The Science of Justice

Bay Area Rapid Transit Police Department
National Justice Database City Report

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CENTER FOR POLICING EQUITY

The Center for Policing Equity (CPE) is a research and action think tank, providing leadership in equity through excellence in research. CPE specializes in partnering with law enforcement and communities, with the mission of bridging the divide of communication, generational mistrust, and suffering. CPE’s work is powered by science. Using advanced analytics to diagnose disparities in policing, the organization’s work sheds light on police behavior and answers questions that police and communities have asked for years about how to build a healthy relationship. Using CPE’s analyses and recommendations, partners can chart a path toward better practices that are consistent with their values.
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The project’s overall goals were (1) to identify any racial disparities in police interactions with community members; (2) if disparities are observed, to determine whether they were caused by inequitable practices on the part of officers or could be explained by other factors; (3) to identify any attitudinal dispositions on the part of officers or departmental contexts that can perpetuate inequities or make it probable that inequities, if not already present, will manifest in the future; and (4) to provide recommendations for reducing any identified disparities.

Using data contributed by BART PD to CPE’s National Justice Database (NJD), we examined the incidences of stops involving major racial groups during the six-year period, adjusting for the relative population size of each group. We also administered a climate survey to assess officer attitudes and beliefs that could enhance or decrease vulnerability to expressing bias. Finally, we conducted a review of BART PD’s policy manual, focusing on policies related to (1) collection of data regarding police interactions with members of the public; (2) equitable policing practices; and (3) use of force.

It should be noted that BART PD has significantly advanced its data collection and management practices since data were collected for this report. We commend BART PD on these efforts, and expect that future analysis will be enriched by these advancements.

The NJD analytic framework aims to distinguish among five broad types of explanations for racial disparities in policing, all of which are likely to play some role in producing racial disparities in BART PD, as elsewhere. These explanations are elaborated upon in the report’s Introduction section below and include: (1) the characteristics or behaviors of individual community members; (2) neighborhood and community conditions and characteristics; (3) the characteristics or behaviors of individual officers; (4) departmental culture, policy, or law; and (5) relationships between the communities and the police.

While the whole story likely incorporates elements of each explanation, the comprehensive NJD framework analyzes the role that community- and police-level factors may contribute to racial disparities. By combining police administrative data with population data (e.g., income, racial demographics, neighborhood crime rates) and a police department climate survey, we can examine the role that these explanations play in the disparities that both police departments and communities want to reduce.

BART PD is the first transit police department to participate in the NJD. CPE is excited to partner with BART PD and commends the department for paving the way for transit authority participants. Transit departments are unique (compared to municipal law enforcement agencies) and, as such, we adapted the NJD analytic plan to account for the mobile population BART PD officers interact with.

Summary of Findings

Overall, the analysis revealed reasons for optimism along with areas for improvement in advancing the goal of equitable policing. The climate survey revealed generally positive officer perceptions of organizational distributive justice within BART PD regarding the fairness of departmental procedures. Moreover, officers reported feeling that they are treated with dignity and respect by their supervisors. Additionally, they expressed egalitarian attitudes and a strong commitment to community-oriented and procedurally just policing.

The analysis also revealed areas that warrant additional attention. The stop and use-of-force data shared with us suggest that residents experience BART PD policing
in disparate ways by race: Compared to Whites and all other non-Black racial groups, Black persons are more likely to be stopped in their cars or in the BART system. Members of Black communities also experience more incidents involving force. Although the data and analytical limitations of the present study do not allow us to identify the causes of differential rates of contact observed in BART PD stops and use of force, they offer reasons for further investigation.

The analysis also found 322 incidents involving display or pointing of a firearm by BART PD over the six-year period, and revealed that the majority of persons who experienced this type of force were Black. Our analysis does not determine whether the use of force in any given situation is appropriate or justified. However, the display or pointing of firearms is an area that potentially warrants additional departmental attention to ensure BART PD firearm policy and practice reflect the department's commitment to public safety.

Vehicle and Rider Stops
Among other important findings, our analysis of BART PD vehicle and rider stops revealed the following:

- **Per capita, there were twice as many vehicle stops of Black as of White persons.** BART PD conducted 1.1 stops of Black persons per 1,000 Black residents, compared to a rate of 0.46 per 1,000 White residents.

- **Nearly half of riders stopped by BART PD (49%) were Black,** compared to their 8.7% share of the estimated racial population served by BART. At most stations in the BART system, a majority or plurality of riders stopped by BART PD were Black.

- **Black persons experienced BART PD rider stops at a rate eight times higher than the stop rate for White riders.** This finding holds true when we take into account the crime rate, poverty rate, and racial demographics of the area surrounding each BART station. Although the analysis cannot affirmatively identify the causes of this disparity, we also found:
  - There were more stops made in locations with higher poverty rates.
  - The Black–White racial disparity existed at all neighborhood income levels, but it was larger in wealthier neighborhoods than in those with lower incomes.

- **A sizable percentage of records were missing racial data for rider stops** for the initial five years of the study period. Data collection was significantly improved in 2017, when only 4% of rider stop records were missing racial data.

- **At five BART stations, officers did not record racial data in more than one third of their stops:** Pleasant Hill/Contra Costa Centre (49% of stop records were missing racial data), South San Francisco (48%), Union City (41%), Millbrae (40%), and Dublin/Pleasanton (37%).

- At most stations, fewer than 20% of stops were missing racial data.

Use of Force
Among other important findings, our analysis of BART PD use-of-force incidents revealed the following:

- **Overall, 63% of persons who experienced force were Black** (compared to their 8.7% share of the population served by BART).

- **Black persons were 13 times more likely to experience BART PD use of force than their White**
counterparts were. This increases to 15 times more likely when we take into account the crime rate, poverty rate, and racial demographics of the area surrounding each BART station. While this analysis does not account for all potential factors, these findings suggest the disparity might be mitigable by changes to BART PD policy and practice.

- Other than Black persons, all other racial groups were the subjects of force at per capita rates lower than that of White persons.

- “Hands-on” force was the type most commonly recorded in BART PD use-of-force incidents. This includes physical restraint, which was used in 66% of recorded force incidents, and physical striking, which was used in 3.4%.

