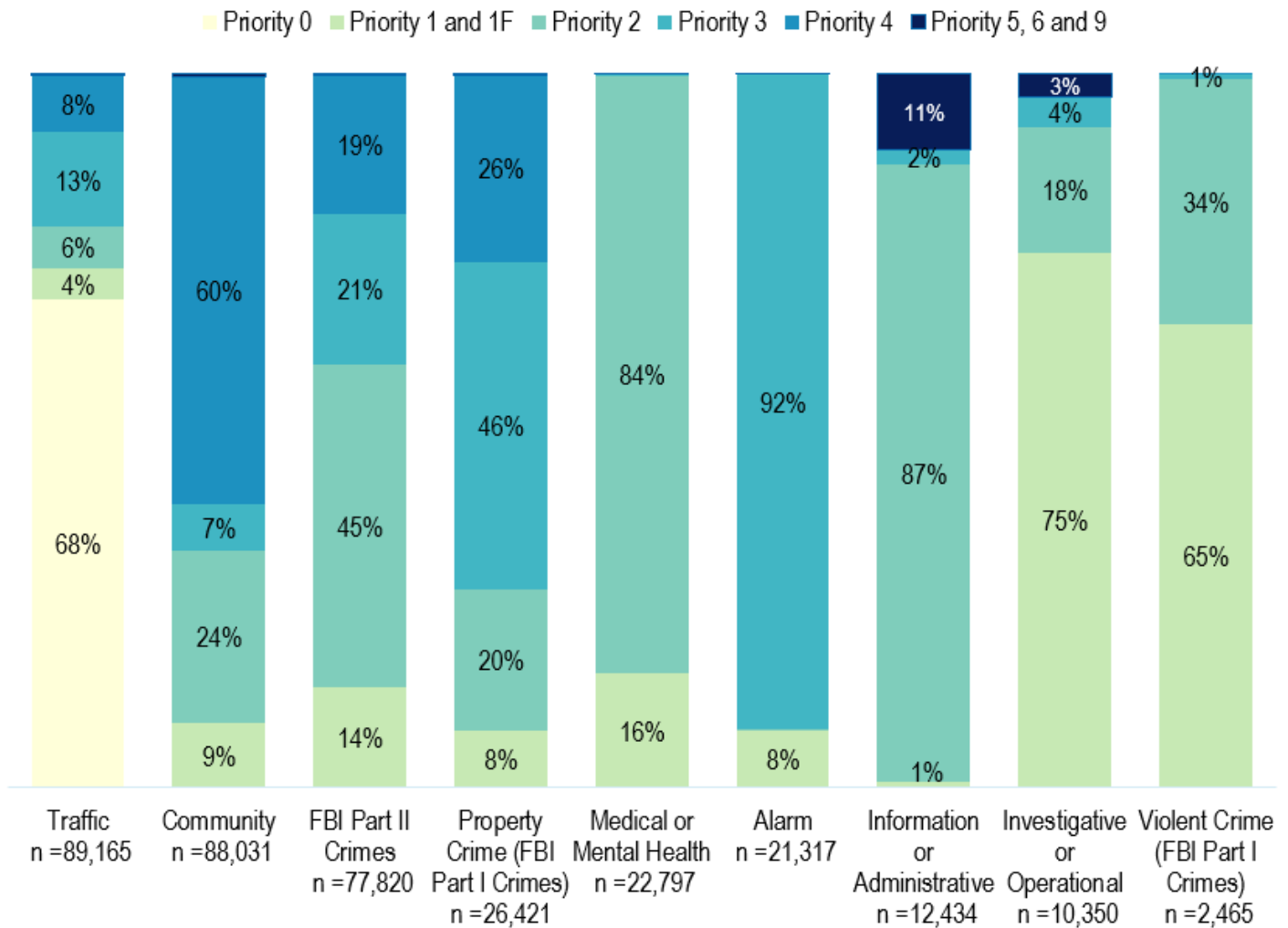
Note: Priorities that rounded to 0% of each category (0.4% or less) were excluded from the chart for readability.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Events that Result in an Arrest

Table 4 shows the top ten call types and how many arrests were made for each of those call types from 2015 to 2019, but does not include all arrests BPD made during this time. CAD data only records arrests made during the event, but arrests can take place after dispatchers close the event. An event like a robbery, for example, could result in no arrest during the event, but lead to an arrest several days later. That arrest would be recorded in the Law Enforcement Records Management System, but is not included in the CAD data we received.

Table 4. Top 10 Call Types of Events and Arrest Outcomes, 2015-2019 (n = 189,536 out of 350,800 events)

Call Types	Arrests	Total Events	Arrests (% of Total)
1. T - Traffic Stop	1,258	44,795	2.8%
2. 415 - Disturbance	528	35,696	1.5%
3. 1033A - Audible Alarm	19	19,920	0.1%
4. 415E - Noise Disturbance	12	15,773	0.1%
5. SEC - Security Check	211	15,262	1.4%
6. 1042 - Welfare Check	122	15,030	0.8%
7. SUSCIR - Suspicious Circumstance	152	11,547	1.3%
8. 602L - Trespassing	120	11,058	1.1%
9. 484 - Theft	101	10,556	1.0%
10. W911 - Wireless 911	6	9,899	0.1%

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Events that Result in a UCR Part I Report: Violent and Property Crimes

In this section, we present data on events that result in a report of certain violent or property crimes.

BPD officers are required to file a report when events involve certain violent and property crimes. BPD tracks a set of crimes, known as Part I crimes, through the Uniform Crime Reporting (UCR) Program, which is separate from the CAD system. The Federal Bureau of Investigation developed the UCR Program to standardize how law enforcement agencies categorize and count crimes, and report crime statistics. BPD analyzes the relevant crime data and provides statistical reports to the California Department of Justice to be included in state and national crime data.

We received data on some events that resulted in a Part I crime report. UCR orders Part I crimes from most severe to least severe, with criminal homicide being the highest in the hierarchy and arson being the lowest. Part I UCR crimes are listed below:

1. Criminal Homicide
2. Forcible Rape
3. Robbery
4. Aggravated Assault
5. Burglary
6. Larceny-theft (except motor vehicle theft)
7. Motor Vehicle Theft
8. Arson

Additionally, there were 38 events that resulted in the reporting of hate crimes between 2015 and 2019. UCR standards require participating law enforcement agencies to report hate crimes as separate from and additional to the crimes listed above. According to the UCR handbook, hate crimes are not distinct crimes, but are traditional crimes motivated, in whole or in part, by the offender's bias against a race, religion, disability, sexual orientation, or ethnic or national origin group. Consequently, BPD collects hate crime data by capturing additional information about crimes they already report to the UCR program.

The CAD data does not include all the Part I UCR crime reports BPD filed because not all instances of these crimes took place during an event or involved dispatching police personnel. Further, an event classified as a Part I crime in CAD does not necessarily mean that a crime was ultimately charged or committed. Altogether, from 2015 to 2019, a total of 6.7 percent of events in CAD with a police response resulted in a Part I UCR crime report. While there could be more than one UCR crime report per event, we used the hierarchy rule to identify each event by the most severe crime. As of this writing, we do not have detailed information on Part II crime reports as this information was not available to us.

Figure 13 shows the number of events in CAD that resulted in a Part I UCR crime report from 2015 to 2019.

Figure 13. CAD Events with a Part I UCR Crime Report, 2015-2019 (n = 23,587 out of 350,800 events)
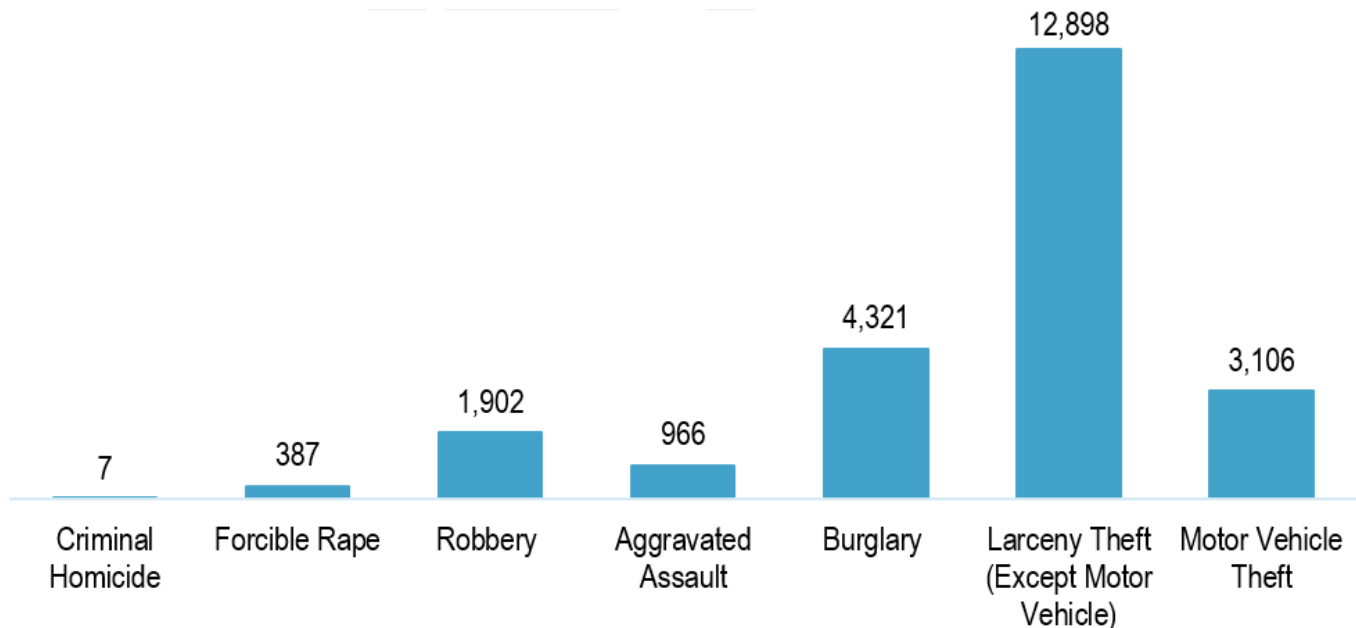
Note: There were no UCR reports of Arson in the data.
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Table 5 shows how events with Part I UCR crime reports from 2015 to 2019 are classified for the purposes of this report.

Table 5. Auditor Classification of Events that Resulted in a Part I UCR Crime Report, 2015-2019 (n = 350,800 events)

Auditor Classification	Events with UCR Reports Filed	Total Events	% of Total Events with UCR Reports
Property Crime (FBI Part I Crimes)	17,475	26,421	66.14%
Community	2,058	88,031	2.34%
Violent Crime (FBI Part I Crimes)	1,752	2,465	71.08%
FBI Part II Crimes	1,555	77,820	2.00%
Alarm	305	21,317	1.43%
Traffic	230	89,165	0.26%
Investigative or Operational	85	10,350	0.82%
Medical or Mental Health	64	12,434	0.51%
Information/ Administrative	63	22,797	0.28%

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Table 6 shows how many of the top ten call types in CAD resulted in a Part I UCR crime report, from 2015 to 2019.

Table 6. Top 10 Call Types of Events that Resulted in a Part I UCR Crime Report, 2015-2019 (n = 189,536 out of 350,800 events)

Call Type	Events with UCR Reports Filed	Total Events	% of Total Events with UCR Reports
1. T - Traffic Stop	49	44,795	0.11%
2. 415 - Disturbance	261	35,696	0.73%
3. 1033A - Audible Alarm	245	19,920	1.23%
4. 415E - Noise Disturbance	4	15,773	0.03%
5. SEC - Security Check	120	15,262	0.79%
6. 1042 - Welfare Check	40	15,030	0.27%
7. SUSCIR - Suspicious Circumstance	920	11,547	7.97%
8. 602L - Trespassing	32	11,058	0.29%
9. 484 - Theft	5,752	10,556	54.49%
10. W911 - Wireless 911	16	9,899	0.16%

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

IV. Characteristics of Officer-Initiated Stops

Analysis of 56,070 officer-initiated stops from 2015 to 2019

In this section, we provide an overview of the data we obtained on officer-initiated stops including the types of stops police make, stop trends over time, and stops that result in enforcement or searches.[8] We also breakdown some of this information by race and age. In the context of this report, the number of officer-initiated stops refers to the number of individuals detained by BPD. This means that there could be more than one individual stopped per CAD event. For example, if an officer initiates a vehicle stop and detains two individuals, this is counted as one event with two stops.

We review the following components related to stops:

1. Officer-initiated stops by stop type
2. Time of day when stops occur
3. Dispositions, including:
   a. Stops by race and age
   b. Enforcement outcomes
   c. Searches

State law authorizes Berkeley police officers to enforce state and local traffic laws to promote public safety. Officers enforce traffic laws by stopping drivers who may be violating traffic laws. Pedestrians and cyclists may also be stopped. Officers are required to record the results of all stops. In this report, we refer to these events as officer-initiated suspicious vehicle stops, vehicle stops, pedestrian stops, or bicycle stops.[9] All Berkeley police officers, whether assigned to the Traffic Bureau or not, are directed to participate in traffic enforcement and to be on the lookout for speeding, pedestrian safety concerns, and drivers under the influence.

Our stop analysis is the most recent effort to analyze police stop data in the City of Berkeley, but another organization also examined police stop data.[10] In 2015, BPD contracted with the Center for Policing Equity (CPE) to conduct an analysis of Berkeley's police stop data. Their analysis covered an observation period of 2012 through 2016.

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[8] The data analyzed in this section slightly differs from stop data on the City's Open Data Portal. This analysis only looks at officer initiated stops using a dataset pulled by the department, whereas the Open Data Portal provides disposition data for both officer-initiated and non-officer-initiated stops (e.g., emergency and non-emergency calls for service). The overall difference between the two is not significant.

[9] According to BPD, vehicle stops are different from suspicious vehicle stops. Vehicle stops can include stops for traffic violation enforcement or investigation of suspected criminal activity, and are initiated by officers. A suspicious vehicle stop is similar, but is typically dispatched by the Communications Center in response to a call for service.

[10] According to its website, the Center for Policing Equity is a nonprofit organization that "produces analyses identifying and reducing the causes of racial disparities in public safety and advocates for large-scale and meaningful change."

All of the charts in this section reflect officer-initiated stops for a total of 56,070 individuals from 2015 to 2019. A significant portion of information about stops draws from disposition reports submitted by officers and other traffic enforcement units. These disposition reports summarize information including race, sex, and age of the individuals involved in the event, the reason for the stop, the enforcement action, and whether or not BPD conducted a search. As such, this section does not include information for 4,961 stops that did not have accompanying disposition data. We did not determine the methods BPD typically uses to determine individuals' race, sex, or age as that was outside the scope of our audit.

While the time period we analyzed overlaps and extends beyond the time period examined by CPE, our analysis uncovered a number of the same general patterns in stops, searches, and dispositions.

We found that the majority, 78 percent, of officer-initiated stops were vehicle stops, and most of them occurred between 8:00pm and 1:00am. The majority of vehicle stops did not lead to a search, and most stops led to a warning.

With regard to race, our data mirrored data by CPE in that BPD stopped Black and Hispanic individuals at higher rates than their representation in the population, Black individuals significantly so. BPD stopped White and Asian individuals at lower rates. We did not conduct an analysis regarding how this data should be interpreted, but simply note that these patterns are consistent with what CPE found in the data they examined.

Figure 14. Race and Officer-Initiated Stops
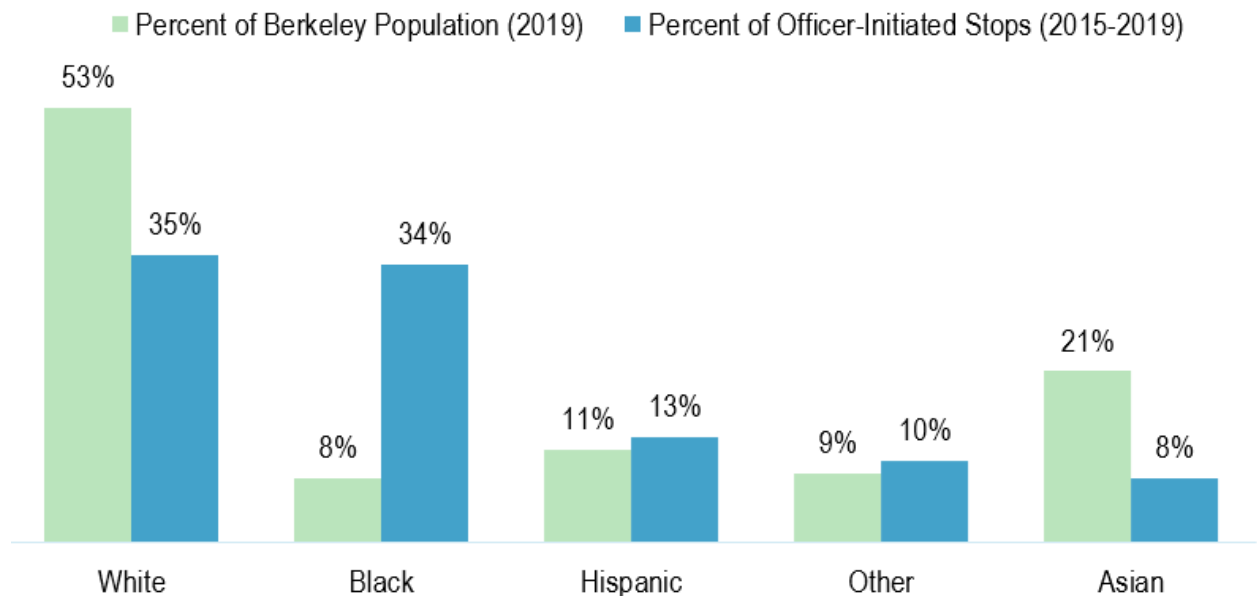
Note: For the purposes of this figure for Berkeley populations, the U.S. Census categories of American Indian and Alaska Native alone, Native Hawaiian and Other Pacific Islander alone, and Two or More Races are summed for Other; White is White alone, not Hispanic or Latino.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data and 2019 US Census data

Further, like CPE, we found that Black and Hispanic individuals are more likely to be searched after being stopped, yet searches of these groups are less likely to result in an arrest than searches of White and Asian individuals. However, we did not do a full comparative analysis between the data set that is the subject of this report and the data reviewed by CPE because it was outside the scope of this overview report. More data on stops and searches are included in the following sections and in Appendix C and D.

Overall Stops

Figure 15 shows the percentage of different types of officer-initiated stops from 2015 to 2019.[11]

Figure 15. Officer-Initiated Stops by Type of Stop, 2015-2019 (n = 56,070 individuals stopped)
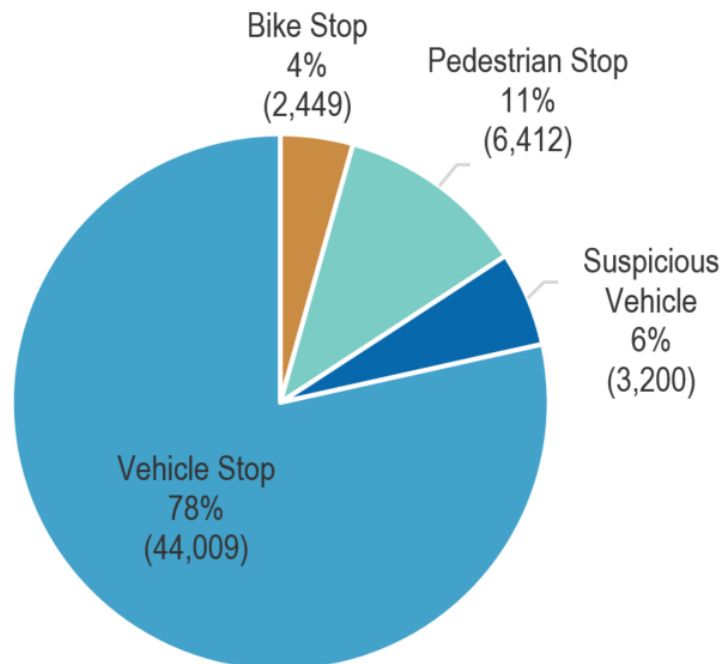
Note: Figures 15 to 29 do not include information for 4,961 stops that did not have accompanying disposition data.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

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[11] According to BPD, vehicle stops are different from suspicious vehicle stops. Vehicle stops can include stops for traffic violation enforcement or investigation of suspected criminal activity, and are initiated by officers. A suspicious vehicle stop is similar, but is typically dispatched by the Communications Center in response to a call for service.