- Pointing or display of a firearm was the second most common force type recorded in BART PD use-of-force incidents. Over the six-year period, 23% of all use-of-force incidents recorded by BART PD involved a firearm (323 incidents).

- Frequency of firearm incidents varied across racial groups and geographic locations.

  - Overall, 63% of incidents of pointing or display of a firearm involved persons who were Black. White persons were the subjects of the next largest proportion of firearm incidents (17%).

  - Incidents involving a firearm were concentrated in and around Oakland and other parts of the East Bay. Across the observation period, 113 firearm incidents (35% of the total) were logged in Zone 1 (Oakland); 59 firearm incidents (18% of the total) were logged in Zone 3 (South Bay). No other zone recorded more than 35 firearm incidents across the observation period.

Although the data show racial disparities in BART PD interactions with community members during the study period, these disparities do not necessarily indicate that police officers have engaged in biased or discriminatory behavior. The NJD analytic plan, described in the introduction to the full report, suggests that disparities may be explained by community characteristics, individual characteristics, individual officer behavior, and department policies and culture, as well as by the relationship between the police and the community. Accordingly, racial differences in policing data should be contextualized with other contributing factors.

**Officer Climate Survey**

To gain better insight into social attitudes, beliefs, and morale, which can serve as risk factors for inequitable officer behavior in the field, we conducted a climate survey of BART PD officers. The survey focused on attitudes and beliefs that enhance or decrease vulnerability to expressing bias and relate to (1) inequitable and burdensome policing; (2) community trust; and (3) workplace well-being and optimal job performance.

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3 One use-of-force incident, recorded during the 2016–2017 period, reflects two discharges of a firearm.

4 Per email from BART PD personnel, September 9, 2019, there were five OIS from 2009 through 2017, as well as two non-OIS firearm discharges. Records of these incidents were not included in the data provided and are not included in our analysis.
Because only 40 persons responded to the survey, and a majority of them were in supervisory roles, the results of the survey may not be generalizable to officers in the BART PD as a whole. Nonetheless, the climate survey revealed a number of departmental strengths.

- **Respondents expressed little explicit racial bias** and egalitarian attitudes toward various social groups.

- **Respondents expressed a deep commitment to procedural justice** and were supportive of community-oriented policing.

The survey also suggests police–community relations is an area with opportunity for improvement.

- **Survey respondents expressed low levels of trust of the community** and believed that the community in general, and Black persons in particular, may stereotype police officers and have negative attitudes toward police.

- **Structured efforts to improve the police–community relationship might be warranted**, and the current community programs administered by BART PD (e.g., Barbershop Forum, Coffee with a Cop) could be evaluated to assess how they might be enhanced.
In this report, we advance six specific recommendations. While not an exhaustive list of possible solutions to the issues raised in this report, we recommend BART PD adopt these actionable steps to enhance the department’s commitment to fair and equitable policing. We additionally recommend BART PD draw on existing departmental strengths, including those revealed in the climate survey, when implementing these recommendations.

1. Implement key changes to data collection efforts, specifically with respect to stops, searches, and use-of-force incidents, as follows:
   
a. Update the BART PD policy manual by adopting a written policy requiring officers to collect data on all stops in accordance with the Racial and Identity Profiling Act of 2015 (RIPA).
   
b. Adopt a policy requiring supervisors to review stop and use-of-force records in a timely fashion to ensure that their supervisees are completing them properly.
   
c. Ensure that officers are trained to record racial data for every stop and use-of-force incident. Officers should not ask persons for racial self-identification, but should record their perception of the person’s racial identity. If they are not sure, they should record “Unknown.”
   
d. Record every search, and include in these records the reason for the search and whether contraband was found. Yield rate data can be calculated based on categorical lists of contraband or a more detailed accounting that allows for specific weapons or drugs to be identified. These categories are listed in the RIPA stop-data regulations and are also required to be reported under BART PD Policy 322.5.
   
e. Record the nature of the offense(s) when a person is arrested at a vehicle or rider stop or after a use-of-force incident.
   
f. In use-of-force incidents involving firearms, record whether the weapon was discharged and whether any person was injured. Officer-involved shootings should be included in use-of-force data sets.
   
g. Implement the recommendations for RIPA compliance outlined in the COPS Stop Data Guidebook: Pilot Implementation Reports, which was drafted by CPE and the Policing Project.

2. Adopt a policy requiring officers to write a brief narrative explanation of the reason for each stop they conduct and submit the same to their supervisors at the end of each shift. While RIPA already requires that this information be collected and submitted to the California Attorney General, we recommend that BART PD adopt a policy requiring that it also be submitted to supervisors on a daily basis for review. We further recommend that BART PD adopt a policy requiring supervisors to review these reports in a timely manner to ensure that stops are supported by reasonable suspicion and consistent with BART PD policy and applicable law.

3. Monitor the locations and times of fare enforcement operations—which represent a large majority of BART PD’s activities—to ensure efficient and equitable deployment.

4. Revise the BART PD policy on drawing/deploying firearms (Policy 300.3.5) to clarify when an officer may draw a firearm or point a firearm at a member of the public, and about the role of bystander safety in the determination of whether to draw, point, or discharge a firearm. We recommend that BART PD adopt a policy stating that officers may only draw or display their firearms if they reasonably believe that there is a substantial risk that the situation may escalate to the point where deadly force may be justified.

5. Redouble efforts to build mutual trust and open productive channels of communication between BART PD and the community. The climate survey data show that some officers distrust the community and believe that community members, especially members of Black communities, have a negative attitude toward police. We recommend BART PD explore the underlying causes of distrust for both officers and community members. This could include hosting open dialogues (e.g., listening sessions) or administering a community survey. Once the core issues are brought to light, BART PD must implement responsive change in a way that is transparent to both officers and community members.

6. Work in collaboration with the BART Office of the Independent Police Auditor and the BART Police Citizen Review Board to implement the recommendations made in this report.
At the same time, many community members perceive law enforcement activities to be targeted toward—and biased against—non-White people. Communities wracked by mass incarceration and highly publicized policing incidents have called for greater transparency and accountability on the part of the police. And research shows that positive police–community relationships are crucial for safer communities: Citizens are more likely to engage as witnesses and as partners in crime reduction if they believe in the legitimacy of police as equitable and impartial agents of the law.