Figure 16 shows the number of any type of officer-initiated stop from 2015 to 2019. Because officers initiate stops, the number of stops they make depends largely on their availability. If an officer is busy responding to a high number of community-initiated calls, they are less likely to proactively initiate stops.

Figure 16. Officer-Initiated Stops by Month, 2015-2019 (n = 56,070 individuals stopped)
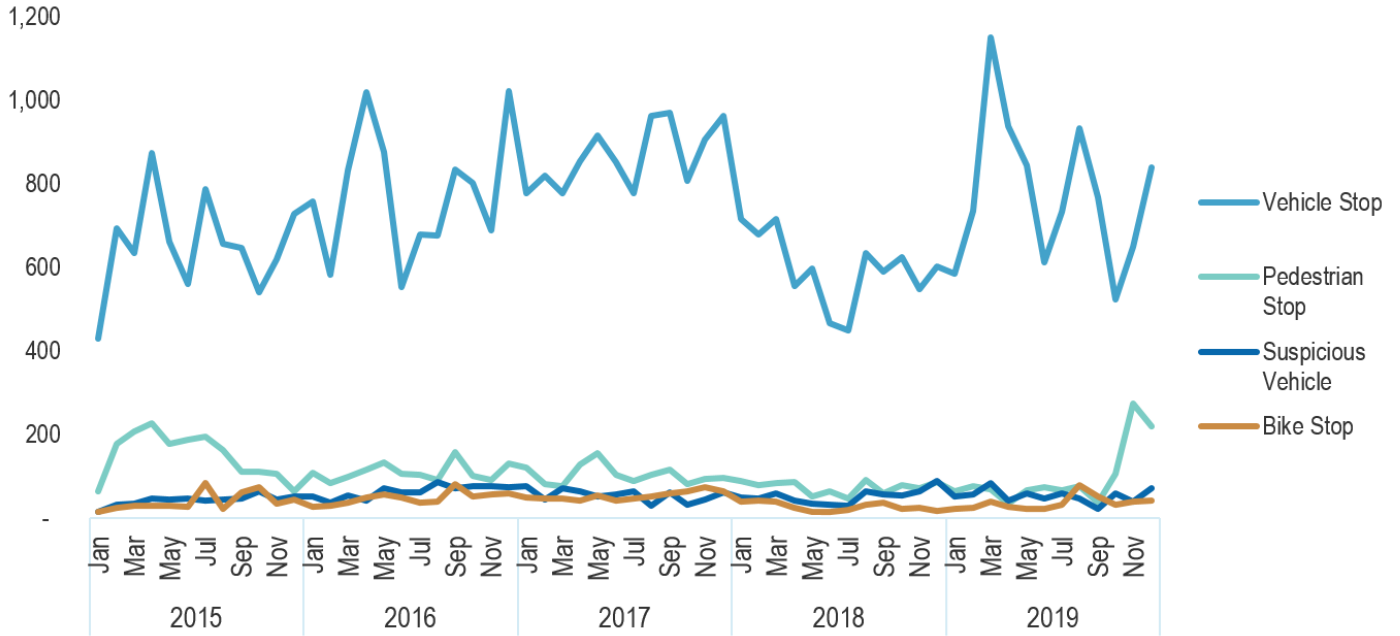
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Stops by Time of Day

Figure 17 is a heat map that adds up all of the events from 2015 to 2019, based on the time in which an officer initiated a stop. The chart is organized by the time of day on the bottom (x axis) and the type of stop conducted on the left (y axis). The colors in each row represent the number of stops as a percentage of all stops for each category. The blue color reflects fewer events, while a deeper red reflects more events.

Figure 17. Officer-Initiated Stops by Time of Day as a Percentage of Each Stop Type, 2015-2019 (n = 56,070 individuals stopped)
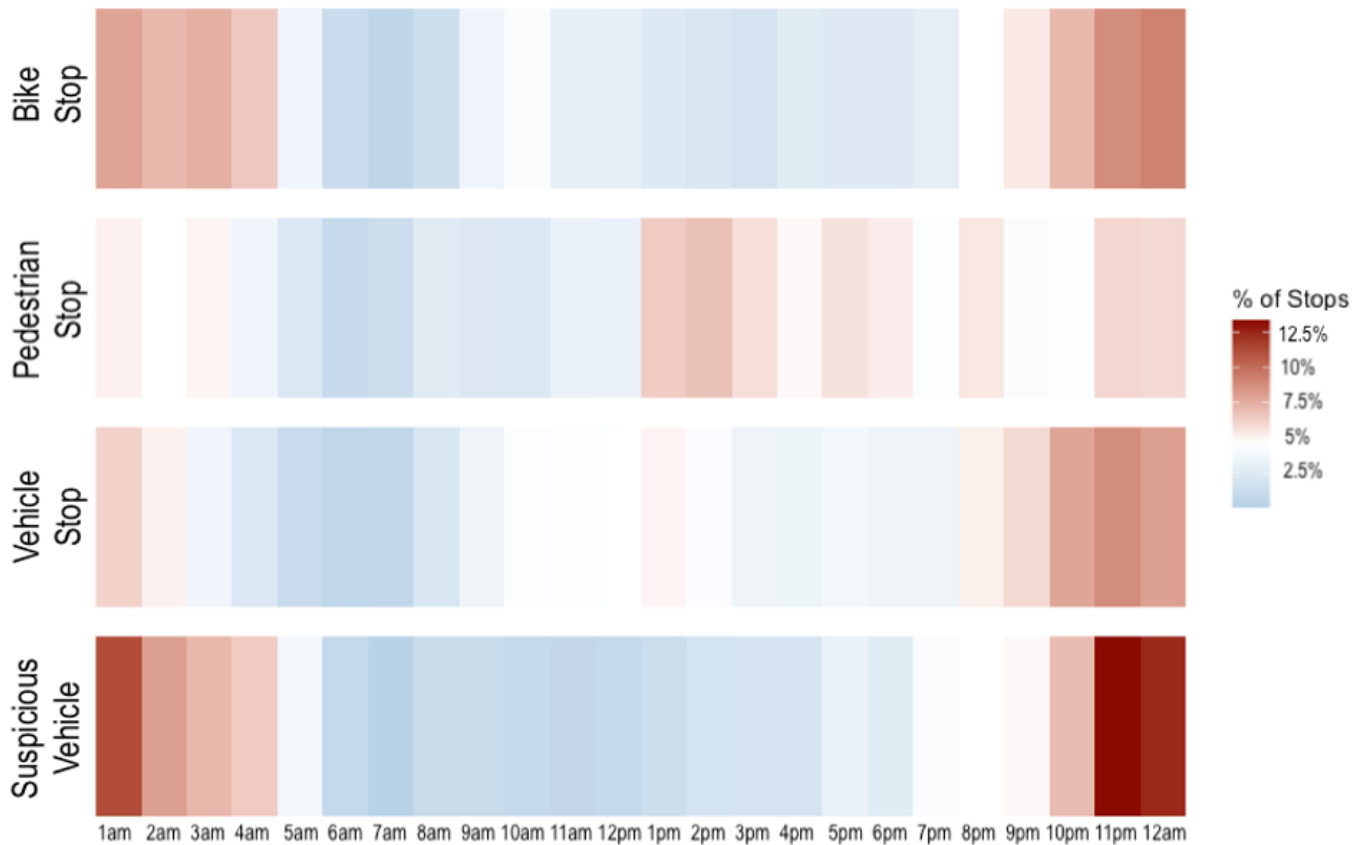
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Stop Dispositions

BPD tracks information about stop dispositions. This information includes the officer reported race, sex, and age of the individuals involved in the event, the reason for the stop, the enforcement action, and whether or not BPD conducted a search. BPD's General Order B-4 required officers to provide stop disposition data after making any stop during the audit period of 2015 to 2019.

In 2015, the California legislature passed the Racial and Identity Profiling Act (RIPA) which supersedes General Order B-4. The goal of RIPA is to have more robust and reliable data to understand the demographics of those stopped by the police in California. RIPA requires law enforcement agencies to collect additional information about stop dispositions including contraband or evidence recovered during the stop, basis of a search if conducted, actions taken during the stop, and officer years of experience and assignment. While BPD stated that these requirements were mandated to start in 2022, BPD started collecting the data required by RIPA in October 2020. According to BPD and the City's Department of Information Technology, officers do not collect personally identifying information as part of meeting RIPA requirements.

All the stop disposition data presented in this report was reported under the guidelines of General Order B-4 and before BPD implemented RIPA.

Stops by Race and Age

In this section, we present an overview of officer-initiated stops by race and age. BPD records demographic information for people stopped by the police, including their race, sex, and age. Until October 2020, officers used a six-digit disposition code to record information on the race, sex, and age of the person or people involved in stops, as well as the type of stop, the enforcement outcome, and if the officer performed a search. In October 2020, the BPD transitioned to collecting stop data in accordance with the RIPA using an app installed on each officer's City-issued smart phone.[12] Officers are now required to collect the same information as the disposition code used previously and additional information on the stop.

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[12] Memo to City Council, October 13, 2020, https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/RIPA%20data%20101320.pdf

Figure 18 shows the percentage and number of stops by race from 2015 to 2019. BPD uses five groups to document the race of people involved in stops: Asian, Black, Hispanic, White, and Other.

Figure 18. Officer-Initiated Stops by Race, 2015-2019 (n = 56,070 individuals stopped)
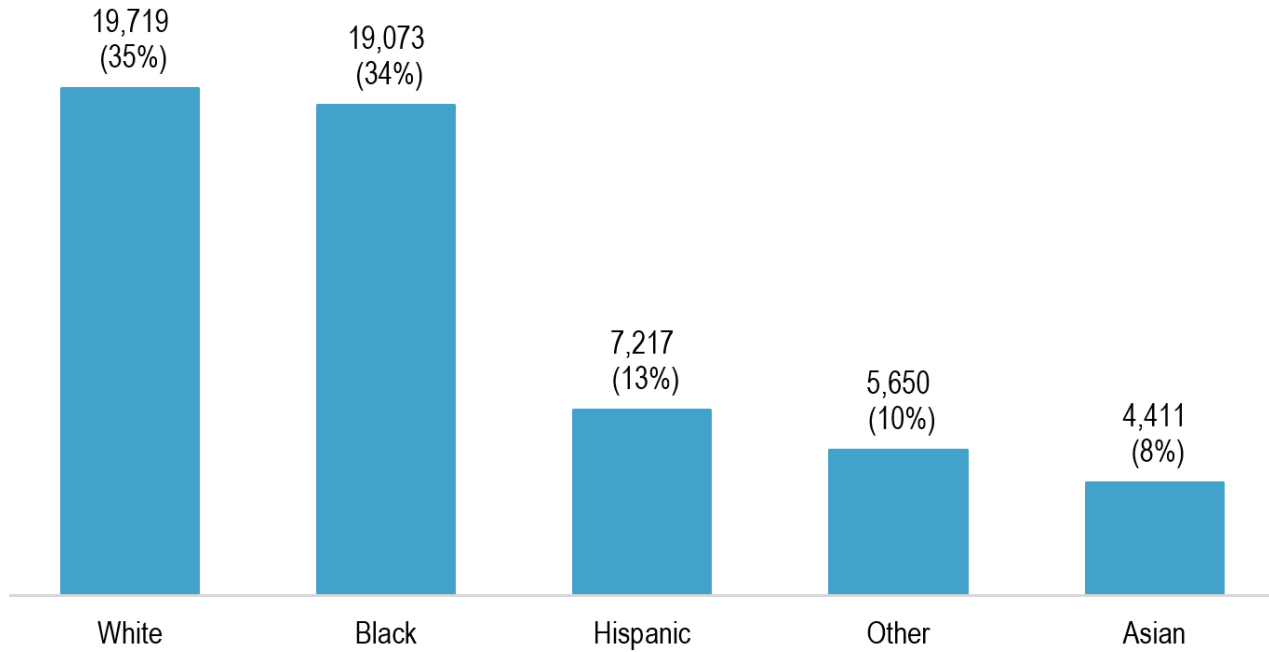
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 19 shows stops by age and race from 2015 to 2019.

Figure 19. Officer-Initiated Stops by Race and Age, 2015-2019 (n = 56,070 individuals stopped)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 20 shows the distribution by race within each type of stop from 2015 to 2019.

Figure 20. Type of Officer-Initiated Stops by Race, 2015-2019 (n = 56,070 individuals stopped)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 21 shows the monthly distribution for all types of stops by race from 2015 to 2019.

Figure 21. Officer-Initiated Stops by Race and Month, 2015-2019 (n = 56,070 individuals stopped)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Enforcement

Officer-initiated stops sometimes result in enforcement outcomes. The four possible enforcement actions are arrest, citation, warning, and no enforcement. BPD's General Order T-03 guides how officers are expected to use enforcement, including when to provide a verbal warning or a citation, in accordance with the California Vehicle Code. The general order directs officers to use their professional judgement in deciding whether to issue a warning instead of a citation. It also directs officers to issue a correctable citation for certain violations such as equipment or registration. Additionally, the general order directs officers to interact with the individuals and observe if there are signs of intoxication, visible guns, open alcohol containers or drugs, or other indicators of a crime.

Figure 22 shows the breakdown of types of enforcement actions of stops, including arrest, citation, warning, and no enforcement.

Figure 22. Enforcement Actions of Officer-Initiated Stops, 2015- 2019 (n = 56,070 individuals stopped)
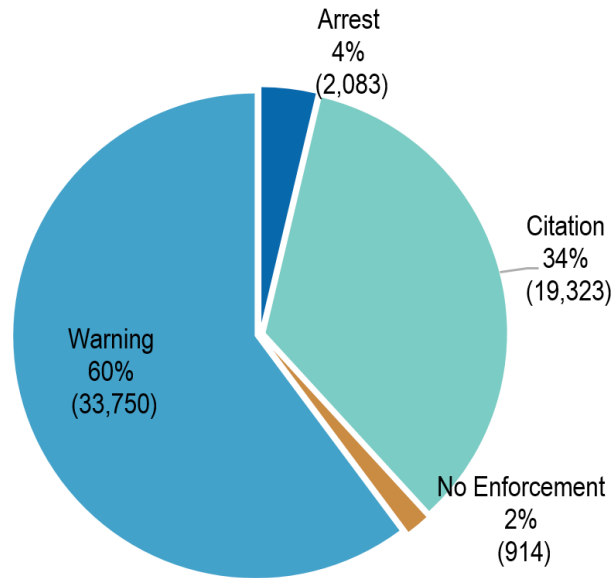
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 23 shows the number of enforcement actions, broken down by type of enforcement and stop, from 2015 to 2019.
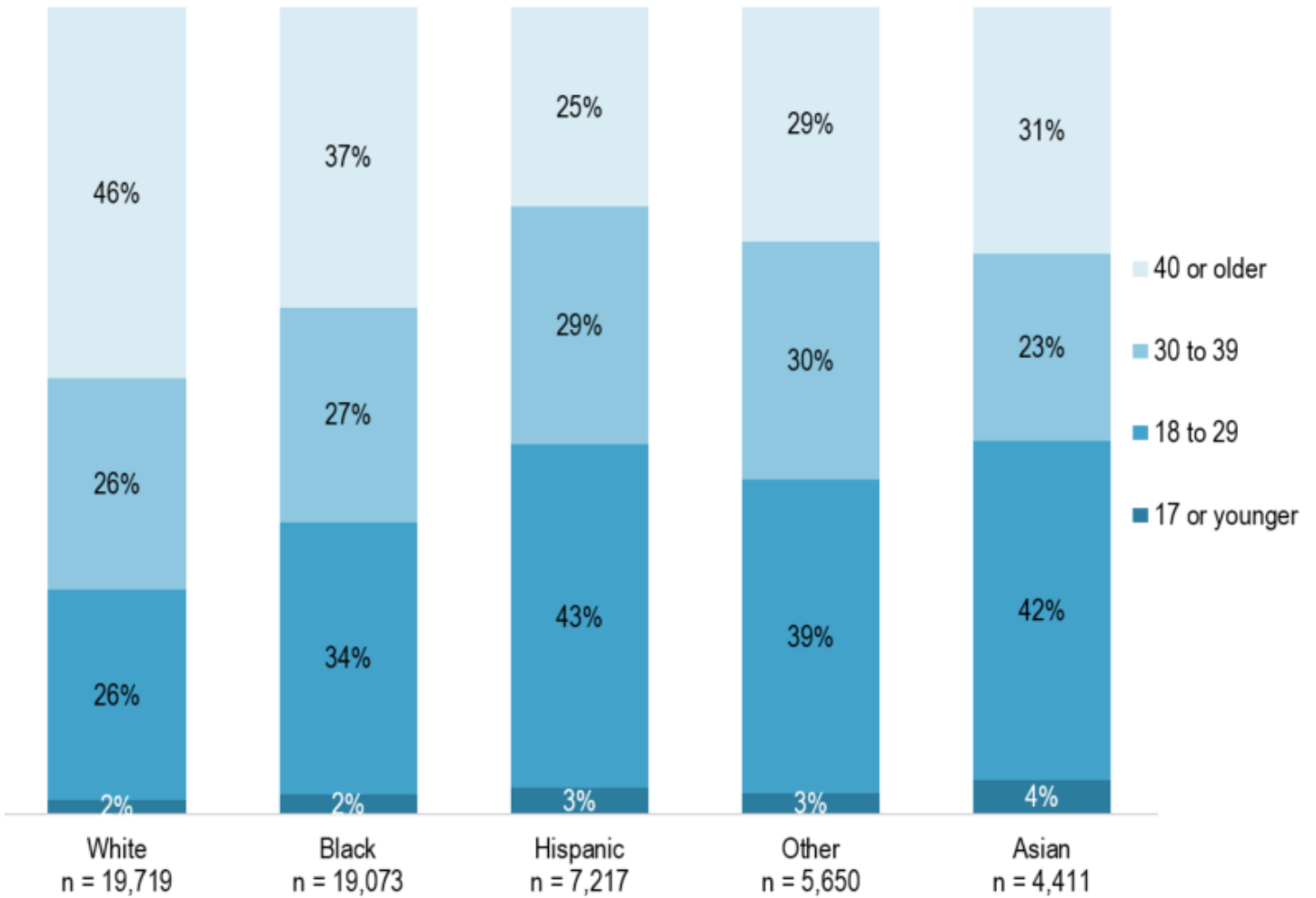
Figure 23. Enforcement Actions of Officer-Initiated Stops by Stop Type, 2015-2019 (n = 56,070 individuals stopped)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 24 shows the number of stops by enforcement action and month from 2015 to 2019.

Figure 24. Enforcement Actions of Officer-Initiated Stops by Month, 2015-2019 (n= 56,070 individuals stopped)

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 25 shows the stop enforcement actions by race from 2015 to 2019.

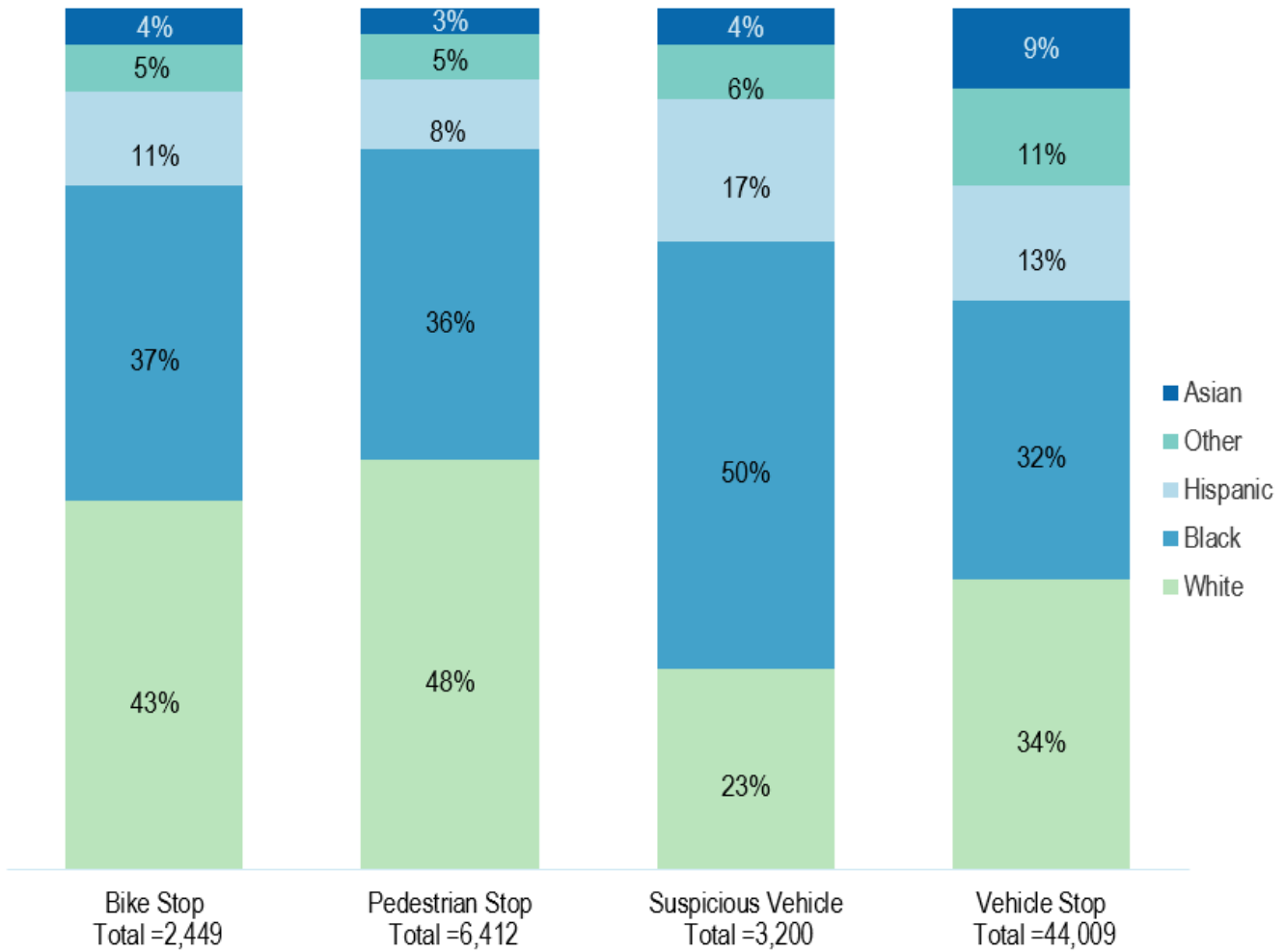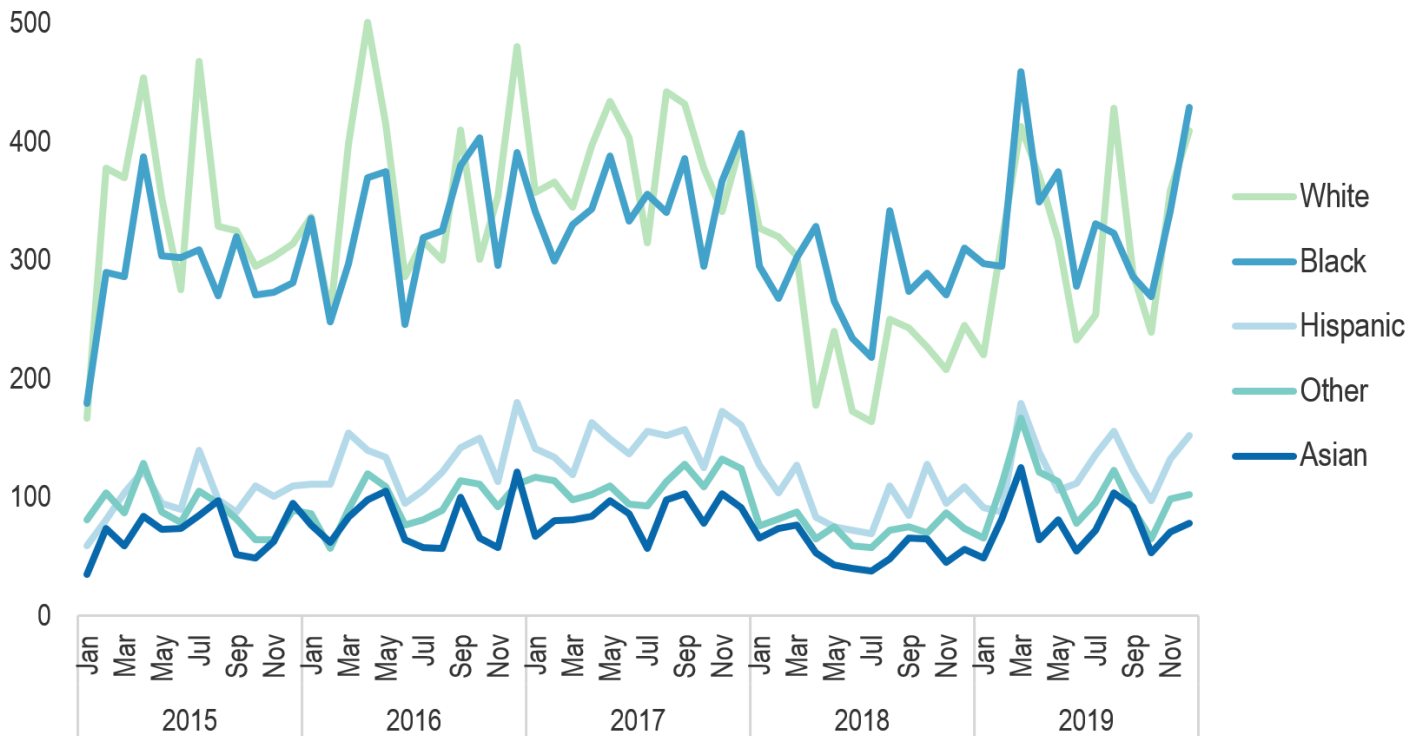Figure 25. Enforcement Actions of Officer-Initiated Stops by Race, 2015-2019 (n = 56,070 individuals stopped)
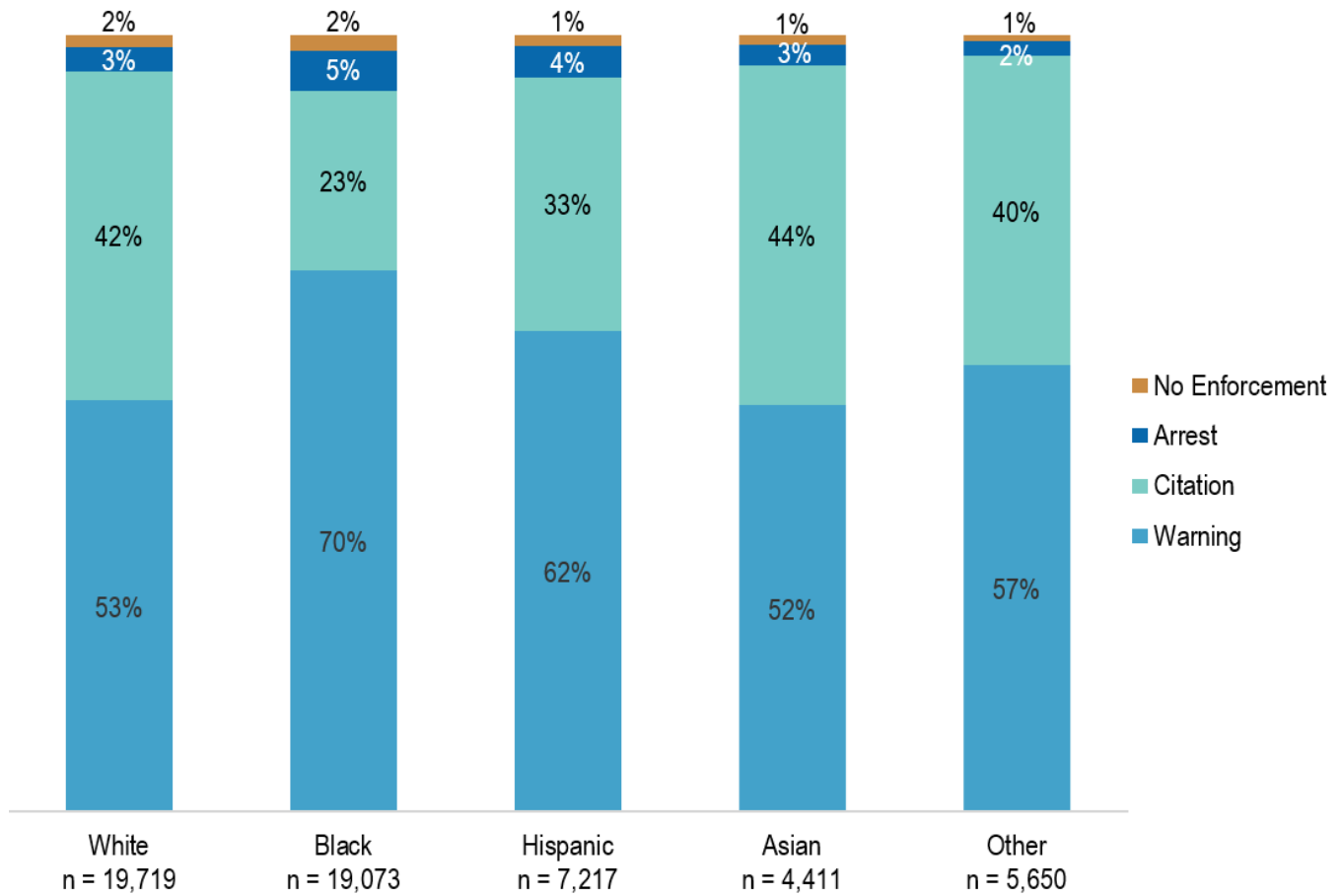
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Searches

The following section provides information on whether BPD conducted a search during vehicle, bike, suspicious vehicle, or pedestrian stops. We break down all types of searches and resulting enforcement actions by race.

The stop disposition data during the 2015 to 2019 audit period did not include information on whether the officer asked for consent to search the person, and if so, whether the individual gave consent. The data also does not indicate the basis for the search, nor the type of contraband or evidence that was recovered, if any.

Figure 26 shows individuals stopped by type and search outcome from 2015 to 2019. Out of 56,070 stops, 8,965 (16 percent) result in a search.

Figure 26. Searches Resulting from Officer-Initiated Stops by Stop Type, 2015-2019 (n = 56,070 individuals stopped)
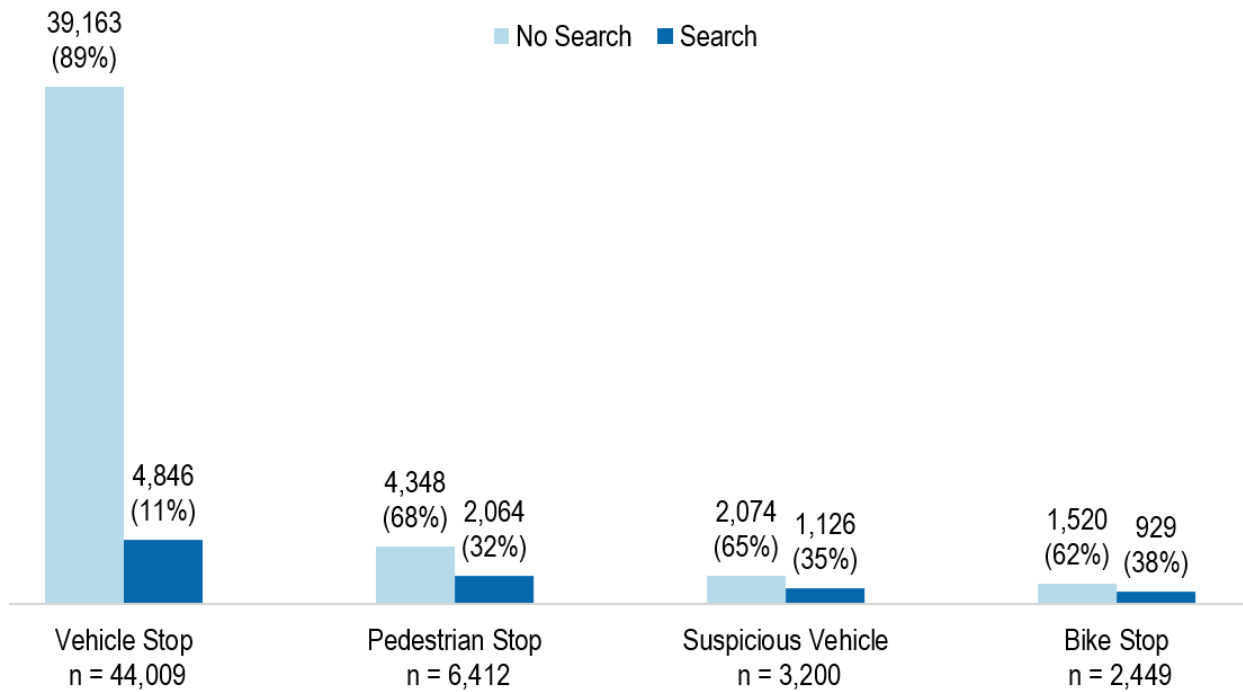
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 27 shows stops by search outcome by month from 2015-2019.

Figure 27. Searches Resulting from Officer-Initiated Stops by Month, 2015-2019 (n = 56,070 individuals stopped)
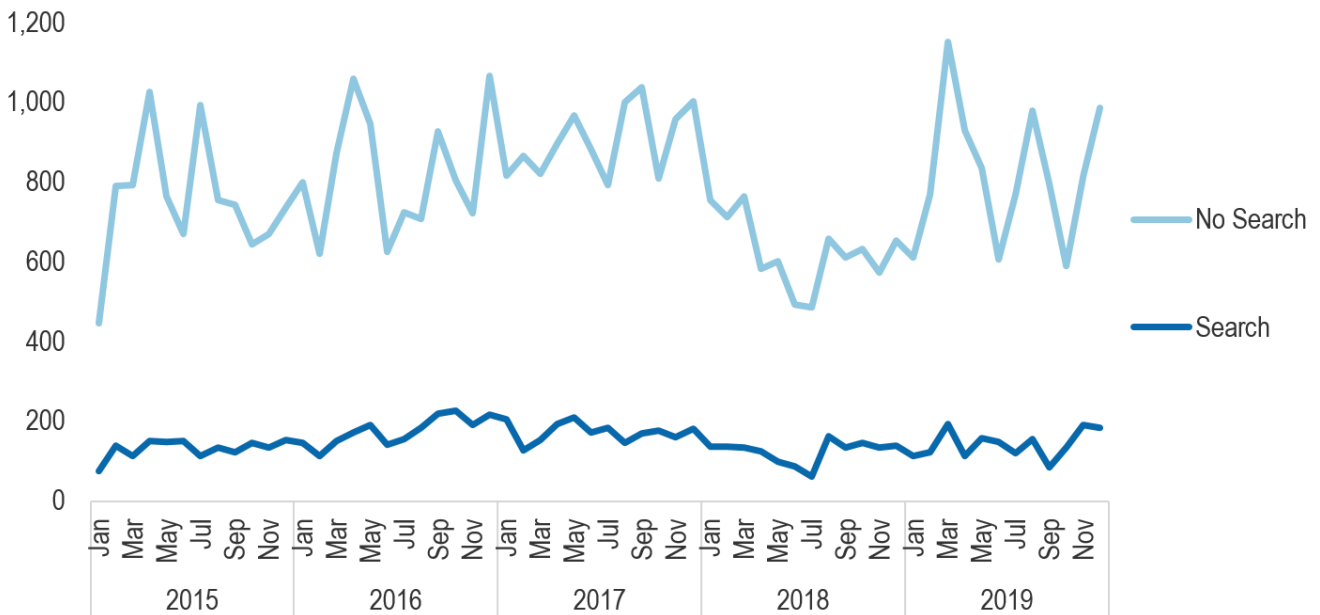
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 28 shows stops by search outcome and race from 2015 to 2019.