Increasingly, then, courageous and forward-looking law enforcement executives are seeking hard metrics on current practices as a way to identify effective policy reforms aimed at reducing bias and improving police–community relations. They are seeking out partnerships with prominent researchers to solve this riddle and to lead policing in the nation with respect to civil rights and public accountability. Toward this end, the Bay Area Rapid Transit Police Department (BART PD) partnered with the Center for Policing Equity (CPE), a 501c(3) research and action think tank dedicated to advancing equity by way of rigorous scientific research. This report describes the data analysis resulting from this partnership.

CPE aims to address the needs of both law enforcement and communities by building the National Justice Database (NJD) to better understand and improve policing practices. Through the NJD, we collect policing data to measure fairness and improve policing equity, and make these findings transparent to law enforcement and to communities. The NJD offers a rigorous analytic framework to make sense of policing data in order to identify and understand the consequences of policing activities and the sources of racial disparity.

Data collection and analysis are essential tools that can reveal empirical realities and illuminate options that might advance equity in public safety. Too often, law enforcement data have been captured with an eye toward accounting or litigation, and the data have not been leveraged to optimize performance. But just as CompStat ushered in a new era where police could be accountable for crime rates, data on racial disparities—and the inferential analyses we pair with them here—can be used to identify opportunities to improve public trust and safety. Consequently, together with specific policies designed to address opportunities for improvement revealed by careful analysis, better data accountability is a vital part of the path forward.

This report is designed to provide BART PD with a valuable resource toward that end. It is intended as a preliminary guide to illuminate options that might advance equity in public safety and provide straightforward statistical answers to some of the most pressing questions facing this department and other law enforcement agencies. In the sections that follow, we present empirical documentation of the degree of racial disparities in BART PD’s policing practices, as well as analysis and interpretation of the factors that might contribute to such disparities. While the

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6 In this report, “racial group” refers to groups described in BART PD records by racial category (e.g., Black, Asian). When our analysis compares BART PD policing statistics to U.S. Census Bureau data, these identities are mapped onto the following census categories: Hispanic (referred to as Latinx in this report), non-Latinx Asian, non-Latinx Black, non-Latinx White, and non-Latinx Other Race. The census considers Hispanic as an ethnicity that encompasses all racial backgrounds. The description of Asian, Black, Latinx, White, and Other Race as “racial” designations does not represent a claim that any person belongs to a monolithic “race,” or indeed that the category of “race” has objective meaning independent of its social context.
results are mixed, our analysis reveals encouraging findings and heartening trends. It also flags questions and issues that warrant further investigation and reform.

Our purpose is to demonstrate what can be learned when policing data are analyzed by qualified, independent researchers. This report, like those produced for other NJD participants, aims to offer law enforcement officials a road map toward greater transparency and accountability in police practices so they can transform agencies and adopt more just and equitable means of promoting public safety.

National Justice Database Analytic Framework
The NJD analytic framework aims to distinguish among five broad types of explanations for racial disparities in policing, all of which are likely to play some role in producing racial disparities in the Bay Area, as elsewhere:

1. **Individual characteristics or behaviors.** Individual conditions or behaviors—such as mental health challenges, homelessness, or participation in criminal activity—can lead to disparate contact with law enforcement.

2. **Community characteristics.** Characteristics such as high crime rates or poverty may draw increased police attention to certain communities.

3. **Officer characteristics or behaviors.** Some officers may view members of certain communities with a higher level of suspicion, resulting in a disproportionate rate of stops or a more punitive disposition after a stop for these individuals.

4. **Police department organizational culture or policy.** Police departments may have established practices or policies that increase law enforcement contact with some members of the population more than others. For example, officers may be deployed to patrol some communities more frequently than others. Moreover, department culture and policy can be affected by local ordinances, outside of a police department’s purview, that force officers to sanction certain segments of the population more than others. Examples of such ordinances are those related to closing public parks at night and other forms of curfew.

5. **Relationships between communities and police.** Mistrust of law enforcement can reduce community members’ willingness to cooperate with police. Similarly, a sense that communities do not trust or respect police may cause officers to feel unsafe or defensive in some neighborhoods.

While the whole story likely incorporates elements of each of these explanations, the comprehensive NJD framework analyzes the role that community-level and police-level factors (with a specific focus on the first three explanations above) may contribute to racial disparities. By combining police administrative data with population data (e.g., income, racial demographics, neighborhood crime rates) and a police department climate survey, we can examine the role that these explanations play in the disparities that both police departments and communities want to reduce.

**DEPARTMENTAL DATA**
With regard to police administrative and population data, the NJD analytic framework leverages data that departments collect on officer–community interactions, such as stops and incidences of use of force. These are then integrated with American Community Survey data from the U.S. Census Bureau and neighborhood serious crime rates reported by departments and coded for Part I crimes according to the Uniform Crime Reporting system of the U.S. Federal Bureau of Investigation. While no police department in the country currently collects all the data recommended by the NJD analytic framework, BART PD has been forthcoming in response to our requests for data-sharing and information.

We commend BART PD for their thorough data collection procedures, and recent updates to ensure the inclusion of officer involved shootings in their use-of-force records.

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7 Part 1 crimes are serious crimes—specifically a category of eight offenses used in the FBI’s Uniform Crime Reporting Statistics: murder and non-negligent homicide, rape (legacy and revised), robbery, aggravated assault, burglary, motor vehicle theft, larceny theft, and arson.
system. We encourage BART PD to continue its collection of stop and search data, and to include information on whether these stops lead to criminal charges. This additional information will allow more powerful and comprehensive analysis to be conducted on a more comprehensive dataset that could identify trends and policy effects across multiple years of BART PD practice. Expanded data collection and analysis will also afford a significant opportunity to better understand and foster fairness in policing, which will benefit BART PD as well as the communities it serves.

OFFICER CLIMATE SURVEY DATA

In addition to analyzing police administrative and population data, the NJD analytic framework explores conditions that serve as risk factors for ineffective and unjust policing practices. In line with that goal, we administered a climate survey to officers within BART PD, providing them the opportunity to voluntarily share their perspectives about working within the department as well as their views about the communities they serve and protect. The survey measured dispositions that can:

- increase the risk that officers will engage in inequitable and burdensome policing practices;

- increase the likelihood that officers will be resistant to policies and procedures that enhance community trust; and

- undermine the optimal job performance of officers.

With these survey findings, BART PD can better assess the types of departmental culture shifts or professional development trainings that may need to be adopted to further the goal of equitable policing.

By leveraging police administrative data, climate survey data, and a review of department policies, the NJD analytic framework produces comprehensive findings regarding a department’s strengths and areas in which improvements are needed. The resulting analysis can be used to steer community engagement, relationship building, and continued departmental reform.

It is important to emphasize that the persuasive power of analytics grows substantially with the length of time a department measures and analyzes important indicators. As a result, we encourage BART PD, its community, and all law enforcement agencies involved in the NJD to treat this analysis as an initial benchmark against which future progress can be measured. With many departments set to receive similar research reports in the coming years, we hope this analytic framework will serve as a road map for police and communities to establish where they are now and to chart a path toward a more just and equitable future.

History of BART PD Involvement in the National Justice Database

BART PD began its relationship with CPE in 2012, when CPE trainers conducted a workshop on masculinity threat in policing. In 2013 and 2014, we worked with BART PD to produce two reports, both entitled Police-Initiated Stops for Fare Evasion in the BART System: Embarcadero, Powell, 12th Street, and Dublin/Pleasanton Stations. (A preliminary report was delivered in June 2013, with an addendum in April 2014.) In November 2015, BART PD began to share data with us as part of the NJD. In 2017–2018, BART PD officers participated in focus groups in the course of our development of the COPS Guidebook, which was published in 2019.

During its work with CPE, BART PD has been led by several different chiefs. Most recently, in May 2019, Interim Chief Ed Alvarez took over leadership of the department from former Chief Carlos Rojas, who retired in April 2019. Chief Alvarez was promoted from Interim Chief to Chief in January 2020.

BART PD implemented a number of trainings during the study period related to enhancing equity in policing, including curriculum on implicit bias, procedural justice, crisis intervention, and de-escalation. Both the Office of Independent Police Auditor and the BART Police Citizen Review Board provide oversight of the department, including through independent investigations of complaints and oversight of internal investigations, as well as by providing recommendations on policy changes and facilitating community outreach. The department has collaborated with these oversight agencies in revising departmental policy, including the creation of policy on interactions with transgender people in 2015 and a revision to the use-of-force policy to require de-escalation in 2017.
In particular, an essential component of the NJD analytic framework is the analysis of geographic and demographic information collected when officers have interactions with individuals. These data include (but are not limited to) the location of each incident and the race and gender characteristics of all officers, suspects, and individuals involved.

With this in mind, departments participating in the NJD are invited to share data as completely as possible. The higher the quality of the data, the more the robust analysis that can be provided to departments. We analyze all data using descriptive statistical methods, and some are additionally analyzed with multilevel regression models. In Section I, we focus on the quantity and quality of the data BART PD provided to us for analysis in this report.

Data Provided by the Department
Table 1 outlines a subset of the data that were requested of and provided by BART PD. This is not a comprehensive list of data petitioned from the department, but it identifies the major pieces of data necessary for holistic assessment. In addition, BART PD allowed us to administer a climate survey to all sworn officers. Of the officers invited to participate, 40 completed the survey.

The datasets we received on BART PD stops were reasonably comprehensive but were subject to several limitations. First, BART PD recording protocols did not clearly distinguish vehicle stops from pedestrian or rider stops. To disambiguate them, we classified stop records that contained vehicle data as vehicle stops; stop records without vehicle data were grouped as pedestrian stops.

Another challenge was that some stops recorded disposition as “field interview,” while a separate dataset recorded “field interviews” with other dispositions. To address this challenge, we reviewed incidents from both datasets to ascertain whether they were duplicates. Upon finding that stops with “field interview” recorded as the disposition were not duplicated in the other dataset, we

Table 1. Data Requested and Received from BART PD

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combined all of these field interviews with all other stops, coding them as vehicle stops if they contained vehicle information, and as rider stops if they did not.

BART PD stop records did not document whether a person was searched, whether the search uncovered contraband, or what kind of contraband was found. The collection and analysis of these data are essential to understanding any observed racial disparities in stop and search rates.

Finally, BART PD recorded 322 incidents that involved the pointing or display of a firearm, and one incident in which a firearm was discharged. The datasets shared with us did not include comprehensive records on officer-involved shootings (OIS) and other firearm discharges by BART PD, and they did not reflect whether anyone was injured or killed. Limited information on firearm discharge (whether OIS or other discharge, such as accidental discharge or shooting an animal) was provided via personal communications between BART PD and CPE. Integration of these data, the racial demographics of the individuals involved, and the geolocations of the incidents is essential for analyzing use-of-force incidents, including any racial or geographic disparities observed in these incidents. In the period since we completed data collection for this report, we have been advised by BART PD that the agency has revised their data collection procedures to ensure that records of OIS and other firearm discharges are now included in use of force data.

With these limitations, we were still able to use descriptive methods to analyze and present data on BART PD stops and use-of-force incidents.

The Data Context
The data provided for this report must be contextualized by the people they represent. It is important to account for the demographics of those who are served by BART PD. Because not all residents of the Bay Area are likely to use the BART, we relied on two sources to estimate the demographics of the population that BART PD officers are likely to encounter: data collected in the 2016 “BART Station Profile Study” on rider entry and exit counts per station and U.S. Census data. (The methodology used to calculate this population benchmark is described in the next subsection.) We estimate that the residential population served by BART comprises approximately 1,662,435 persons, whose racial breakdown is approximately as follows:

- 36% are non-Latinx White (“White”)
- 29% are non-Latinx Asian (“Asian”)
- 25% are Latinx
- 8.7% are non-Latinx Black (“Black”)
- 0.6% are Indigenous Hawaiian or Pacific Islander
- 0.3% are Indigenous American (Native American or Alaska Native)

As of 2017, BART PD employs a diverse force of approximately 189 sworn officers and 99 civilian employees to serve the BART system. The racial breakdown of the 183 sworn officers for whom racial data were available in 2017 is approximately as follows:

- 74 (40%) were White
- 39 (21%) were Black
- 32 (17%) were Asian
- 35 (19%) were Latinx
- 3 (1.6%) were “Other Race”

Methodology for Estimating Benchmark Population at Each BART Station
Given that nearly all persons stopped by BART PD were riders on the transit system or were on or near BART property, we benchmarked data about BART PD pedestrian and vehicle stops against the estimated demographics of the “benchmark population” with which BART PD officers might interact. Any estimate of this population must take into account not only the demographics of the local resident population at the location where the incident occurred, but also the demographics of the population that might be commuting to or through the station from other neighborhoods. For example, the commuter population using a transit station in an affluent downtown business district is unlikely to reflect the demographics of those who live in the immediate neighborhood.