Figure 28. Searches Resulting from Officer-Initiated Stops by Race, 2015-2019 (n = 56,070 individuals stopped)
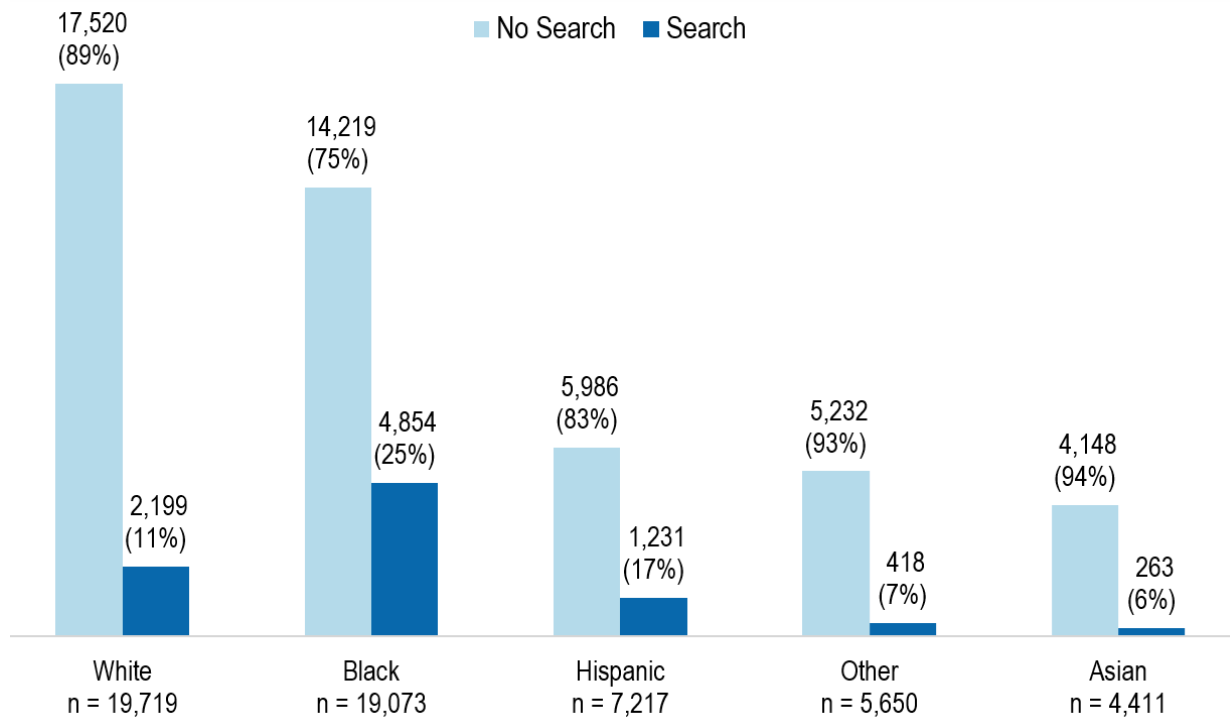
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 29 shows searches and resulting enforcement outcomes by race from 2015 to 2019.
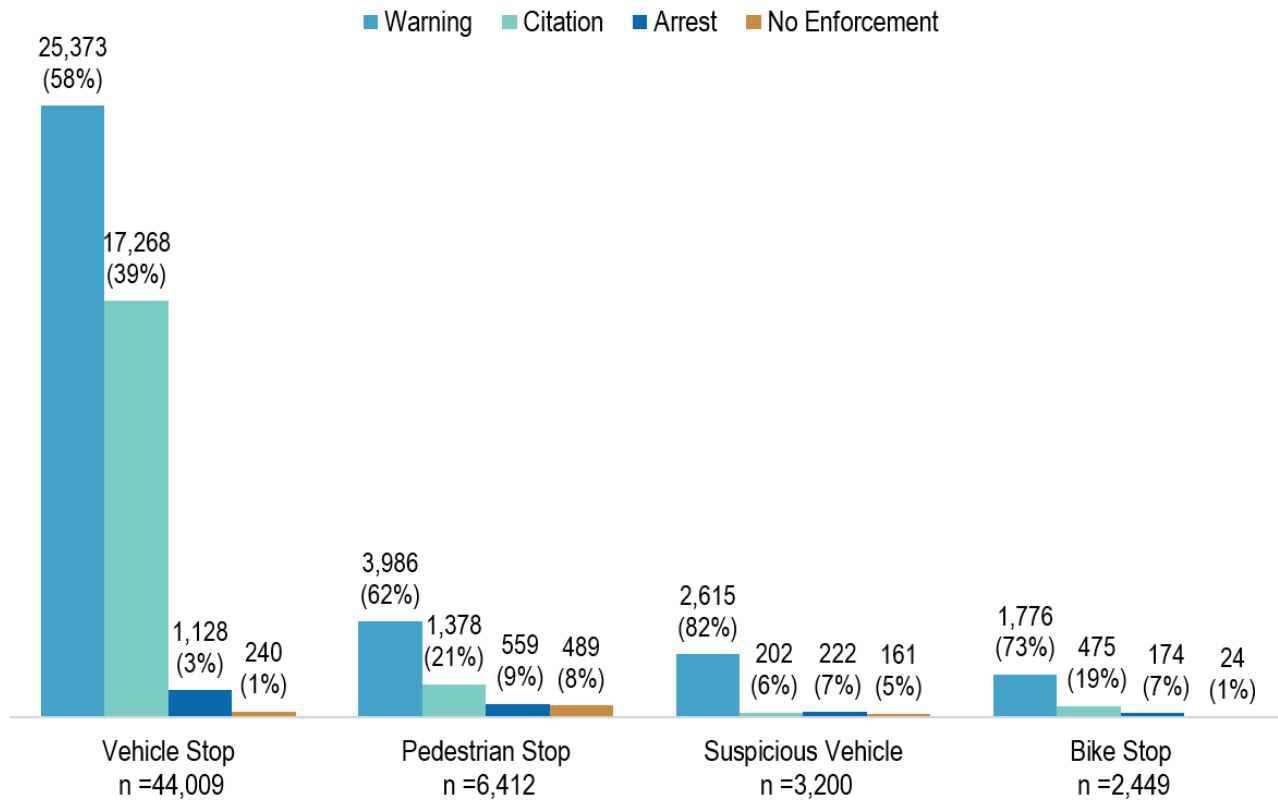
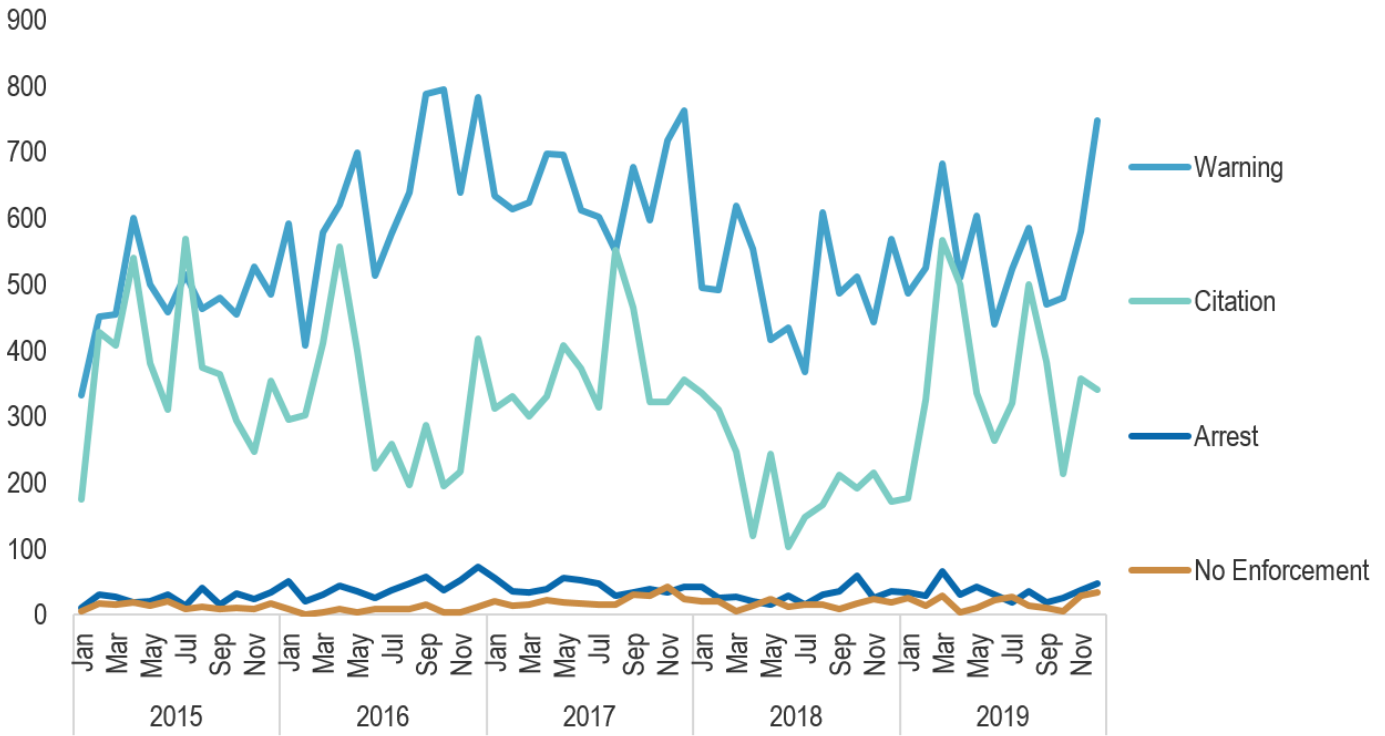Figure 29. Enforcement Outcomes of Searches Resulting from Officer-Initiated Stops by Race, 2015-2019 (n = 56,070 individuals stopped)
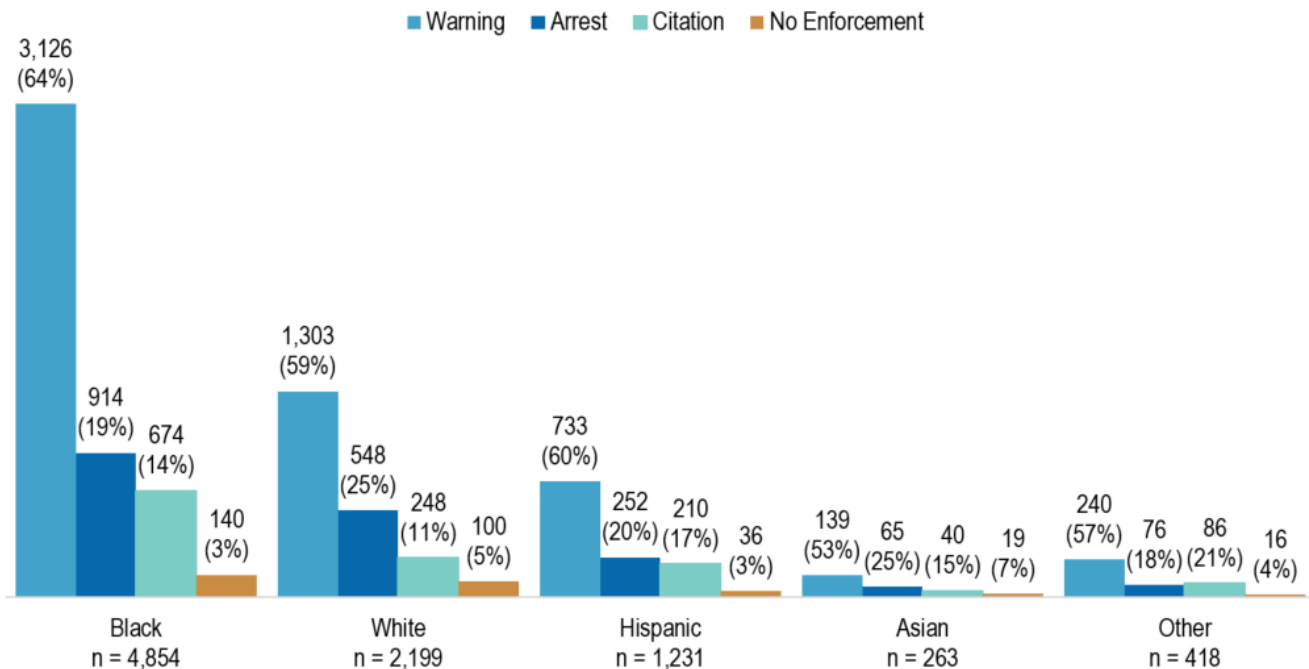
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

V. Characteristics of Police Response

Analysis of 637,313 responses from BPD sworn officers and other units

This section presents an overview of data about personnel that responded to events. Personnel dispatched to respond to events can include non-police personnel in addition to BPD personnel. All events in this CAD analysis include a response by at least one BPD sworn officer, though the Communications Center can also dispatch additional non-police personnel to certain events as needed. BPD Communications Center staff also play an important role in how BPD responds to events.

> We review the following components related to police response:
>
> 1. Response by personnel unit type
> 2. Number of personnel responding to events
> 3. Personnel time spent responding to events

Sworn officers represented 96 percent, or most of the personnel that responded to events, and personnel from other units accounted for 4 percent of total personnel that responded to events. Parking enforcement officers and bike units accounted for over half of the personnel responses from other units. On average, BPD dispatched 1.8 personnel per event. The majority of personnel time, 69 percent, is spent responding to events classified as Community, FBI Part II Crimes, and Traffic. The data, which includes the classification or call type assigned to the event prior to BPD arriving at the event, may not reflect the actual event that takes place.

Primary BPD Response Personnel

Our analysis primarily reflects work conducted by the Communications Center and patrol teams to respond to events in the Berkeley community, with some information about additional supportive units. We provide a summary of each of these units below.

Patrol Teams. The Berkeley Police Department provides patrol services 24 hours a day, seven days a week. These teams of sworn officers are usually the first and primary responders to calls for service. According to BPD's Policy 400, the function of a patrol team is to respond to calls for assistance and reports of criminal activity, act as deterrent to crime, enforce state and local laws, identify community needs, provide support and assistance to the community, and respond to emergencies. Their duties may also include directing traffic, providing mutual aid, and responding to calls for help. The police responses tracked in the CAD data are largely from patrol teams and their supervisors.[13]

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[13] Patrol teams may include reserve officers who serve in a part-time capacity, and supplement and assist regular sworn police officers in their duties. Reserve officers can be dispatched to similar assignments as full-time patrol officers with the exception of some felonies and more serious offenses and are required to get patrol sergeant approval when making arrests.

Communications Center. The Communications Center is part of the Support Services Division of the Berkeley Police Department, overseen by a sworn police captain. The Communications Center serves as Berkeley's 911 public safety answering point, receiving all emergency and non-emergency police, fire, and medical calls in the City, and dispatching public safety personnel to respond as appropriate. The Communications Center is staffed 24 hours a day, 365 days of the year by a team of dispatchers. Dispatchers are highly trained professionals, who gather essential information from callers and dispatch the appropriate response team to the scene. They take control of situations that may be chaotic, stressful, confusing, and traumatic. Dispatchers are often described as "first responders" as they make primary contact with the person reporting the emergency. As described in Section II, the Communications Center is integral in directing and characterizing these responses. For more information about the Communications Center, see 911 Dispatchers: Understaffing Leads to Excessive Overtime and Low Morale, which the City Auditor's office released in 2019.

Other personnel units. A small portion of the data involves BPD personnel in units other than patrol teams that responded to events, as well as personnel from other city departments outside of BPD. Our data set did not include personnel dispatched from the Berkeley Fire Department, which may respond to an event that includes a BPD personnel. Other units may include the personnel described in the following sections.

Figure 30. Percentage of Personnel Responses by Type of Unit, 2015-2019 (n = 637,313 responses)
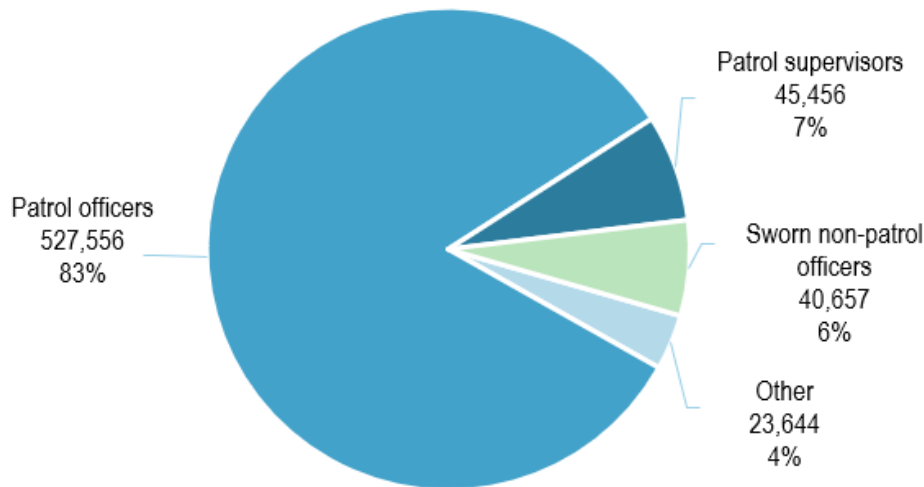
Note: The category with 527,556 patrol officer responses includes 3,105 reserve officer responses. Patrol supervisors include sergeants, lieutenants, and captains.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Other BPD Response Personnel – Sworn Officers

In addition to patrol officers, BPD employs a core group of individuals who are sworn in as law enforcement officers. State law grants sworn officers the authority to enforce the law, including traffic law. According to BPD, no other personnel are granted the same authority at this time. The following sworn positions responded to events:

Area Coordinators. Area Coordinators are within the Community Services Bureau. These are officers on a special assignment in this unit. The Area Coordinators act as liaisons to the patrol officers in their assigned area and collaborate with other city departments or community organizations to solve long-term problems.

Bike Unit. Bike Unit personnel are officers on special assignment who travel by bike. They work in a focused geographical area and initiate stops related to their work, but they often self-dispatch to support patrol officers.

Special Enforcement. Special Enforcement officers are officers focused on detecting, apprehending, and prosecuting persons engaged in narcotics, vice, and organized crime. This Special Enforcement Unit was established in 2000 and most recently operated under investigations. BPD disbanded the drug taskforce within the Special Enforcement Unit in 2016.

Motor Unit. Motor unit officers operate within the Traffic Enforcement function of the Traffic Bureau. BPD staffs four motor officers who manage, investigate, and report on traffic-related events such as towed vehicles or collisions. The motor unit additionally supports the car seat education and installation program for the Berkeley Traffic Bureau.

Sworn, non-patrol officers. Some officers dispatched to events are sworn officers who are not assigned to patrol teams, such as when they are assigned to investigations or special assignments when they respond to a call.

Other BPD Response Personnel – Professional Personnel

In addition to patrol officers and other sworn personnel, BPD employs individuals who are non-sworn. The following non-sworn positions responded to events:

Community Service Officers. Community Service Officers (CSO) are specialized professionals performing a wide variety of technical support duties in the department. CSOs work most often in Berkeley City Jail, evidence, and investigations. According to BPD, while CSOs rarely appear in the CAD data, they may appear in cases when they need assistance from BPD officers in the jail.

Crime Scene Technician. Crime Scene Technicians are part of the Crime Scene Unit/Investigation, and are CSOs. The Crime Scene Supervisor oversees four Crime Scene Investigators who collect and document evidence at crime scenes. Crime Scene Technicians support patrol officers of all ranks and all detectives with searches for evidence but are ultimately responsible for managing evidence in major or complex crimes.

Parking Enforcement Officers. Parking Enforcement Officers operate within the Parking Enforcement Unit of the Traffic Bureau. Parking Enforcement Officers enforce local and state parking laws and regulations. Their functions include responding to parking issues as reported by the community, working traffic control posts during police incidents, and helping to manage traffic and parking at special events, such as the 4th of July, the Solano Stroll, and UC Football games. Berkeley Municipal Code authorizes non-sworn parking enforcement officers to issue citations for violations of state and local parking laws, but not traffic violations.

Non-BPD Response Personnel

University of California Officers. BPD dispatches these officers when they are partnered with a BPD officer as part of a special program in which BPD has the lead.

Animal Control. Animal Control are members of the City of Berkeley Animal Care Services. They are responsible for enforcement of city ordinances related to animals, removal of killed or injured animals, impoundment of stray pets, and investigation of animal-related neglect, cruelty, nuisance, and bite cases.

Mobile Crisis Team. The Mobile Crisis Team (Mobile Crisis) are staff in the City's Mental Health Division who may accompany BPD officers to calls related to individuals experiencing a mental health crisis. This team aims to reduce the impact of mental health emergencies through immediate response to crisis situations at the street-level and through coordination and consultation with local public safety organizations, hospitals, and other community groups.

Response to Events

BPD dispatched patrol officers to respond to events 527,556 times with multiple officers being dispatched to some events. Patrol officers include seven patrol teams and reserve officers. Supervisors include police sergeants, lieutenants, and captains. Other units include Animal Control, Area Coordinators, Bike Unit, Crime Scene Techs, Community Service Officers, Dispatchers, Mobile Crisis Team, Parking Enforcement Officers, Police Aides, Special Enforcement, Traffic Bureau, and University of California officers. Figure 31 shows the number of other personnel units that responded to events from 2015 to 2019.

Figure 31. Responses to Events by Other Units, 2015-2019 (n = 23,644 out of 637,313 personnel)
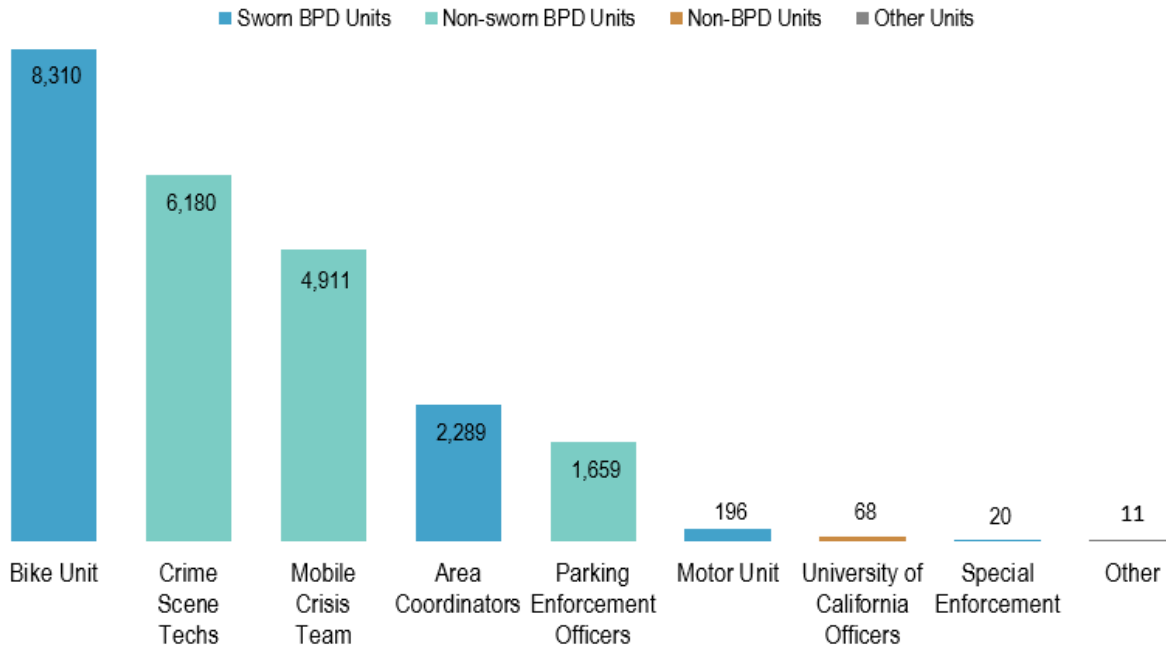
Note: Other includes: CSOs (non-sworn BPD unit), Police Aides (non-sworn BPD unit), and Animal Control (Non-BPD unit).

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

The number of personnel who respond to an event varies depending on the call type. Table 7 shows the average number of personnel who responded to an event by the most frequent call types. Appendix G provides the average personnel responses for all call types.

Table 7. Top Call Types by Personnel Response, 2015-2019 (n = 333,493 responses)

Call Type	Average Personnel Responses per Event	Total Number of Personnel Dispatched
415 - Disturbance	2.0	70,456
T - Traffic Stop	1.5	67,083
1033A - Audible Alarm	1.7	34,175
SUSCIR - Suspicious Circumstance	2.6	29,897
1042 - Welfare Check	1.9	29,266
SEC - Security Check	1.8	26,845
242 - Battery	3.1	21,672
SUSPER - Suspicious Person	2.3	18,654
415E - Noise Disturbance	1.1	18,009
484 - Theft	1.7	17,436

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 32 shows a breakdown of events by the number of responding personnel from 2015 to 2019.