To estimate the population demographics of individuals passing through each station, our analysts developed a customized methodology that uses BART data on the station at which each passenger entered and exited the
BART system. These data are combined with census data for the neighborhoods near each station to estimate the racial demographics of the benchmark population in or near each station, who are thus available for interactions with BART PD officers.

To calculate the demographics of the benchmark population, we used the following approach:

- We assumed that persons who live within a mile of a BART station are the population most likely to enter the BART system there. Studies show that an individual is more likely to utilize public transportation if it is within one-quarter to one-half of a mile of their home.\(^8\) Using data from the 2017 U.S. Census American Community Survey five-year estimate, we estimated the demographics of the population within a one-mile radius of each station. The one-mile radius was chosen in order to include those who might walk, bike, drive, or use a bus to access a BART station.

- If two BART stations are less than a mile apart, we assumed that residents use the BART station that is closest to them.

- We estimated the racial demographics of the disembarking population at each station based on the demographics of the neighborhood (within a one-mile radius) where they had entered the BART system. Thus, for example, if 2% of people who exit at Embarcadero entered at Richmond station, we calculated that 2% of persons exiting Embarcadero reflects the racial demographics of the census tracts within one mile of Richmond station.

This benchmarking methodology is subject to several limitations, including:

- The American Community Survey demographics relied upon in this report do not include the homeless population. Homeless individuals often use public transportation and seek shelter in stations.

Also, Black people are more likely than Whites to experience homelessness, so our benchmark may underestimate the number of Black persons using the BART system.\(^9\)

- Persons who travel more than one mile (by foot, bike, car, bus, or other means) to access a BART station are not accounted for in our benchmarking methodology.

- Our methodology does not account for persons who pass through a station without entering or exiting the train.

Two other, more general caveats about benchmarking police data should also be kept in mind when evaluating the analysis presented in this report. The first involves limits on drawing conclusions based on local populations. Specifically, for BART PD, as for any other police department, it cannot be assumed that persons with whom the department’s officers interact are necessarily residents of the neighborhood immediately surrounding the station at which they entered or exited the BART system. Some riders may walk, cycle, drive, or ride a bus to enter a BART station that is more than a mile from their place of residence. And some riders who use BART may be visitors from outside the Bay Area, or even outside the state or country. Furthermore, to the extent that persons experience a stop or use-of-force incident while aboard a train or while at a station waiting to change trains, census demographics of the location of the incident may not offer information about the demographics of the site of the person’s entry or exit from the BART system.

It is impossible to calculate precisely what the racial distribution of police encounters would look like if they precisely reflected the demographics of the persons with whom BART PD officers interact. Our estimate of rider demographics, based on station-by-station demographic estimates, represent the most precise possible effort to estimate the population that BART PD officers are most likely to encounter.

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\(^8\) Cervero and Duncan (2002); Dill (2003); Murray, Davis, Stimson, and Ferreira (1998).

\(^9\) North and Smith (1994); Moses (2019).
The second caveat is that disparities do not necessarily indicate that police officers have engaged in biased or discriminatory behavior. We cannot know, for example, the racial distribution of drivers or riders who engage in behaviors that might result in a stop or in use of force. There is also no reason to suspect that racial disparities observed in law enforcement are unrelated to the racial disparities in education, housing, employment, healthcare, and other socioeconomic indicators that characterize American society are outside the control of BART PD. Accordingly, racial differences in policing data must be contextualized with other contributing factors, including but not limited to those modeled in the regression analysis presented in Sections IIB and III of this report.
Because BART PD is a transportation safety department, its stop patterns differ from those of a typical municipal police department. We are advised by BART PD that 77% of its officers’ discretionary enforcement activities are directed at fare enforcement, with the balance of their activities designed to prevent and address other kinds of lawbreaking that may occur on or near BART PD vehicles, train lines, stations, or parking lots. Vehicle stops for BART PD officers typically involve citing drivers for moving violations on station access roads, bus zones, and parking lots. As a result, BART PD records many more pedestrian stops than vehicle stops.

Unfortunately, as discussed above, BART PD recording protocols did not clearly distinguish vehicle stops from pedestrian stops. To disambiguate them, we classified stop records that indicated a vehicle-related reason for the stop (e.g., “basic speed law,” “DUI,” “license plates”) as vehicle stops. Stop records—including those categorized as pedestrian stops or field interviews—were otherwise grouped as rider stops. Since many people stopped by BART PD are not actually pedestrians on foot but are riding BART vehicles or waiting for them, this report describes these non-vehicle stops as “rider stops.”

According to BART PD Policy 420.6, field interviews are stops based on reasonable suspicion. BART PD policy does not mandate that officers make records of field interviews that they conduct. Rather, Policy 420.6 states that field interviews “may be documented to provide other officers, investigators, and crime analysts with information concerning suspicious persons and situations” (emphasis added). As a result, some field interviews may have gone unreessed, and BART PD records of such interactions may be incomplete.

For the purposes of this report, a stop is defined as a single event in which an individual is stopped by one or more BART PD officers, regardless of the number of officers or other individuals involved in the stop. This section presents the frequency of vehicle and rider stops recorded by BART PD, along with their racial distribution. We also examine the population-adjusted, or per capita, number of stops of drivers from each of the racial groups most frequently stopped by BART PD. Drivers identified by officers as being Black, Hispanic (Latinx), White, or Asian (includes persons identified by officers as Cambodian, Chinese, Filipino, Guamanian, Hawaiian, Korean, Laotian, Pacific Islander, Samoan, Vietnamese, “Other Asian or East Indian,” and “Other Asian”) accounted for about three quarters of all BART PD stops during this time period. Drivers who were identified by officers as “Other” accounted for 18% of all stops; 5.3% of all vehicle stops were missing racial data.