Figure 32. Number of Personnel Responses per Event, 2015-2019 (n = 637,313 responses)
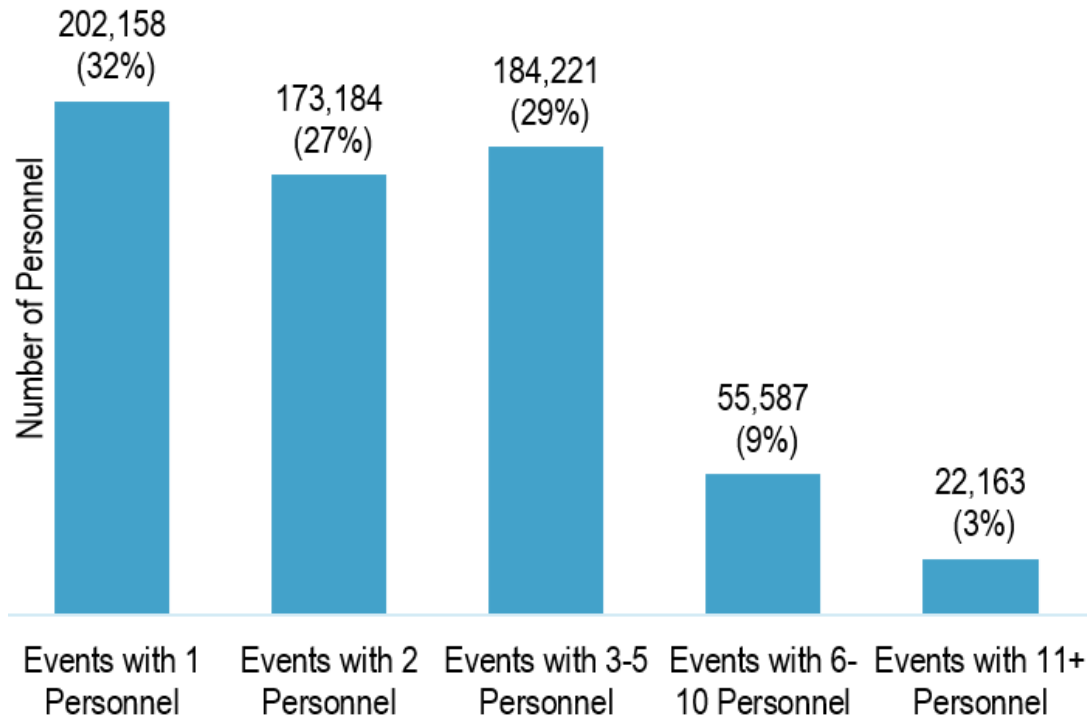
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

BPD Patrol Teams

BPD has seven patrol teams, as shown in Figure 33. Each team is made up of 5 to 11 officers and two supervising sergeants. Four lieutenants oversee two patrol teams each. According to BPD, patrol teams often fall short of the number of assigned officers when officers are out due to sick leave, training, or injury, and officers do overtime to make the minimum staffing of 8-9 officers per team. The number of officers dispatched to an event will vary depending on the call type. On average, BPD dispatches 1.8 personnel per event. Appendix G includes the average personnel responses for each call type.

Figure 33. Example of Police Patrol Team Staffing

	Monday-Thursday				Friday-Saturday			
	Team 1	Team 2	Team 3	Team 4	Team 5	Team 6A	Team 6B	Team 7
Lieutenants	👮		👮		👮		👮	
Sergeants	👮👮	👮👮	👮👮	👮👮	👮👮	👮👮	👮👮	👮👮
Officers	10-11	10-11	10-11	10-11	10-11	5	5	10-11
Shift Time	6:00a – 4:00p	11:00a – 9:00p	3:30p – 1:30a	8:30p – 6:30a	6:00a – 6:30p	11:30a – 12:00a	2:00p – 2:30a	6:00p – 6:30a

Source: Berkeley Police Department

Figure 34 shows the dates when more than 50 personnel were dispatched to one event during the five-year period, including the call type that was assigned to each respective event.

Figure 34. Events with Responses from More than 50 Personnel, 2015-2019 (n = 1,074 out of 637,313 responses)

Year	Date	Call Type
2015	2/19	Search Warrant, 54
2016	7/4	Security Check, 63
2017	3/4	Demonstration, 104
2017	4/15	Demonstration, 114
2017	8/27	Security Check, 94
2017	9/14	Security Check, 71
2017	9/24	Demonstration, 108
2017	9/25	Demonstration, 86
2017	9/26	Demonstration, 97
2017	9/27	Demonstration, 76
2018	8/5	Security Check, 94
2019	7/4	Security Check, 58
2019	11/20	Demonstration, 115
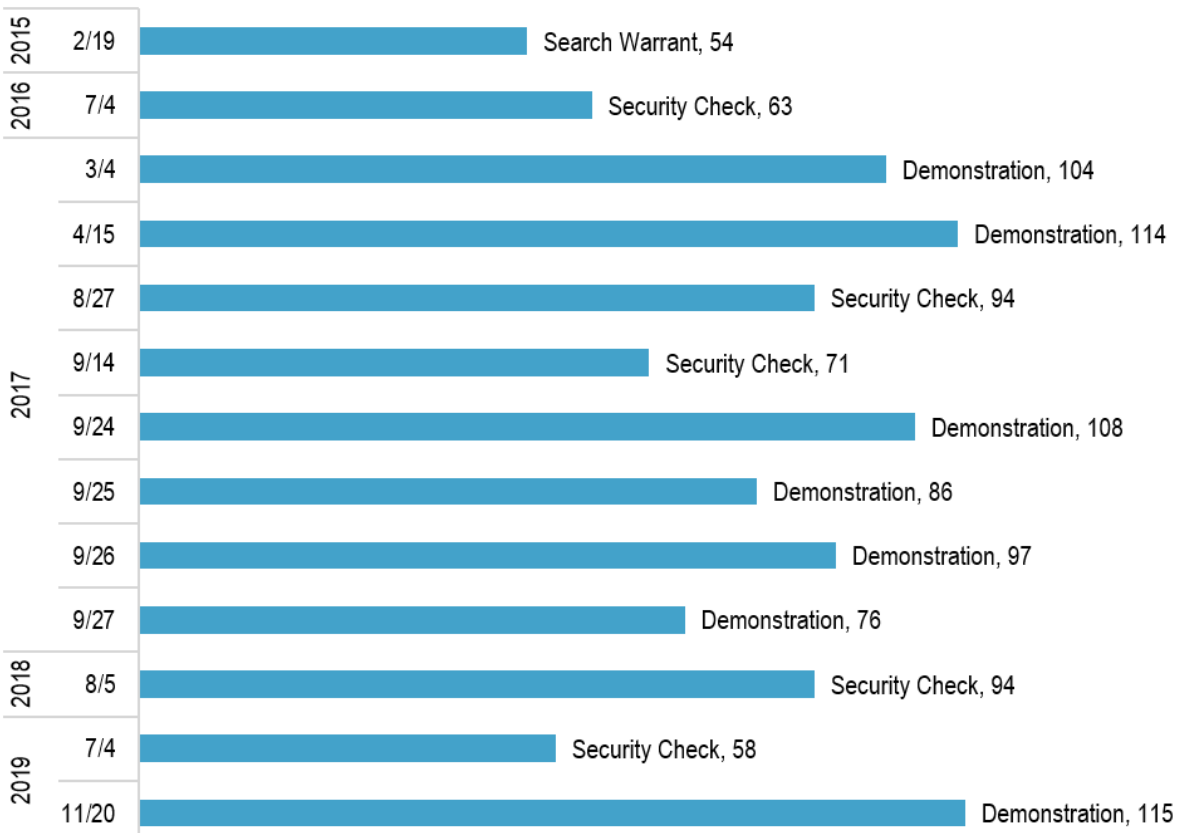
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Time Spent Responding to Calls

In this section we present information about the time BPD spends recording, dispatching, and responding to calls. The CAD data includes time stamps that correspond with the steps that occur throughout the call and response process. These time stamps enable an understanding of the amount of time that is dedicated to different portions of responses to events. We use the time between when a call is dispatched and cleared to indicate the amount of time that an officer or other personnel spends responding to an event. We use the time between a call being created and an officer being dispatched to denote the time in which the Communications Center assesses resources and dispatches officers.

The CAD system only records the time of a police event, which is an approximation of the time that officers and other personnel spend responding to events. Therefore, the data does not include information about how they spend their time outside of responding to events. Typical police activities that are not recorded in the CAD system include training, proactive policing activities, and report writing.

The time that BPD officers and other personnel take to respond to events can be longer than expected for several reasons. It could be because dispatchers forget to close out a call. Officers may have moved to another call, or are working on a report. Officers may also close out a call and continue to work on a report, so that they can be dispatched if needed.

Figure 35 shows the total number of BPD officers and other personnel dispatched to events by event priority level from 2015 to 2019.

Figure 35. Number of Personnel Responses by Priority Level, 2015-2019 (n = 637,305 out of 637,313 responses)
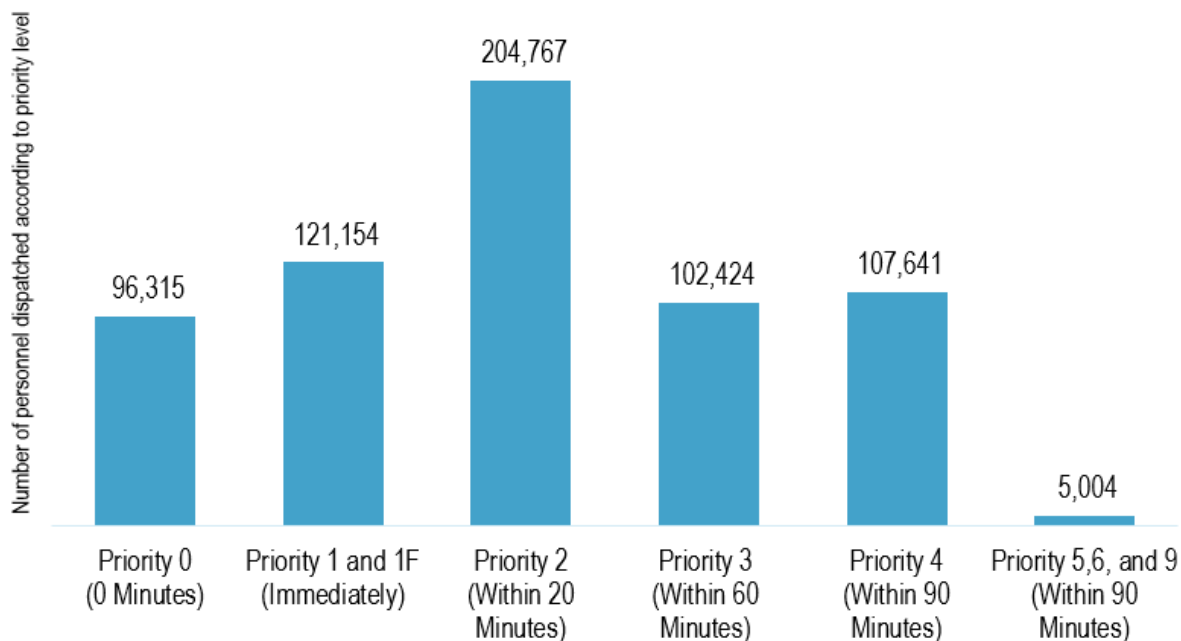
Note: Fire dispatch times are not included in this graphic.
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Table 8 shows the median time personnel spent responding to the ten most frequent call types from 2015 to 2019. Time spent responding is defined as the time between when the Communications Center dispatches personnel and closes the event in CAD, indicating that personnel are no longer on scene.

Table 8. Median Time Spent on Event after Dispatch for Top 10 Call Types, 2015-2019 (n = 321,224 out of 637,313 responses)

Call Type	Median Time Spent on Event after Dispatch (Minutes and Seconds)	Total Number of Personnel Dispatched
1. T - Traffic Stop	7:00	67,083
2. 415 - Disturbance	14:00	70,456
3. 1033A - Audible Alarm	9:00	34,175
4. 415E - Noise Disturbance	9:00	18,009
5. SEC - Security Check	29:00	26,845
6. 1042 - Welfare Check	19:00	29,266
7. SUSCIR - Suspicious Circumstance	17:00	29,897
8. 602L - Trespassing	12:00	16,911
9. 484 - Theft	28:00	17,436
10. W911 – Wireless 911	7:00	11,146

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 36 shows an overview of the time BPD officers and other personnel spent responding to events for each call type classification. This is represented as percentages of the total time that all officers and other personnel spent responding to events.

Figure 36. Percent Personnel Time Spent Responding to Events Out of Total Time Responding to All Events by Auditor Classification, 2015-2019
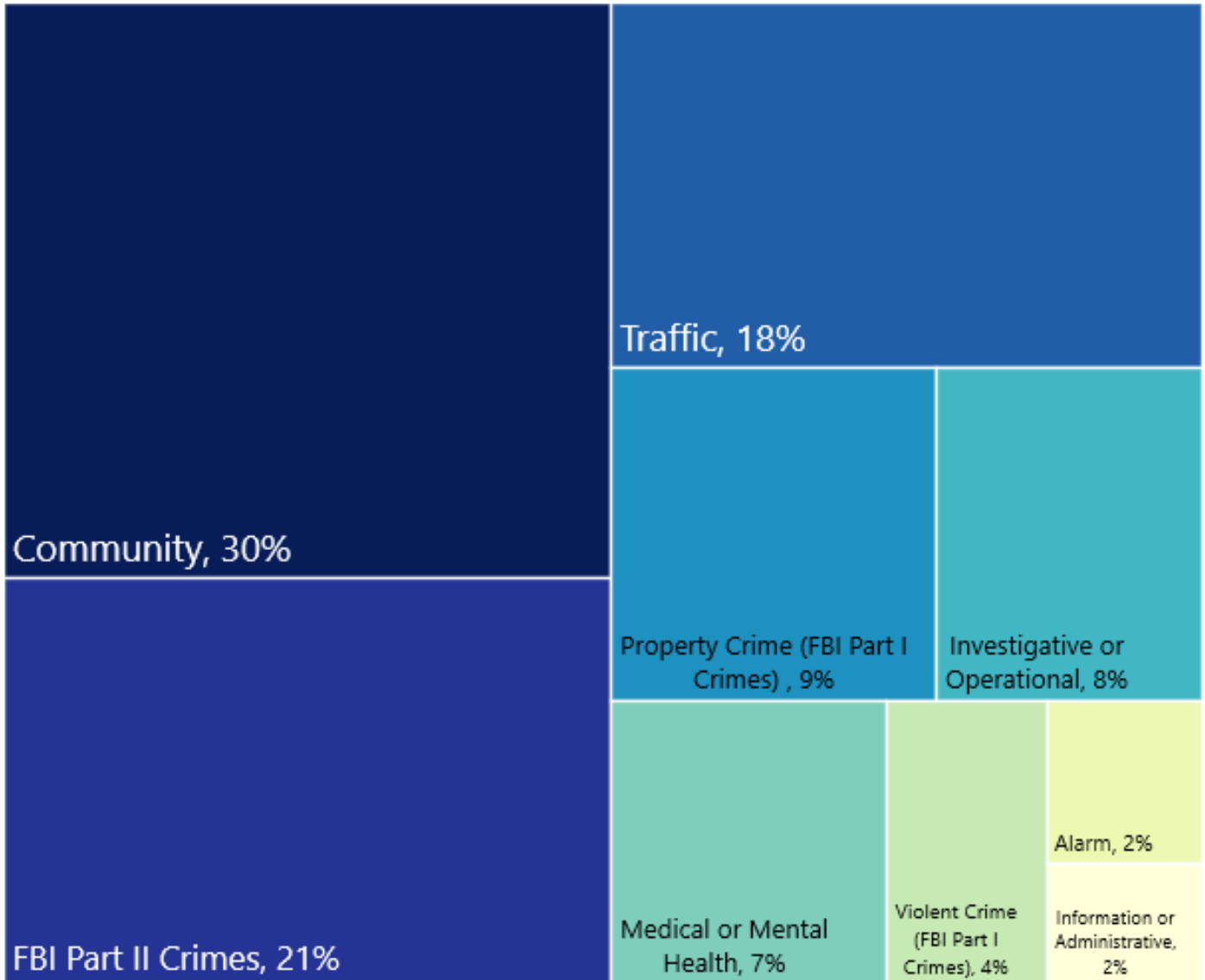
Note: The figure excludes 5,247 responses that were missing start or end time stamps in the data.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

VI. Finding 1: Berkeley Police Department can better track mental health and homelessness calls.

There has been much discussion by City Council and the community around BPD resources in response to events related to mental health and homelessness. City officials have estimated that BPD dedicates significant resources to responding to calls about people experiencing mental health issues or homelessness,[14] and the City Council requested data to gain a better understanding of BPD's response to these events.[15] As such, we assessed the available data about the number of events and officer-initiated activities that relate to mental health and homelessness.

Currently, it is difficult to determine the full extent of BPD officers' encounters with people who are experiencing a mental health issue or homelessness from the data set. We identified as many of these events in the data as possible, but they are undercounted, likely significantly, because BPD does not identify all calls related to mental health or homelessness. Better tracking of all events where mental health or homelessness are apparent would provide more complete understanding about BPD's response and inform decisions about the appropriate resources to dedicate to these events.

Events Related to Mental Health and Homelessness are Undercounted

BPD receives many calls that involve individuals who are experiencing a mental health issue or homelessness, but there are some challenges that make it difficult to identify these events in the CAD data.

First, call types in CAD reflect the primary reason for a call which may not capture events where the individuals involved are experiencing a mental health issue or homelessness. CAD has some call types to identify when the primary reason for the call is a mental health issue, such as a suicide attempt or "5150" for someone experiencing a mental health crisis. However, if the primary reason for the call is another issue, dispatchers are trained to assign those to call types that reflect the primary reason, such as family disturbance or pedestrian stop, which do not capture an accompanying mental health issue. According to BPD, if the event involves a potential crime, dispatchers will always log it using a corresponding crime code and not a mental health call type. For example, if the Communications Center receives a call about a disturbance in progress, dispatchers will assign a call type related to a disturbance. Officers may arrive on scene and find the individual involved is experiencing a 5150 mental health crisis, but the call type would not reflect this. Similarly, there is one call type specifically for events related to homelessness, but dispatchers may assign these events to other more general call types such as welfare check or person down depending on the information they receive about the primary reason for the call.

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[14] Berkeleyside article, "Mental health calls #1 drain on Berkeley police resources." https://www.berkeleyside.com/2015/04/16/mental-health-calls-are-1-drain-on-berkeley-police-resources

[15] Mayor's Omnibus Motion on Public Safety Items: https://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_Commissions/2020-07-14%20Mayor%20Supp%203%20Police%20Items.pdf

Second, disposition codes used to describe basic information about the event do not always capture when there is a mental health or homelessness component. For instance, out of 28,959 events with a mental health term in the narrative, only 23 percent were assigned the mental health disposition code. According to BPD, officers most often are the ones to enter disposition codes unless they call into the Communications Center and provide information for dispatchers to enter the code. BPD stated that officers do not consistently use this code for events with an apparent mental health component. Additionally, CAD does not have a disposition code that indicates whether an individual in an event is experiencing homelessness. Even if CAD did have such a disposition code, BPD stated that officers tend to only ask individuals for information that is directly relevant to the event and may not gather information about housing status if it is not relevant. BPD should only include this information if it is apparent during the event.

Third, the narrative description for an event in CAD may not identify events with a mental health or homelessness component. In addition to logging call types and dispositions, dispatchers enter narrative information about the event in a description field. In our analysis, we found that the information in the description field does not always match the call type. For instance, dispatchers assigned over 20,950 events to a mental health call type. Of those events, mental health key words were only present in about 48 percent of the narrative descriptions. Using only the narrative description to identify 5150 calls would have excluded many of those calls. For events related to mental health or homelessness that do not have a designated call type, the description field may contain the only information that may identify those events as mental health or homelessness.

Lastly, the data shows when the Mobile Crisis Team responds to events related to mental health, but this alone is not a reliable way to identify these events. The Communications Center may not dispatch the Mobile Crisis Team if the responding officer does not request assistance. There are also some events that the Mobile Crisis Team would normally respond to but cannot because they are unavailable. There is no equivalent response personnel indicator for events related to homelessness.

We developed a method to identify as many events with a mental health or homelessness component as possible, which we describe below, but it is evident that our analysis significantly undercounts these events because of the data limitations we identified.