In addition to descriptive statistics, we present findings from multilevel regression models designed to assess whether observed racial disparities in BART rider stops could be explained by neighborhood characteristics such as poverty, crime rates, or racial demographics.

Section IIA: BART PD Vehicle Stops and Racial Disparities

In this section, we present findings related to BART PD vehicle stops. As noted above, stop records that indicated a vehicle-related reason for the stop—for example, “basic speed law,” “DUI,” or “license plates”—were counted as vehicle stops. A stop may involve one or more BART PD officers.

10 Per telephone conversation with BART PD personnel, November 13, 2019.
SUMMARY OF FINDINGS
We are advised by BART PD that most of the department’s vehicle stops occur when a private vehicle drives onto roadways that are reserved for BART vehicles.11 The size and direction of racial disparities observed in BART PD vehicle stops varied widely among BART stations, but overall they were smaller than those we found in rider stops or use-of-force incidents. On a per capita basis, Black drivers were twice as likely to be stopped by BART PD as their White counterparts.

BART PD did not collect or share data about whether the persons it stopped were searched, and whether those searches revealed contraband. This prevented assessment of whether racial disparities in searches during vehicle and rider stops might reflect inequitable treatment.

Figure 1, above, shows the number of vehicle stops recorded by BART PD officers during each quarter of the six-year observation period.

In total, BART PD officers recorded 5,651 vehicle stops during the observation period, ranging from a quarterly low of 22 vehicles stopped in January–March of 2016 to a high of 579 stops recorded in April–June of 2016.

Figure 2. Number of Vehicle Stops by Race and Year, 2012–2017

11 Per telephone conversation with BART PD personnel, November 13, 2019.
Figure 3. Number of Vehicle Stops by Race and BART Station, 2012–2017
The sharp dip in vehicle stops observed in the first quarter of 2016 may reflect incomplete recording of vehicle stops as BART PD transitioned to a new stop-recording system. For both vehicle and rider stops, field interview data were missing for January 1 through March 14, 2016.

As noted earlier, about 5.3% of vehicle stops recorded by BART PD were missing racial data. Figure 2, above, shows that of the vehicle stops that contained data on the race of the driver, no racial group made up a clear majority. Of stops for which racial data were recorded, a plurality of stopped drivers were White (30%), followed by Other (19%), Black (17%), Latinx (17%), and Asian (17%).

The racial distribution of BART PD vehicle stops varied considerably by station (Figure 3). For example:

- Persons identified as White constituted the largest proportion of drivers stopped at the following stations: Ashby (71% of stops were of White persons), Rockridge (59%), Walnut Creek (59%), Pleasant Hill/Contra Costa Centre (58%), Lafayette (57%), El Cerrito Plaza (52%), North Berkeley (49%), Concord (42%), MacArthur (40%), North Concord-Martinez (40%), West Oakland (39%), Castro Valley (35%), Dublin/Pleasanton (34%), Millbrae (32%), El Cerrito del Norte (30%), and Fruitvale (27%).

- Persons identified as Asian constituted the largest proportion of drivers stopped at Warm Springs/South Fremont (50%), Dale City (37%) Colma (30%), and South San Francisco (29%).

- Persons identified as Latinx constituted the largest proportion of drivers stopped at Richmond (39%), San Bruno (32%), South Hayward (32%), and Hayward (28%).

- Persons identified as Black constituted the largest proportion of drivers stopped at Coliseum/Oakland Airport (51%), Pittsburg/Bay Point (42%), Bay Fair (39%), and San Leandro (22%).

- Persons identified as “Other Race” constituted the largest proportion of drivers stopped at Orinda (37%), Union City (36%), Dublin/Pleasanton (34%), and Fremont (30%).

In nearly every age group, White persons constituted the largest number of drivers stopped. The one exception was in the age group that was stopped least frequently—ages 16 to 21—where Latinx drivers were the most frequently stopped (See Figure 4 below).

Figure 5, on the next page, shows shows the rate of vehicle stops per the benchmark population of each race passing through BART stations. (See the explanation of population benchmarking methodology above in Section I.)

Across the six-year observation period, BART PD conducted 1.1 stops of Black persons per 1,000 Black residents, compared to 0.46, 0.36, and 0.31 stops per 1,000 White, Asian, and Other Race, respectively.

**Figure 4. Number of Vehicle Stops by Race and Age, 2012–2017**
Latinx, and Asian residents, respectively. Proportionate to population, a Black driver was more than twice as likely as a White driver to experience a BART PD vehicle stop.

Figure 6, below, shows the number of BART PD stops experienced by each racial group as a share of its population in each year of the observation period.

In each of the six years, for all drivers other than Black drivers, the number of vehicle stops per capita was less than 1.0 per 1,000 residents. Black drivers were stopped at a rate that ranged from 0.75 (in 2013) to 1.3 (in 2015). The Black-to-White disparity in per capita vehicle stop rates decreased during the observation period, however.

In 2012, Black drivers were stopped more than four times more frequently per capita than White drivers were (1.2 stops per 1,000 Black drivers, compared to 0.25 for White drivers); in 2017, Black drivers were stopped about twice as frequently as White drivers (1.1 stops per 1,000 Black drivers, compared to 0.52 for White drivers).

Asian and Latinx drivers were less frequently stopped, per capita, than White drivers were, except in 2012, when the per capita stop rate for Latinx drivers was slightly higher than for White drivers.

Across the observation period, from 2012 through 2017, the likelihood that a stopped driver would receive a

Figure 5. Rate of Vehicle Stops per 1,000 Residents by Race, 2012–2017

Figure 6. Rate of Vehicle Stops per 1,000 Residents by Race and Year, 2012–2017
warning rather than a citation increased (Figure 7). In 2012, 96% of stopped drivers received a citation while only 4.4% received a warning. Over time, the percentage of citations decreased and the percentage of warnings increased; by 2016, 86% of drivers received a warning while only 13% received a citation. The following year was only slightly different: In 2017, 78% of stopped drivers received a warning, while 20% received a citation.

BART PD shared no demographic data on arrests at vehicle stops prior to 2016, so arrests from 2012–2015 are not included in Figure 7. In 2016, 15 drivers (1.0%) were arrested at vehicle stops. In 2017, 17 drivers (1.6%) were arrested at vehicle stops.