Transparency and accessibility of information about BPD's response to calls related to mental health or homelessness is an important part of the City's public safety reimagining process. In 2020, City Council passed the Omnibus Motion on Public Safety which called for the reimagining process to consider the police response to mental health and homelessness-related calls. To increase the availability of data on BPD's response to events that relate to mental health or homelessness to the extent that it is known, it is important that these events are identified in the CAD data. While there are challenges to identifying all these events, there are opportunities for BPD to capture more complete information by identifying events where it is apparent that individuals involved are experiencing a mental health crisis or homelessness, regardless of call type. This will result in more complete information about BPD's response and the outcomes of the events. This information can also inform decisions about the most appropriate way to respond to these events.

Identifying Events Related to Mental Health

Mental health events we identified in the data do not represent the total number of events that may have had a mental health component because of the data limitations described above. We used the following components of the CAD data to identify 42,427, unduplicated events with a mental health component, or 12 percent of all events.

- **Call types.** Call types related to mental health include suicide (1056), mental illness (5150), and welfare check (1042). While dispatchers can select call types related to mental health, they can assess a situation and opt to select a different call type that reflects the nature of the event.[16] Events with a call type that indicated the presence of a mental health issue accounted for 20,950 of the mental health calls identified.

- **Mental health disposition code.** According to BPD officials, the data includes a disposition code that is used to reflect events involving a mental health issue. This is a field that can be checked by BPD officers in addition to an assigned call type.

- **Narrative description.** The data includes narrative fields that dispatchers use to document details about the call that extend beyond the other CAD data entry options. These descriptions can vary depending on the dispatcher and not follow standardized language to describe mental health-related situations. In order to identify mental health-related terms within the narrative data, we consulted with officials from Berkeley Mental Health and the Mental Health Commission to create the list of search terms specific to mental health (Appendix F). We then used these terms to query and identify all the narrative reports to identify events with description fields that contained terms associated with mental health.[17]

- **Mobile Crisis Team response.** The data specifies the personnel who responded to each event. We queried the data for all instances in which the Mobile Crisis Team responded to an event. The data includes only Mobile Crisis Team responses that also involve a sworn BPD officer. The data does not document occasions in which the Mobile Crisis Team is unavailable to respond to a request for support. Therefore, the absence of a Mobile Crisis Team response does not necessarily mean that there was no request for their services.

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[16] This includes other call types that do not explicitly refer to mental health but correlate with mental health outcomes, such as welfare check, family disturbance, pedestrian stops, and suspicious person.

[16] We used the terms that are more specific to mental health and excluded terms more specific to substance abuse or addiction.

Table 9 below shows the unduplicated events we were able to identify as related to mental health based on the call type, disposition, narrative description, or response by the Mobile Crisis Team. Approximately 12 percent of all events were related to mental health from 2015 to 2019.

Table 9. Results of Scan for Events Related to Mental Health, 2015-2019

		Narrative Report	Disposition Report	Call Types	Mobile Crisis	Unduplicated Count
		Mental Health-related events identified in Narrative Reports	Events with an "MH" Disposition Report	Events with Mental Health-related Call Types	Events with response by Mobile Crisis	Narrative report, disposition, call types, and/or Mobile Crisis response
Identified events	#	28,959	9,553	20,950	4,298	42,427
	%	8%	3%	6%	1%	12%
Total Events		350,800	350,800	350,800	350,800	350,800

Note: Call Types includes: 1056 – Suicide, 5150 - Mental Illness and 1042 - Welfare Check
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Table 10 shows how many events of the ten most frequent call types also had a mental health component from 2015 to 2019.

Table 10. Top 10 Call Types and Mental Health Terms in Narrative, 2015-2019

Call Types	Events with Mental Health Term in Narrative Field	Percent of Events	Total Events
1. T - Traffic Stop	70	0.2%	44,795
2. 415 - Disturbance	6792	19.0%	35,696
3. 1033A - Audible Alarm	100	0.5%	19,920
4. 415E - Noise Disturbance	221	1.4%	15,773
5. SEC - Security Check	199	1.3%	15,262
6. 1042 - Welfare Check	6032	40.1%	15,030
7. SUSCIR - Suspicious Circumstance	1244	10.8%	11,547
8. 602L - Trespassing	514	4.6%	11,058
9. 484 - Theft	395	3.7%	10,556
10. W911 - Wireless 911	123	1.2%	9,899

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Identifying Events Related to Homelessness

Similar to mental health-related events, we were not able to identify all events related to homelessness because the information tracked in CAD is limited. While mental health-related events have several call types, lodging in public is the only call type for events related to homelessness. Unlike mental health, events related to homelessness in CAD do not have a disposition identifier. We used the following components of the CAD data to identify 21,683 events involving homelessness which represent 6.2 percent of all events, but this is an undercount:

- **Call type.** The only call type that is specifically related to events that involve one or more people experiencing homelessness is lodging in public. Events with this call type accounted for 0.6 percent of police-related CAD events we could identify as related to homelessness.

- **Narrative Description.** We queried all the events to identify those with description fields that contained terms associated with homelessness. We consulted with officials from Berkeley's Health, Housing, and Community Services Department, the Mental Health Division within that department, the Homeless Commission, and Mental Health Commission to create the list of search terms specific to homelessness (see Appendix F).

Events related to homelessness may also have a mental health component. The 21,683 homelessness-related events identified may overlap with some of the events related to mental health.

Table 11 below shows the unduplicated events we were able to identify as related to homelessness based on the call type or narrative description.

Table 11. Results of Scan for Events Related to Individuals Experiencing Homelessness, 2015-2019

		Homeless-Related Events Identified in Narrative Reports	Events with Call Type Lodging in Public	Unduplicated Count (Call type and/or Narrative Terms)
Identified events	#	20,768	2,221	21,683
	%	5.9%	0.6%	6.2%
Total Events		350,800	350,800	350,800

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Table 12 shows the ten most frequent call types and events with a homelessness component from 2015 to 2019.

Table 12. Top 10 Call Types and Homelessness Terms in Narrative, 2015-2019

Call Types	Events with Homelessness Term in the Narrative Field	Percent of Events	Total Events
1. T - Traffic Stop	59	0.1%	44,795
2. 415 - Disturbance	3442	9.6%	35,696
3. 1033A - Audible Alarm	118	0.6%	19,920
4. 415E - Noise Disturbance	285	1.8%	15,773
5. SEC - Security Check	441	2.9%	15,262
6. 1042 - Welfare Check	1526	10.2%	15,030
7. SUSCIR - Suspicious Circumstance	711	6.2%	11,547
8. 602L - Trespassing	4818	43.6%	11,058
9. 484 - Theft	518	4.9%	10,556
10. W911 - Wireless 911	59	0.6%	9,899

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Recommendation

To improve access to data, we recommend the Berkeley Police Department:

1.1   Identify all calls for service where there is an apparent mental health issue and/or homelessness component in a manner that protects the privacy rights of the individuals involved.

VII. Finding 2: The City can improve the transparency of Police Department activity data on the Open Data Portal.

The City's Open Data Portal provides the public with limited information about events that BPD responds to. There are opportunities for BPD to improve transparency by increasing the type and scope of data available on the portal.

The City of Berkeley launched the Open Data Portal (portal) pilot on December 15, 2014 with the goal of providing non-confidential, public data for unrestricted use. BPD captures events in their calls for service data set on the portal, which was created in March 2015. BPD policy states that reports must be released to any member of the public unless the release of the report would endanger a person, interfere with an investigation, constitute an unwarranted invasion of privacy, or is otherwise prohibited by law.

However, the data BPD shares on the portal does not include all available data fields. The data fields missing would prevent people using the data from being able to identify the call source, the number of police personnel dispatched, or officer time spent on scene. Without this information, the public may not have a complete understanding of BPD's response to these events.

The calls for service data available on the portal is also limited in scope. It does not include events with certain call types, such as welfare check and noise disturbance, and is limited to data within the last 180 days. The limited date ranges make it difficult to assess trends over time.

Ensuring that all event data has more complete information about the police response, personnel dispatched, time, and call source would help give the public with a more complete understanding of calls for service that the Communications Center receives. Public access to calls for service data enables the community to engage more thoroughly with BPD, elected officials, and city staff to develop a shared understanding of crime and policing in Berkeley. In addition, increased transparency through the portal may decrease requests for BPD data through the Public Records Act.

Recommendation:

To improve access to data, we recommend the Berkeley Police Department:

2.1   Make calls for service data available on the City's Open Data Portal for all call types allowable by Berkeley Police Department policy and law, and update regularly to facilitate transparency. This data should be published in machine ready format, and contain as many years of data as is available.

VIII. Recommendations and Management Response

City Management agreed to our findings, conclusions, and recommendations. Below is the Police Department's initial corrective action plan and proposed implementation date. We find their plans to address our audit recommendations reasonable, however, we would like to clarify the intent of our recommendations.

With regards to the first recommendation, the goal is to collect and provide additional data on calls for service that have an apparent mental health and/or homelessness component. We do not recommend that the Police Department inquires about individuals' housing or mental health statuses, but instead collects this information in a similar way to how the department collects data on individuals' race for traffic stops. With regards to the second recommendation, the goal is to provide additional data on calls for service to the public. We understand that it may take time to coordinate with the vendor to include new datasets. We suggest that in the meantime, the Police Departments publishes the Calls For Service dataset that was provided to our office for this analysis and covers the past five years.

As part of the follow-up process, the Berkeley City Auditor will be actively engaged with the Police Department every six months to assess the progress they are making towards complete implementation.

1.1 To improve access to data, we recommend the Berkeley Police Department identify all calls for service where there is an apparent mental health issue and/or homelessness component in a manner that protects the privacy rights of the individuals involved.

Management Response: Agree with stated limitations which follow.

Proposed Implementation Plan: The Berkeley Police Department can implement steps to capture these issues on calls when appropriate and/or obvious. Disposition codes, which are part of every Call For Service (CFS) offer a tool for data collection. While currently disposition codes for homeless and mental health issues exist, we need to implement training that better defines when these codes should be included in CFS dispositions. We anticipate some challenges with this as we do not routinely inquire about peoples' housing or mental health statuses, especially when it is not directly related to the call for service. It will be important to identify what situations it might be appropriate to inquire about these issues to ensure that personal dignity is respected and privacy rights acknowledged. To ensure these goals are met, further discussion and clarification may be needed as to what data we are attempting to capture by indicating if mental health issues or homelessness was a component of a CFS, and setting more clearly defined definitions as to when each code should be used. Currently standard evaluation tools do not exist to extract this data in situations beyond the most obvious. Developing tools that accurately capture this information where it is more nuanced, and then implementing training that ensures these tools can be applied correctly could be affected by competing resource demands.

Proposed Implementation Date: Between 4-6 months from date of audit completion.

VIII. Recommendations and Management Response

2.1

To improve access to data, we recommend the Berkeley Police Department make calls for service data available on the City's Open Data Portal for all call types allowable by Berkeley Police Department policy and law, and update regularly to facilitate transparency. This data should be published in machine ready format, and contain as many years of data as is available.

Management Response: BPD agrees that the current dataset posted online needs to be updated or replaced.

Proposed Implementation Plan: The new dataset should be able to incorporate additional information that is not currently published. Our staff will need to explore if our current vendor can suffice to provide the requested data, or if we need to seek a new vendor for this work. Implementation timeline is also dependent on the whether this project will require a new contract and budget to accomplish the recommendation. Implementation may require assistance and resources from IT as well, which could further delay implementation.

Proposed Implementation Date: Between 4-6 months if work remains with current vendor, 9-12 months if new vendor selection required.

IX. Methodology and Statement of Compliance

The scope of our audit focused on data for calendar years 2015 to 2019. We performed a risk assessment of the department's data collection and management practices and procedures to identify internal control weaknesses, including fraud risks, within the context of our audit objectives. This included a review of selected policies and procedures, as well as interviews with subject matter experts and BPD staff.

To gain an understanding of BPD operations and internal controls and to achieve our audit objectives, we:

- Reviewed BPD policies and procedures for dispatching units to respond to an event, performing traffic stops, maintaining quality control for data systems, and how patrol officers spend their time to understand the requirements for officers in the City of Berkeley.

- Reviewed local and state laws on police operations and data collection to understand what governs police operations.

- Reviewed national media on reimagining policing, and the collection and analysis of police data to understand the information available to the public.

- Validated and analyzed CAD data from 2015 through 2019.

- Interviewed BPD patrol officers, command staff, dispatchers, police information technology staff, the crime analyst, and the police records manager to understand departmental operations.

- Interviewed mental health and housing officials from the Department of Health, Housing, and Community Services (HHCS), the Homeless Commission, and the Mental Health Commission.

- Interviewed external subject matter experts:

    - AH Datalytics

    - Portland City Auditor

    - San Jose City Auditor

    - Center for Policing Equity

    - Yale Justice Collaboratory

    - NYU School of Law Policing Project

    - Jerry Ratcliffe, Temple University

    - Austin Justice Coalition

    - Jack Glaser, UC Berkeley Goldman School of Public Policy

    - Oakland Reimagining Public Safety Task Force (Data Advisory Board)

    - National Institute for Criminal Justice Reform

    - Berkeley's Police Review Commission

    - Mayor's Fair and Impartial Policing Working Group

- Reviewed the available BPD data sets on the City's Open Data Portal.

Preparing the Data Sets

In this section, we detail the process we undertook to gather, validate, and prepare the data, in addition to the decision points that went into preparing each data set.

Gathered the data. We collaborated closely with BPD on an information request to ensure the data set reflected the breadth of inputs to the CAD system. The validation process resulted in multiple data pulls to resolve substantial discrepancies that we identified in the data. In February 2021, BPD delivered the final source data that forms the basis of this report.

Conducted Data Reliability Assessment. We assessed the reliability of CAD data by reviewing them for reasonableness and completeness, interviewing knowledgeable data owners, gaining an understanding of data access controls, and reviewing data system documentation from BPD and the Communications Center. We also reviewed the Department's policies and procedures, interviewed staff at all levels, interviewed an extensive and varied list of subject matter experts, and reviewed relevant California and Berkeley laws. We determined that the data was sufficiently reliable for the purposes of this report.

Processed the Data to Improve Accuracy. We took the following steps to clean the original data set to improve accuracy:

- We eliminated records for which call types included "NULL" data, as call types are a required entry for dispatchers.
- We eliminated records that represented test calls, such as unit "Mobile08" which represented a test by dispatchers.
- We eliminated events for which there is no response from a sworn officer, due to our primary focus on responses from sworn BPD officers.
- We narrowed the data to events that occurred from January 2015 to December of 2019.
- We organized the data by three separate data sets: event data, stop data, and personnel response data. These data sets reflect different components of the CAD system, and their sample sizes vary due to how they are organized in the data set.

Figure 37. Summary of Data Sets Used in the Report

Orginal Data Set
Each row represents a response, in which a patrol officer or other unit is dispatched to a call. The responses are organized by an ID that represents the overall CAD event. Each Event ID can involve multiple responses.

1. Event Data (n = 350,800)
This data is organized at the event level and each row represents one event.

3. Personnel Data (n = 637,313)
This data is at the response level. Each record represents a response from a distinct unit or personnel (can be one or two individuals).

2. Stop Data (n = 56,070)
Stops are a subset of event data that only include stops which were officer-initiated. This data set only includes stops that had disposition codes, which form the basis of the stop data.

Source: Berkeley City Auditor

1. Characteristics of Events (sample size 350,800 events). For the purposes of this report, events are incidents that the community calls in or police officers observe that result in a police response. Events range in complexity and the Communications Center categorizes them using call types such as suspicious circumstance, disturbance, petty theft, security check, and anything in between. Appendix G provides the full list of call types that are used to describe events in the City of Berkeley. We highlighted the trends and characteristics for all unique events in the data, including community-initiated calls and officer-initiated stops.

2. Characteristics of Officer-Initiated Stops (sample size 56,070 stops). We examined an additional subset of stops officers initiated that were unrelated to calls for service. Stops may include vehicle, pedestrian, bicycle, or suspicious vehicle stops. All of the stops that we review in this section are initiated by officers.

3. Characteristics of Police Response (sample size 637,313 individuals who responded). The Berkeley Police Department Communications Center can assign multiple officers in response to one event. As a result, there are more police responses in the data than there are events. We provide data for responses from officers and other units, including but not limited to the Mobile Crisis Team, Area Coordinators, or the Traffic Bureau.

Categorization of Data

The data contains categorized fields. These include:

Call Type Classifications. We chose to categorize the data into ten categories as illustrated in our report. We selected these categories based on research of current best practices by university researchers, interviews with subject matter experts, and a preliminary assessment of the data sets. We used the definitions for serious and property crime used by the FBI's Uniform Crime Report statistics.

When developing the categories, we took the following into consideration:

- Call types can fall into several classifications. The definitions below guide our decision to keep one call type under a specific category. For instance, vehicle stops are used to manage traffic flows, but in some instances, they may also be related to an investigation. We chose to keep vehicle stops in the traffic category because they may not necessarily result in a crime report.

- Call types under the same classification may serve different purposes. For instance, call types related to alarms may serve a variety of purposes. Some alarms involve investigation for an alarm going off (1033a), while others are more criminal in nature such as a bank alarm indicating a robbery (1033g).

- Our call type classifications present one model among various approaches for classifying call types. There are other approaches for organizing call types, such as by police functions or penal codes.

- It is possible for call types under any of the categories to result in a crime report. We grouped some events into call type classifications that refer to crimes that may be involved. However, other call types may also involve a crime report.

Mental Health and Homelessness. To capture the extent of these calls, we used components of the CAD data to identify unduplicated events related to mental health and unduplicated events related to homelessness. Components related to mental health include call types (1056 – Suicide, 5150 - Mental Illness, and 1042 - Welfare Check), the disposition code "MH," response by Mobile Crisis Team personnel, and terms in the narrative data related to mental health. Components related to individuals experiencing homelessness include events identified in narrative reports, and the call type "lodging in public."

Personnel. We vetted codes that indicate the type of personnel in the data with the Police IT Manager and Communications Center Manager. Through interviews with the Police Records Manager and other BPD command staff, we organized police personnel by categories according to whether they are sworn or non-sworn staff. We additionally categorized staff as patrol units, patrol supervisors, other units, and sworn, non-patrol officers.

Statement of Compliance

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix A. Fields Included in the CAD Data

Table 13. Data Fields Included in Computer Aided Dispatch Dataset Provided by the Berkeley Police Department

Data Fields	Description
Incident Number*	Unique ID for the event.
Call Source	The origin of the call, recoded to include Emergency Line (911), Non-Emergency Line, or Officer-Initiated, or Other.
Call Type*	Call code created by dispatch to describe important information about the event.
Priority	Priority level assigned to the event to determine the urgency of the response.
Occurred Incident Type	Category selected by the officer to organize crime-related calls.
UCR Return A Code	Code selected by the officer and reported to the FBI as a DOJ requirement for all Part 1 crimes.
Unit Disposition	Patrol-reported outcomes of the call. Includes stop dispositions and incident reports.
Call Disposition	Dispatcher-reported outcomes of the call. Includes stop dispositions and incident reports.
Address*	Where the event was reported to have occurred.
Address Location Type	The type of address that is provided by dispatch; includes address, intersection, or longitude/latitude.
Latitude/Longitude	
Police Area	Beat where the event is taking place.
Create Date Time*	The time and date the call was created by either the dispatcher or the officer.
Dispatch Time	The time and date when the officer was dispatched to the incident.
Enroute Time	Time and date in which the officer changes their status to "enroute" after being dispatched.
Onscene Time	Time and date in which the officer arrived to the scene.
Clear Time	Time and date in which the incident was cleared (closed) by a dispatcher.
Primary Unit Flag	The primary officer designated to handle the call. All others are "assisting" officers or units.
Unit Number	The number that corresponds to the police officer and/or other units assigned to the event.
Narrative Data	Further documentation about details of the event used to inform dispatched officers or units.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Note: Fields with an asterisk are required entries in Computer Aided Dispatch (CAD).