### Section IIB: BART PD Rider Stops and Racial Disparities

As described above, stop or field interview records that did not indicate a vehicle-related stop reason were counted as rider stops. We are advised by BART PD that most of its stops designated as pedestrian stops and non-vehicle field interviews involved persons who were in BART trains, in BART stations, or on BART property (such as sidewalks or parking lots). We are further advised by BART PD that a large majority of its pedestrian stops are aimed at fare enforcement.12 Because many people stopped by BART PD are not actually pedestrians on foot but are riding BART vehicles or waiting for them, this report describes persons stopped by BART PD as “riders.”

### SUMMARY OF FINDINGS

Racial disparities observed in BART PD rider stops were much larger than those observed in vehicle stops, and the disparities were quite consistent across locations in the BART system. At most BART stations, Black persons were the racial group most frequently stopped by BART PD. Per capita, BART riders who were Black were more than eight times as likely to be stopped by BART PD officers than were their White counterparts. Black persons make up less than 9% of the resident population, but nearly half of riders stopped by BART PD (49%) were Black. In three of the six years observed (2012, 2013, and 2014), most riders stopped by BART PD officers were Black.

Racial data collection does not appear to have been consistent across the department or over time. Between 2012 and 2016, 16%–21% of rider stop records were missing racial data; in 2017, only 4% of rider stop records were missing racial data. Across the six years of the study, however, at five BART stations—Pleasant Hill/Contra Costa Centre, South San Francisco, Union City, Millbrae, and Dublin/Pleasanton—more than 35% of stop records were missing racial data.

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12 Per telephone conversation with BART PD personnel, November 13, 2019.
To evaluate whether the observed racial disparities in rider stops might be explained by variations in local crime rates, poverty, or neighborhood demographics, we conducted statistical analysis that controlled for these factors. In short, we found that crime, poverty, and neighborhood demographics contribute to, but do not fully explain, the observed racial disparity in rider stops. After these factors were taken into account, on a per capita basis, Black riders were 8.0 times more likely than their counterparts to be stopped by a BART PD officer. To the extent that the observed racial disparities are not explained by crime, poverty, or local demographics, these disparities may be (but are not necessarily) attributable to factors within the control of BART PD.

The number of riders stopped by BART PD increased gradually across the six-year observation period (Figure 8). The quarterly frequency of rider stops conducted by BART PD officers varied widely over time, with peaks in the third quarter of 2014 (3,555 stops) and the third quarter of 2017 (4,157 stops).

The lowest number of stops was recorded in the first quarter of 2016 (2,021 stops). As in the vehicle stop data (see Figure 1, above), the sharp dip in rider stops observed in the first quarter of 2016 may reflect incomplete recording as BART PD transitioned to a new stop-recording system. For both vehicle and rider stops, field interview data were missing for January 1–March 14, 2016.

Figure 8. Number of Rider Stops per Quarter, 2012–2017

Figure 9. Number of Rider Stops by Race and Year, 2012–2017
Although Black persons make up 8.7% of the resident population surrounding BART stations, nearly half of riders who were stopped by BART PD officers were Black (See Figure 9 on the previous page). Of 58,248 stops for which BART PD officers collected racial data, 49% were of Black riders. In 2012, 2013, and 2014, among stops for which racial data were recorded, Black persons made up more than one half of persons stopped by BART PD officers.

The next most frequently stopped group, White riders, made up only 26% of rider stops. Latinx riders accounted for 13% of stops, riders identified as “Other” race accounted for 8.1%, and riders identified as Asian made up 4.5% of BART stops. Although the number of stops increased somewhat over time, the racial distribution of the stops was fairly consistent across the observation period.

Figure 10 presents the number of rider stops of each racial group per 1,000 residents in the benchmark population across the six-year observation period.

The per capita rate at which Black riders were stopped was eight times as high as for any non-Black group. Across the six-year observation period, BART PD officers made about 35 stops of Black riders per 1,000 Black residents, compared to 4.4 stops of White riders per 1,000 White residents. Latinx and Asian riders were
Figure 12. Number of Rider Stops by Race and BART Station, 2012–2017
Figure 13. Percentage of Rider Stops Missing Racial Data by Station, 2012–2017

<table>
<thead>
<tr>
<th>Location of Rider Stop</th>
<th># of Rider Stops</th>
<th>% of Rider Stops Missing Racial Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant Hill/Contra Costa Centre (PHIL)</td>
<td>666</td>
<td>48.51%</td>
</tr>
<tr>
<td>South San Francisco (SSAN)</td>
<td>381</td>
<td>47.98%</td>
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<tr>
<td>Union City (UCTY)</td>
<td>594</td>
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<td>Millbrae (MLBR)</td>
<td>586</td>
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</tr>
<tr>
<td>Dublin/Pleasanton (DUBL)</td>
<td>593</td>
<td>37.09%</td>
</tr>
<tr>
<td>Orinda (ORIN)</td>
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<td>Lafayette (LAFY)</td>
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<td>28.20%</td>
</tr>
<tr>
<td>North Concord/Martinez (NCON)</td>
<td>106</td>
<td>26.37%</td>
</tr>
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<td>337</td>
<td>24.82%</td>
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<tr>
<td>Daly City (DALY)</td>
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<tr>
<td>Castro Valley (CAST)</td>
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<tr>
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<td>10.84%</td>
</tr>
<tr>
<td>MacArthur (MCAR)</td>
<td>407</td>
<td>19.78%</td>
</tr>
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<td>Bay Fair (BAYF)</td>
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<td>San Leandro (SANL)</td>
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<td>El Cerrito Plaza (PLZA)</td>
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<td>407</td>
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</tr>
<tr>
<td>Ashby (ASHB)</td>
<td>155</td>
<td>8.94%</td>
</tr>
<tr>
<td>Embarcadero (EMBR)</td>
<td>155</td>
<td>8.94%</td>
</tr>
<tr>
<td>Montgomery St. (MONT)</td>
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<td>8.94%</td>
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<tr>
<td>Balboa Park (BALB)</td>
<td>155</td>
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</tr>
<tr>
<td>Civic Center/UN Plaza (CIVC)</td>
<td>155</td>
<td>8.94%</td>
</tr>
<tr>
<td>16th St. Mission (16TH)</td>
<td>155</td>
<td>8.94%</td>
</tr>
<tr>
<td>Downtown Berkeley (DBRK)</td>
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<tr>
<td>Warm Springs/South Fremont (WARM)</td>
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</tr>
<tr>
<td>24th St. Mission (24TH)</td>
<td>155</td>
<td>8.94%</td>
</tr>
<tr>
<td>San Francisco Int'l Airport (SFIA)</td>
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<td>8.94%</td>
</tr>
<tr>
<td>19th St. Oakland (19TH)</td>
<td>155</td>
<td>8.94%</td>
</tr>
</tbody>
</table>
stopped at lower per capita rates than their White counterparts (3.2 and 0.94, respectively).