Appendix B. Priority Codes and Call Types According to BPD Policy

Table 14. Berkeley Police Department Priority Codes by Call Types

Priority Code	Call Type
1F & P1*	Boat Fire, Encampment Fire, Encampment Medical, Hazardous Material, Multiple Causality Incident, Water Rescue, Retrieval of a Patient, Structure Fire, Vegetation Fire, Medical Emergency with Gun Shot, Vehicle Accident, Vehicle vs Ped or Bike
P0	Pedestrian Stop, Suspicious Vehicle, Bike Stop, Vehicle Stop
P1	Person Down, Person Calling For Help, Explosion, Unknown Injury Accident, Priority Code Assist, Officer Needs Help, Hit & Run w/ Injuries, GPS Tracker Alarm, Silent Alarm, Pronet Alarm, Video Alarm, Threat of Suicide, Missing Person at Risk, Missing Juvenile, Injury Accident Complaint of Pain, Ascertain 911, Aid to BFD, Bomb Tech, Officer Flagged Down, Foot Chase, Person w/ a Gun, Vehicle Pursuit, Knock & Talk, Battery w/ grievous bodily harm (GBH), Assault w/ Caustic Substance, Assault w/ Deadly Weapon, Suicide w/ Ambulance, Major Injury Accident, Suicide Attempt, Dead Body Found, Shooting w/ Ambulance, Injury Accident, Injury Accident Inv Ped or Bicyclist
Priority 1/Priority 2	Kidnap, Robbery, Carjacking, Attempted Rape, Shot At Dwelling, Rape, Spousal Abuse w/o Injury, Home Invasion, Attempt Assault w/Deadly Weapon, Child Abuse, Family Disturbance, Shoplifter In-Custody
Priority 1/Priority 3	Battery, Brandishing, Arson, Burglary, Prowler, Bomb Threat, Auto Burglary, Court Order Violation, Loud Report
Priority 1/Priority 4	Temporary Restraining Order Violation
Priority 2	Welfare Check, Reckless Driver, DUI Driver, Shooting Cold Report, Dog Bite, Vicious Dog, Hit & Run w/ Injuries Report, Battery w/ grievous bodily harm (GBH) report, Assault w/ Caustic Substance Report, Assault w/ Deadly Weapon Report, Oral Copulation, Found Juvenile, Found Person, Create New Call, Outside Agency Assist, Unknown Problem, Wireless 911
Priority 2/Priority 3	Child Molest, Forgery, Grand Theft, Animal Cruelty, Mental Illness, Stolen Vehicle, Vandalism to Vehicle, Hit & Run Non-Injury, Speeding Vehicle, Throwing Object(s) at Vehicle, Peeper, Fall On City Property, Hate Crimes, LoJack Stolen Car, Suspicious Circumstance, Suspicious Person, Suspicious Vehicle
Priority 2/Priority 4	Indecent Exposure, Disturbance, Petty Theft, Defraud Hotel/Restaurant, Malicious Damage, Forged RX
Priority 3	Runaway, Missing Person, Transportation, Non-Injury Accident, Audible Alarm, Civil Standby, Injury Accident Report, Child Neglect, Under the Influence, Firearm Destruction, Stolen Vehicle Recovery, Search Warrant, Ticket Sign Off, Traffic Hazard
Priority 3/Priority 4	Possession of Stolen Property, Incorrigible, Trespassing, Drug Activity, Misc Penal Code Violation
Priority 3/Priority 9	Misc Vehicle Code Violation
Priority 4	Abandoned Vehicle, Stolen Rental Vehicle, Posted No Parking, Barking Dog, Vehicle Blocking Driveway, Vehicle Blocking Sidewalk, Vehicle Double Parking, 5 or More Unpaid Parking Tickets, No Vehicle Identification, Expired Vehicle Registration, Inoperable Vehicle, Noise Disturbance, Identity Fraud, Annoying Phone Calls, Red Zone Cite, Obstructing Traffic, Construction Zone, Advice, Aid to Citizen, Animal Matter, Berkeley Municipal Code (BMC) Violation, Car Alarm, Court Order Report, Found Property, Parking Violation, Security Check, VIN Verification
Priority 4/Priority 5	Gambling
Priority 4/Priority 6	Prostitution, Lodging in Public
Priority 4/Priority 9	Illegal Dumping
Priority 6	Business & Professions Violation, Warrant Arrest

Priority Code	Call Type
Priority 9	Bait Bike, City Manager Report, Property Damage, Demonstration, Extra Surveillance, Information, Lost Property, Mental Health, Repossession, Storm Log, Subpoena Service, Surveillance, Test Call, Temporary Restraining Order Log, Vehicle Release

Source: Berkeley Police Department

Appendix C. Stops by Race, 2015-2019

Figure 38. Officer-Initiated Stops by Race, 2015-2019
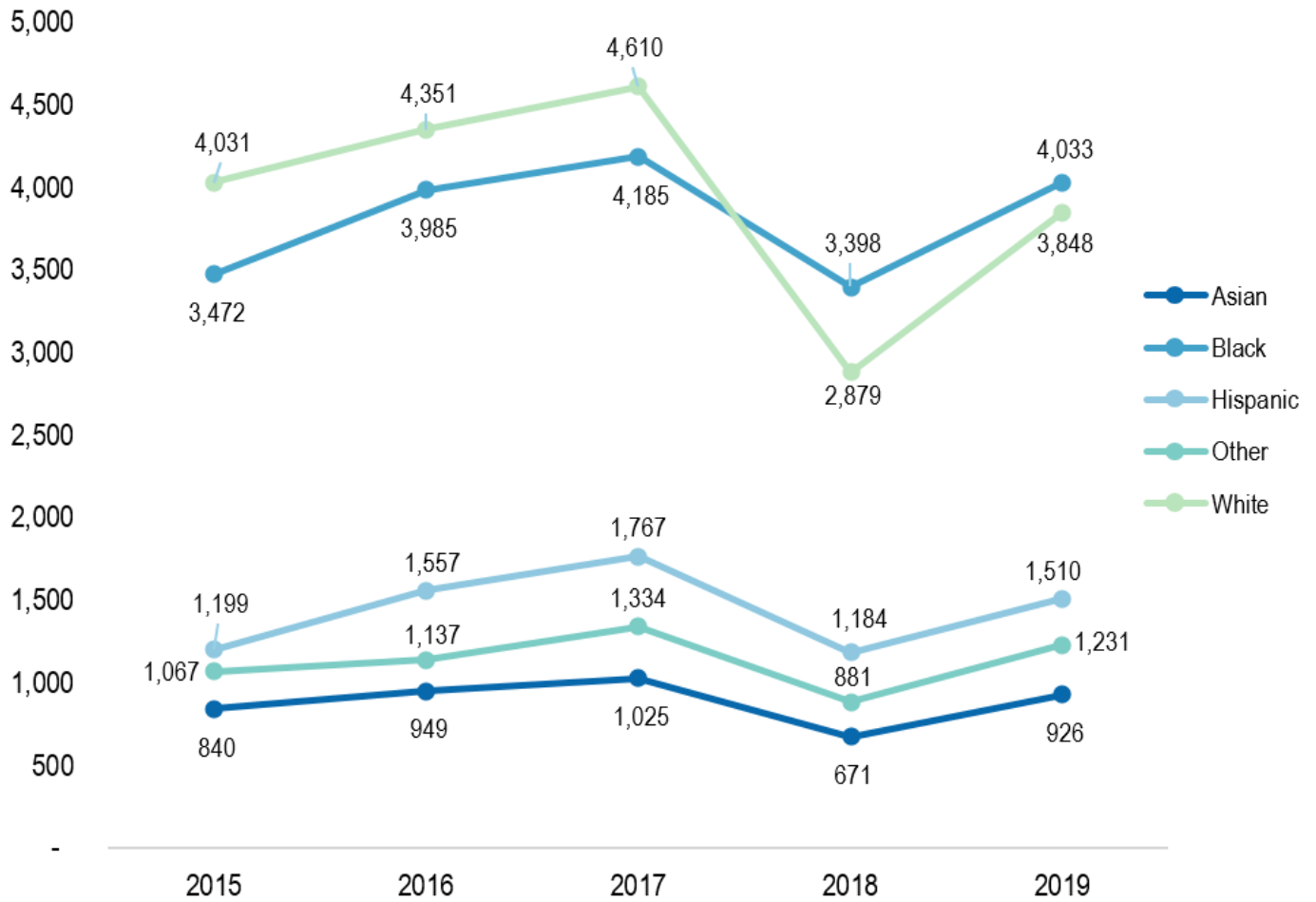
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Appendix D. Enforcement Outcomes of Searches by Race, 2015-2019

The graphs below show trends in enforcement outcomes of searches by race during the 2015 to 2019 audit period. Each data point on the trend lines represents the percentage of searches *for that race group* that resulted in the specified enforcement outcome (not the percentage of total searches for *all race groups*). Note that the graphs are intended to allow comparison between race groups, and the percentages on the left (y-axis) vary depending on the range of data in the graph.

Figure 39. Percentage of Searches that Resulted in Arrest by Race, 2015-2019

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 40. Percentage of Searches that Resulted in a Citation by Race, 2015-2019

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Figure 41. Percentage of Searches that Resulted in a Warning by Race, 2015-2019
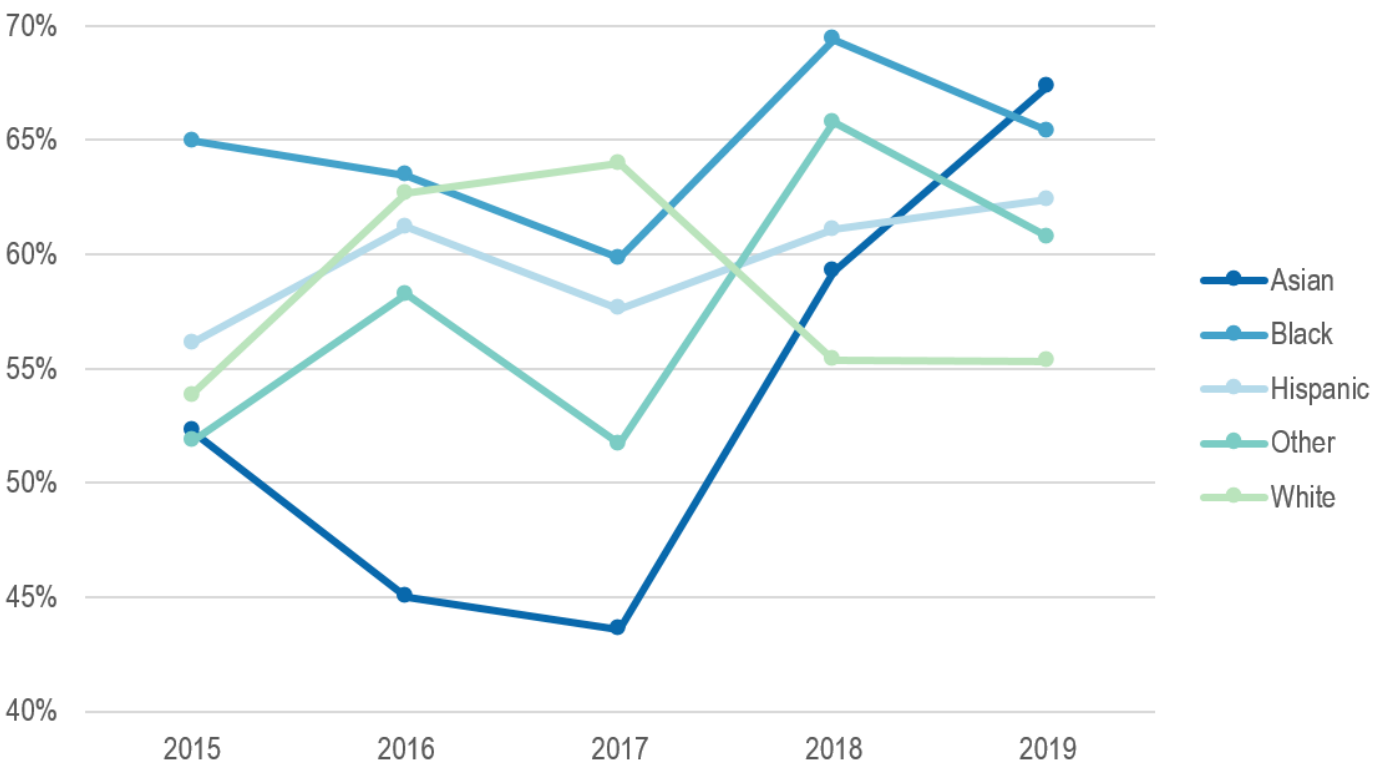
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

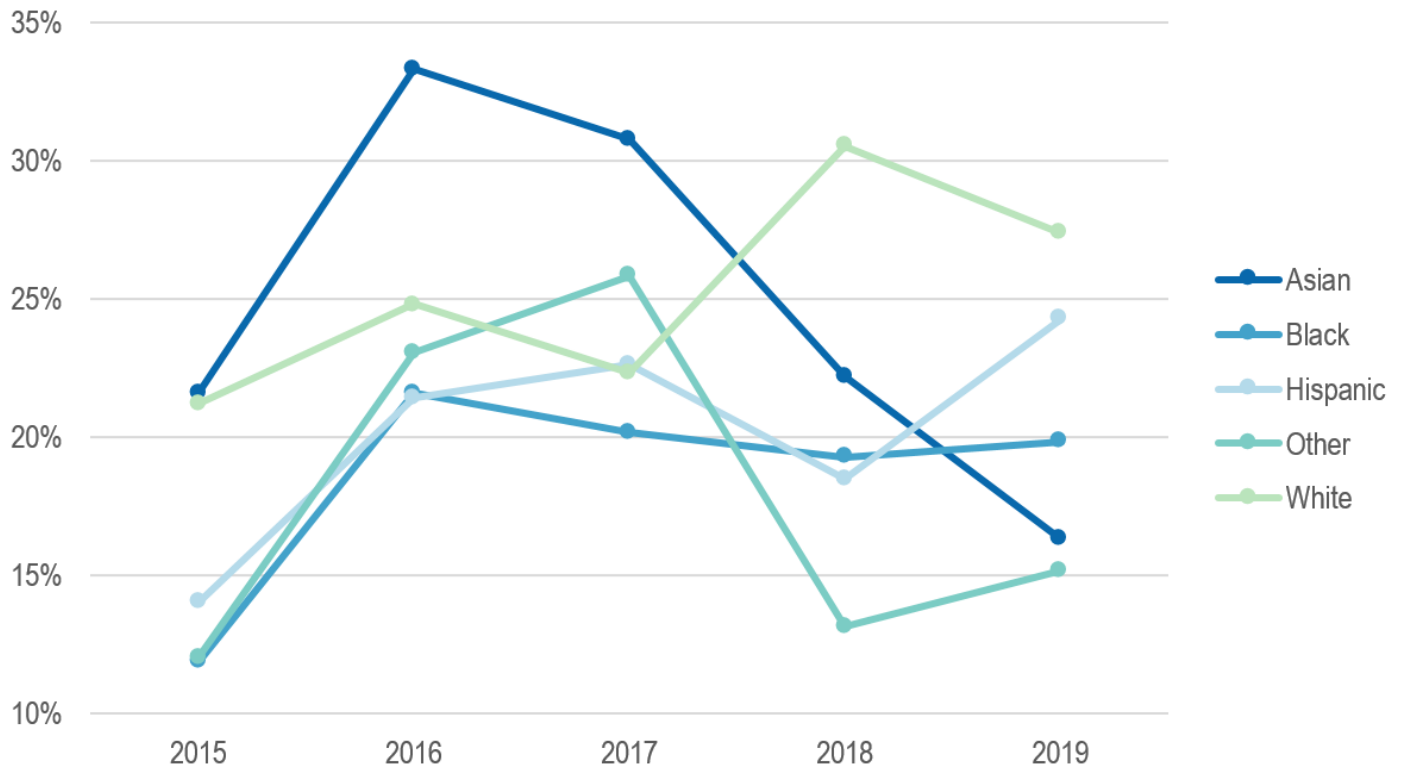Figure 42. Percentage of Searches that Resulted in No Enforcement by Race, 2015-2019
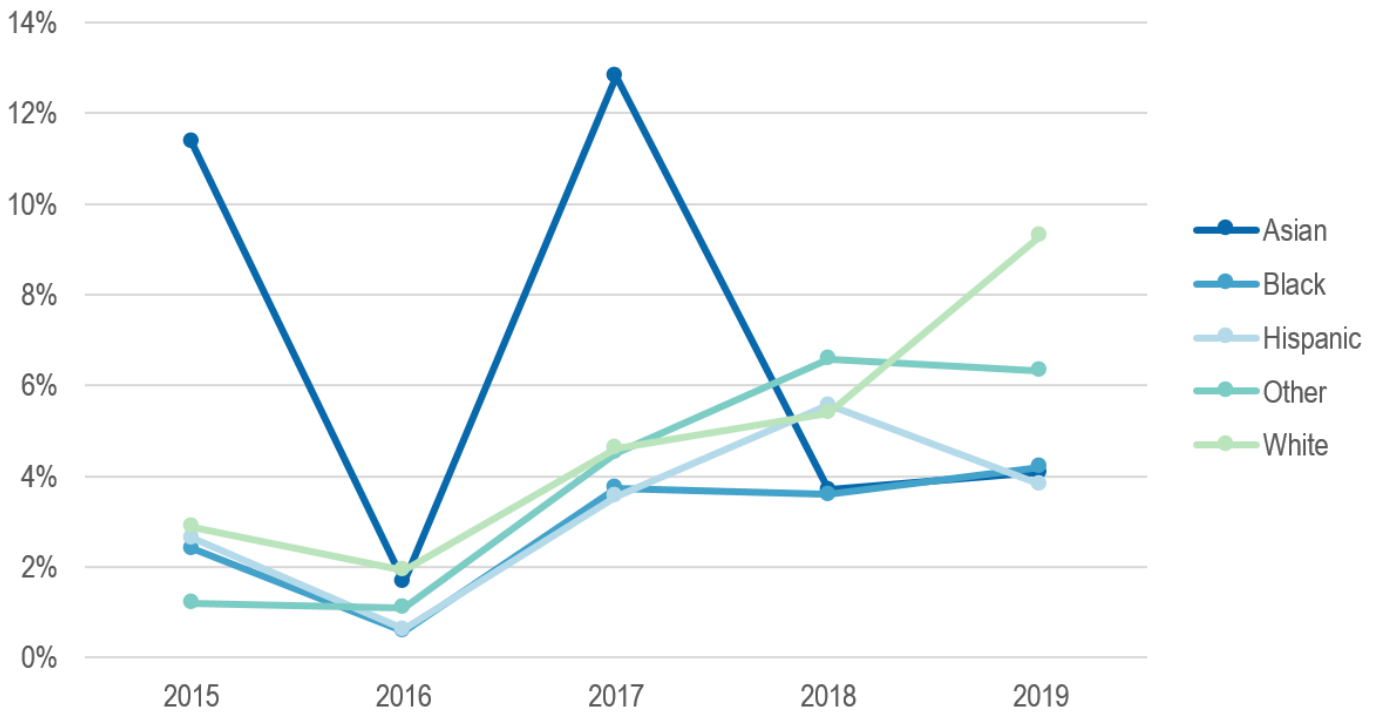
Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data
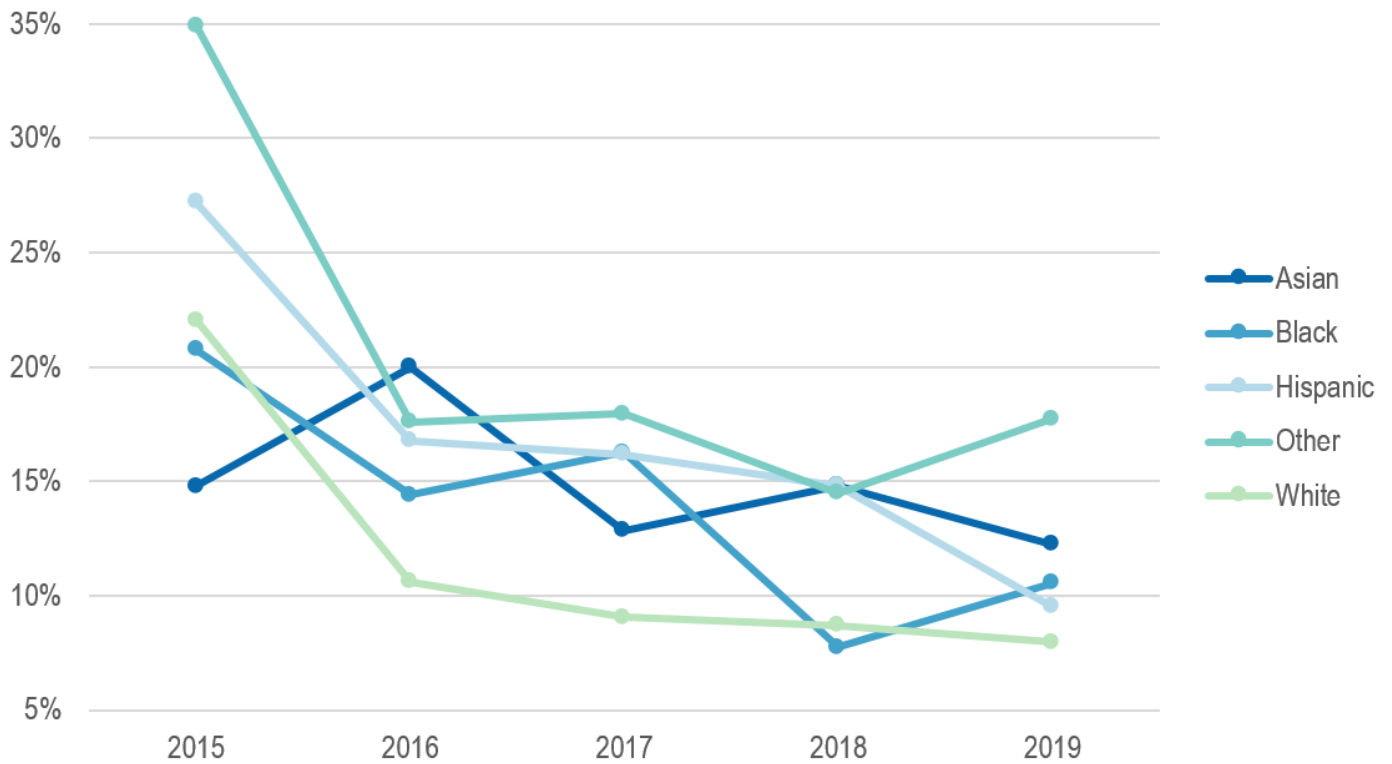
Appendix E. Responses by Units, 2015-2019

Table 15. Berkeley Police Department Personnel Responses by Unit, 2015-2019

	2015	2016	2017	2018	2019	Total
Patrol Supervisors						
Captain	38	26	34	20	17	135
Lieutenant	773	794	788	1,344	1,207	4,906
Sergeant	8,612	8,049	8,617	7,537	7,600	40,415
Patrol Officers						
Reserve Officers	993	651	615	208	638	3,105
Team 1	14,053	13,614	14,128	13,395	12,823	68,013
Team 2	11,417	12,084	12,928	12,219	12,125	60,773
Team 3	14,876	13,563	14,708	13,905	13,633	70,685
Team 4	14,136	16,764	16,452	15,240	13,975	76,567
Team 5	15,510	15,926	15,909	15,236	14,840	77,421
Team 6	14,301	16,347	15,590	12,314	13,583	72,135
Team 7	20,180	20,290	21,036	18,680	18,671	98,857
Sworn non-patrol officers	8,577	7,744	8,189	6,202	9,945	40,657
Other						
Animal Control	-	2	1	1	-	4
Mobile Crisis	967	1,156	1,185	787	816	4,911
CSOs	-	1	1	1	3	6
Crime Scene Techs	1,551	1,523	1,497	929	680	6,180
Parking Enforcement Officers	243	264	375	352	425	1,659
Police Aides	-	-	-	-	1	1
University of California Officers	22	23	12	5	6	68
Area Coordinators	386	273	357	258	1,015	2,289
Bike Unit	3,536	2,596	2,178	-	-	8,310
Motor Unit	136	57	3	-	-	196
Special Enforcement	8	2	4	-	6	20

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

Appendix F. List of Terms Applied in Narrative Search

Table 16. List of Mental Health and Homeless Search Terms Applied to Narrative Search

Mental Health Search Terms		Homeless Search Terms
1056	mania	bacs
5150	manic	bfhp
sees things	mct	camped out
antipsychotic	medication	person down
anxiety	meds	berkeley covid respite
bacs	mental	berkeley drop in center
bipolar	mh	berkeley community resource center
bmh	mobile crisis	women's daytime drop-in center
bonita house	nervous breakdown	fred finch turning point
breakdown	paranoi	berkeley food and housing project
case manager	peer support	dorothy day
counsel	pharmacist	encamp
crazy	psych	encampment
crisis	ptsd	harrison house
deliri	residential care	homeless
deluded	schizo	homeless outreach
delusion	seeing things	housing status
dementia	self harm	living on the street
depress	self talk	nomad
disorder	social worker	obstructing sidewalk
dissociat	suicid	shelter
dual diagnosis	talking to self	sleeper
first break	talk to self	street outreach
hallucinat	therap	tent
hear voices	trauma	transitional housing
hearing voices	treatment	unhoused
hears voices	unable to talk	pathways
ideation	warm line	vagrant
john george	warmline	no address
		no residence
		undomicilized
		coordinated entry

Source: Berkeley City Auditor

Appendix G. Summary Data by Call Type, 2015-2019

Table 17. Summary Data by Call Type with Auditor Classifications, 2015-2019

Call Type	2019 Events	Total Events	Average Yearly events	Priorities Assigned in CAD	Average Personnel per Event	Median Time Spent on Event after Dispatch (Minutes and Seconds)
Alarm Classification (n = 21,317)						
1033A - Audible Alarm	4,228	19,920	3,984	0,1F,2,3	1.7	9:00
1033S - Silent Alarm	234	1,314	263	0,1F	2.4	9:00
1033G - GPS Bank Alarm	8	79	16	-	7.1	21:00
1033T - ETS (Bank) Pronet alarm	-	4	1	-	1	15:30
Community Classification (n = 88,031)						
415E - Noise Disturbance	2,709	15,773	3,155	1F,4	1.1	9:00
SEC - Security Check	3,682	15,262	3,052	0,1F,2,4,9	1.8	29:00
SUSCIR - Suspicious Circumstance	2,145	11,547	2,309	0,1F,2,3,4	2.6	17:00
ADVICE - Advice	1,728	8,498	1,700	1F,2,3,4	1.1	26:00
SUSPER - Suspicious Person	1,512	8,247	1,649	0,1F,2,3	2.3	15:00
AID - Aid to Citizen	1,327	5,984	1,197	0,1F,2,3,4,9	2.1	18:00
FLAG - Officer flagged down	1,209	5,215	1,043	0,1F,2,4	1.6	12:00
FOUND - Found Property	722	4,202	840	0,2,3,4	1.1	30:00
SUSVEH - Suspicious Vehicle	596	3,351	670	0,1F,2,3,4	1.7	14:00
647J - Lodging in Public	33	2,221	444	1F,3,4,6	1.4	12:00
1057 - Missing Person	249	1,326	265	0,1F,2,3	1.5	42:00
LDRPT - Loud Report	183	1,071	214	0,1F,2,3	4.2	12:00
ANIMAL - Animal Matter	194	1,065	213	2,4	1.3	15:00
1067 - Call for Help	180	969	194	0,1F	3.4	14:00
1062B - Civil Standby	150	822	164	3	1.8	28:00
ILLDMP - Illegal Dumping	54	463	93	4,9	1.1	14:00
1091B - Barking Dog	72	454	91	4	1.1	10:00
601 - Runaway	46	372	74	0,3	1.6	47:00
1057AR - Missing At Risk	41	289	58	0,2,3	4.9	40:30
601I - Incorrigible	31	184	37	1F,2,3,4	2.5	38:00
FNDPER - Found Person	23	134	27	0,1F,2	1.7	29:00
1057J - Missing Juvenile	21	122	24	-	5.1	14:00
1091E - Dog Bite	16	101	20	1F,2	1.7	28:00
1091V - Vicious Animal	13	101	20	2	1.8	21:00
LOST - Lost Property	16	86	17	4,9	1.1	22:00

Call Type	2019 Events	Total Events	Average Yearly events	Priorities Assigned in CAD	Average Personnel per Event	Median Time Spent on Event after Dispatch (Minutes and Seconds)
FNDJUV - Found Juvenile	10	74	15	2	2.5	25:00
DEMO - Demonstration	7	52	10	9	17.7	6:19:00
FIRE - Structure Fire	-	34	7	-	1.4	2:00
1080 - Explosion	2	9	2	-	2.8	24:00
BART - Bart Tunnel Incident	2	2	-		6.5	36:00
BOAT-FR - Boat Fire	-	1	-		1	1:00
FBI Part II Crimes Classification (n = 77,820)						
415 - Disturbance	6,925	35,696	7,139	0,1F,2,3,4	2	14:00
602L - Trespassing	1,944	11,058	2,212	1F,2,3,4	1.5	12:00
242 - Battery	1,383	6,991	1,398	0,1F,2,3	3.1	22:00
BMCVIO - Berkeley Municipal Code (BMC) Violation	1,014	5,934	1,187	1F,2,4,5	1.2	10:00
415F - Family Disturbance	583	3,254	651	0,1F,2	3.4	25:00
594 - Vandalism	330	1,939	388	0,1F,2,4	1.7	28:00
PCVIO - Misc Penal Code Violation	450	1,538	308	0,1F,2,3,4	1.3	48:00
DRUGS - Drugs Inv.	184	1,440	288	0,1F,2,3,4	1.6	11:00
10852 - Vehicle Damage	303	1,392	278	1F,2,4	1.5	33:00
530 5 - Identity Theft	175	1,112	222	4	1.1	47:00
647F - Intoxicated in Public	146	1,018	204	0,1F,2,3,4	1.9	12:00
653M - Harassing Phone Calls	132	969	194	4	1.1	33:30
417 - Brandishing Weapon	187	845	169	0,1F,2,3	4.8	23:00
314 - Indecent Exposure	140	698	140	1F,2,4	2.3	18:00
TROV - Temporary Restraining Order Violation	140	601	120	0,1F,4	2.5	37:00
23152 - DUI	72	484	97	0,2,3	2	15:00
273 5 - Domestic Violence	67	314	63	0,1F,2	3.8	39:00
273A - Child Abuse	51	278	56	0,2,3	1.5	29:00
470 - Forgery	28	265	53	2,3	1.6	57:00
CRTVIO - Court Order Violation	58	262	52	0,2,3	1.7	34:30
GUN - Person with Gun	50	237	47	0,1F,2	8.3	24:00
23110 - Throwing Object(s) at Vehicle	39	210	42	2,3	1.4	11:00
243E1 - Domestic Violence	54	205	41	0,1F,2	3.5	44:30

Call Type	2019 Events	Total Events	Average Yearly events	Priorities Assigned in CADK	Average Personnel per Event	Median Time Spent on Event after Dispatch (Minutes and Seconds)
537 0 Defrauding Innkeeper (Hotel/Restaurant)	28	179	36	2,4	2	20:00
597 - Cruelty to Animals	23	160	32	1F,2,3	1.8	14:30
1070 - Prowler	13	119	24	0,3	3.4	18:00
300WI - Child Neglect	13	109	22	2,3	1.9	27:00
330 - Gambling	10	101	20	4	1.4	8:00
BPVIO - Business & Professions Violation	18	101	20	6	1.1	8:00
CRTRPT - Court Order Violation	12	98	20	4	1.2	45:00
496 - Poss. Stolen Prop.	11	50	10	3,4	1.7	27:00
FOOT - Foot Chase	6	46	9	-	4.3	32:00
288 - Sexual molest	5	35	7	2,3	1.7	2:15:30
HATE - Hate Crime	4	34	7	2,3	1.3	48:00
647AB - Prostitution	2	15	3	4	1.5	21:00
4390 - Prescription Fraud	2	12	2	2	1.8	35:00
207 - Kidnapping	2	11	2	0,2	6.7	1:10:00
1079 - Bomb Threat	-	6	1	3	4	54:00
148 - Resisting/Obstructing	-	2	-		15.5	1:29:00
REG- Registration for certain criminal offenders	1	2	-		1	1:15:30
Information or Administrative Classification (n = 12,434)						
W911 - Wireless 911	2,830	9,899	1,980	1F,2	1.1	7:00
INFO - Information	205	1,093	219	0,2,9	2.1	16:00
FALL - Fall on City Prop.	181	965	193	1F,2,3	1.5	23:00
DAMAGE - Property Damage	60	234	47	0,1F,2,9	2	38:00
FADEST - Firearm Destruction	37	205	41	3	1.1	58:00
CM - City Manager Report	5	18	4	9	2.3	47:30
SUBP - Subpoena Service	2	14	3	9	1	26:30
REPO - Repossession	-	4	1		1.2	4:00
TROL - Temporary Restraining Order Log	1	2	-		1.5	38:00
Investigative or Operational Classification (n = 10,350)						
A911 - Ascertain 911	995	6,859	1,372	0,1F,2	1.5	9:00

Call Type	2019 Events	Total Events	Average Yearly events	Priorities Assigned in CAD	Average Personnel per Event	Median Time Spent on Event after Dispatch (Minutes and Seconds)
OUTAID- Outside Agency Assist	286	1,419	284	0,1F,2,3	1.8	22:00
KNOCK - Knock & Talk	73	463	93	-	2.1	36:00
1198- Code 1 assist	91	436	87	0,1F,2	4.4	15:00
SEARCH - Search Warrant	30	408	82	3	8.9	5:19:00
UNK - Unknown Problem	44	322	64	0,1F,2	3	14:00
WARARR - Warrant Arrest	65	269	54	0,2,3,6	2.1	47:00
LJ - LoJack Incident	36	96	19	2	3.9	16:00
SURVE - Surveillance	15	78	16	9	4.1	3:50:00
Medical or Mental Health Classification (n = 22,797)						
1042 - Welfare Check	3,065	15,030	3,006	0,1F,2	1.9	19:00
5150 - Mental Illness	827	4,807	961	0,1F,2,3	2.4	20:00
1053 - Person Down	255	1,450	290	0,1F	2.1	12:00
1056 - Suicide	277	1,113	223	0,1F,2	3.6	34:00
DBF - Dead Body	97	397	79	0,1F	3.3	1:12:00
Property Crime (FBI Part I Crimes) Classification (n = 26,421)						
484 - Theft	2,161	10,556	2,111	0,1F,2,3,4	1.7	28:00
459A - Auto Burglary	1,590	6,667	1,333	0,1F,2,3	1.5	32:00
459 - Burglary	597	3,911	782	0,1F,2,3	2.1	44:00
10851 - Stolen Vehicle	631	3,639	728	0,2,3	1.3	48:00
487 - Grand Theft	299	1,034	207	2,4	1.9	37:00
484C - Theft In-Custody	72	407	81	0,1F,2	1.9	48:00
451 - Arson	37	134	27	0,1F,3	2.9	26:00
10855 - Embezzled Vehicle	18	68	14	4	1.1	1:27:00
212 5 - Residential Robbery	1	5	1	-	7.4	37:00
Traffic Classification (n = 89,165)						
T - Traffic Stop	9,129	44,795	8,959	0,1F,2	1.5	7:00
1194 - Pedestrian Stop	1,739	9,157	1,831	0,1F,2,4	1.8	13:00
PRKVIO - Parking Violation	1,112	6,508	1,302	0,1F,2,4	1.1	13:00
20002 - Hit & Run Prop.	917	4,562	912	0,1F,2,3	1.6	33:00
1196 - Suspicious Vehicle	859	4,360	872	0,1F,2	2	11:00
TRFHAZ - Traffic Hazard	792	3,719	744	0,1F,2,3	1.3	11:00
23103 - Reckless Vehicle	553	2,894	579	2	1.3	8:00

Call Type	2019 Events	Total Events	Average Yearly events	Priorities Assigned in CAD	Average Personnel per Event	Median Time Spent on Event after Dispatch (Minutes and Seconds)
1182 - Non Injury	496	2,819	564	0,1F,2,3,4	1.6	26:00
1194B - Bike Stop	442	2,784	557	-	1.6	9:00
1181 - Minor Injuries	478	2,635	527	0,1F,2,3	3.4	38:00
RECOVR - Stolen Vehicle Recovery	214	1,325	265	0,2,3	1.5	56:00
1183 - Unknown Injuries	200	1,261	252	0,1F,2,3	3	33:00
1148 - Transportation	255	623	125	3	1.9	2:48:00
VCVIO - Vehicle Violation	140	584	117	3,4	1.2	13:00
1124 - Abandoned Vehicle	134	459	92	3,4	1.4	13:00
20001 - Hit & Run Injuries	74	330	66	0,1F,2,3	3.3	38:00
23109 - Exhibition of Speed	49	220	44	2	1.2	8:00
VVER - VIN Verification	15	127	25	4	1.1	21:00
HOT - Vehicle Pursuit	-	2	-	-	4	40:00
VREL - Vehicle Release	-	1	-		2	1:14:30
Violent Crime (FBI Part I Crimes) Classification (n = 2,465)						
211 - Robbery	341	1,571	314	0,1F,2,3	5.8	29:30
245 - Assault w/Deadly Weapon	74	383	77	0,1F,2,3	5.3	39:00
261 - Rape	55	267	53	0,2	2.5	1:42:00
243 - Serious Battery	5	63	13	0,2	3	45:00
244 - Assault w/ Caustic Substance	13	47	9	0,2	3.3	21:00
246 - Shots at Dwelling	8	44	9	0,2	2.8	37:00
215 - Carjacking	14	40	8	0,1F,2	7	33:00
1071 - Shooting	8	24	5	0,2	11.4	1:32:00
220 - Sexual Assault	1	16	3	0,2	2.4	50:30
288A - Child molest	2	10	2	2	1.9	1:11:00

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

BERKELEY CITY AUDITOR

To: Honorable Mayor and Members of the City Council

From: Jenny Wong, City Auditor

Subject: Audit Report: Data Analysis of the City of Berkeley's Police Response

RECOMMENDATION
We recommend City Council request that the City Manager report back by November 16, 2021, and every six months thereafter, regarding the status of our audit recommendations until reported fully implemented by the Police Department.

CURRENT SITUATION AND ITS EFFECTS
We analyzed the Berkeley Police Department (BPD) Computer Aided Dispatch (CAD) data from 2015 to 2019. We analyzed characteristics of events, characteristics of officer-initiated stops, and characteristics of police responses.

From 2015-2019, Berkeley police responded to a total of 350,800 events, or an average of 70,160 events per year. Ten call types accounted for 54 percent of all events—traffic stops, disturbance, audible alarm, noise disturbance, security check, welfare check, suspicious circumstance, trespassing, theft, and Wireless 911. Officer-initiated responses were 26 percent of event responses, while 55 percent were the result of calls to the non-emergency line and 19 percent were from 911 calls.

During that time, Berkeley police initiated 56,070 stops. We found 78 percent of officer-initiated stops were vehicle stops, the majority of which did not lead to a search and most led to a warning. Mirroring prior findings by the Center for Policing Equity, data we reviewed showed Black people were stopped at a significantly higher rate than their representation in the population (34 percent compared to 8 percent), and Blacks and Hispanics were more likely to be searched following a stop.

BPD dispatched an average of 1.8 personnel per event. Three or more personnel responded to 41 percent of police responses. Events designated as (high) Priority Level 1-2 accounted for 40 percent of events, which require a response time of 20 minutes or less, while 43 percent were lower priority requiring a response time of an hour or longer from a call.

We found that the number of events that involved homelessness or mental health and the amount of time police spent responding to these events are not quantifiable due to insufficient data. We also found that The City's Open Data Portal provides the public with limited information about events that BPD responds to. There are opportunities for BPD to improve transparency by increasing the type and scope of data available on the portal.

We recommend BPD identify all calls for service that have an apparent mental health and/or homelessness component. We also recommend BPD expand the current calls for service data available

on the City Open Data Portal to include all call types and data fields for as many years as possible. BPD agrees with our recommendations.

BACKGROUND
Following the killing of George Floyd by Minneapolis police in May 2020, a national conversation ensued about policing, race, and the proper level of resources cities should devote to law enforcement. The Berkeley City Council held several meetings and hundreds of community members provided. Initially proposed by Councilmember Bartlett and incorporated by Mayor Arreguín, analysis of police data was included in Safety for All: The George Floyd Community Safety Act, a broader item on policing that City Council passed in July 2020. We offered to conduct the analysis.

This audit is intended to give decision makers and the public a broad overview of calls for service, officer-initiated stops, and police responses and to help inform the community engagement process around reimagining policing in Berkeley, which is currently underway. Our report examined data from 2015 through 2019.

ENVIRONMENTAL SUSTAINABILITY
There are no identifiable environmental effects or opportunities associated with this report.

RATIONALE FOR RECOMMENDATION
Implementing our recommendations will increase transparency and build a richer data set. The audit does not propose recommendations with regard to police activities or personnel allocations. There is a separate community process for reimagining public safety and policing.

CONTACT PERSON
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Attachments:
1: Audit Report: Data Analysis of the City of Berkeley's Police Response