A marked Black–White disparity in per capita stop rates was observed in every year for which data were collected. In 2016—the year with the lowest Black–White disparity in rider stops—the per capita stop rate for Black riders was 6.5 times higher than for White riders (28 stops of Black riders per 1,000 Black population, compared to 4.2 stops of White riders per 1,000 White population). In 2013, the per capita stop rate was 9.1 times higher for Black riders than for their White counterparts (33 and 3.6 rider stops per 1,000 residents, respectively).

As shown in Figure 12, at the majority of BART stations, Black riders were stopped more frequently than any other group. At each of the three stations that reported the largest number of rider stops—Powell Street, Civic Center/UN Plaza, and Coliseum/Oakland Airport—the majority of persons stopped were Black (51%, 43%, and 74%, respectively).

At nearly every station, White riders made up the second largest group of riders stopped by BART PD officers, followed by Latinx riders, followed by riders identified as Other or Asian.

In every year except 2017, 16%–21% of stop records we received from BART PD were missing racial data;
in 2017, by contrast, only 4% of rider stop records were missing racial data. This suggests that documentation of the racial ascription of stopped riders may have improved in 2017. Continued collection and analysis of data will allow for assessment of whether this improvement in data collection practices has been sustained over time. Figure 13, on page 24, shows the percentage of logged rider stops at each station that were missing racial data across the observation period.

Recording practices for racial data about rider stops appear inconsistent across the department. At most stations, fewer than 20% of stops were missing racial data. But at five BART stations, officers failed to record data in more than one third of stops: Pleasant Hill/Contra Costa Centre (49% of stop records were missing racial data), South San Francisco (48%), Union City (41%), Millbrae (40%), and Dublin/Pleasanton (37%).

As shown in Figure 14, in every age group, Black persons constituted the largest proportion of riders stopped by BART PD. This was especially acute among 16- to 21-year-old riders, among whom the number of Black persons stopped was more than three times the number of Latinx persons of the same age, and nearly four times the number of White persons of the same age.

From 2012 through 2014, a large majority of stops recorded by BART PD officers resulted in the issuance of a citation; relatively few resulted in a warning. The proportion of stops resulting in a warning increased in every year of the observation period, from 1.8% in 2012 to 38% in 2017. In 2016, 5.5% of rider stops resulted in arrests; in 2017, 11% of rider stops resulted in arrests (Figure 15).

MULTILEVEL REGRESSION ANALYSIS

To better understand factors that might contribute to the observed Black–White disparity in BART rider stops, we turned to multilevel regression analysis. We used this technique to explore whether factors other than subject race might be statistically associated with the observed disparities. For example, higher crime rates in neighborhoods with larger shares of Black residents might explain, at least in part, the disproportionately high rate of Black encounters with the police.

The statistical analysis we conducted determines whether the following factors may explain why Black persons are overrepresented, relative to population, in rider stops: (1) the race of individual riders; (2) neighborhood demographics surrounding a BART station; (3) poverty rates surrounding a BART station; and (4) local crime rates surrounding a BART station. Our statistical analysis calculates whether, alone or in combination, these factors may contribute either to the overall number of stops at a BART station, or to the Black–White racial disparity observed at this station. The findings are reported in Table 2 and summarized in the text below.

Using this methodology, our findings were as follows:

- After controlling for crime rates, poverty rates, and racial demographics, Black persons experienced BART PD rider stops at a rate 8.0 times higher than the stop rate for White riders. Thus, the Black–White racial disparity in rider stops was not fully explained by local poverty rates, crime rates, or the racial demographics of surrounding station areas.
- The Black–White racial disparity was larger in wealthier neighborhoods than in poorer ones. Nonetheless, in both high- and low-income neighborhoods, Black riders experienced higher rates of stops than White riders.
- The crime rate was predictive of the number of stops, but not of racial disparity. That is, BART PD made more stops in or near stations in...
higher-crime neighborhoods than in lower-crime ones, but this did not explain the racial disparity in the rates at which Black and White riders were stopped.

- Latinx persons experienced BART PD rider stops at about the same rate as White persons.
- Asian persons experienced BART PD rider stops at a much lower rate than White persons. After controlling for local poverty rates, crime rates, and racial demographics, the per capita stop rate for Asian persons was 0.21 (about one fifth) the per capita rate for White persons.

Table 2. Regressions Predicting Rider Stop Frequency

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated Incidence Ratio</td>
<td>95% Confidence Interval</td>
<td>Estimated Incidence Ratio</td>
<td>95% Confidence Interval</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.02***</td>
<td>(0.01, 0.02)</td>
<td>0.02***</td>
<td>(0.01, 0.02)</td>
</tr>
<tr>
<td>Asian</td>
<td>0.20***</td>
<td>(0.17, 0.24)</td>
<td>0.21***</td>
<td>(0.18, 0.25)</td>
</tr>
<tr>
<td>Black</td>
<td>7.88***</td>
<td>(6.64, 9.37)</td>
<td>8.01***</td>
<td>(6.75, 9.50)</td>
</tr>
<tr>
<td>Latinx</td>
<td>0.81</td>
<td>(0.68, 0.97)</td>
<td>0.83</td>
<td>(0.70, 0.99)</td>
</tr>
<tr>
<td>Black % of Population</td>
<td>1.02</td>
<td>(0.75, 1.38)</td>
<td>1.00</td>
<td>(0.74, 1.36)</td>
</tr>
<tr>
<td>% of Population in Poverty</td>
<td>1.27</td>
<td>(0.94, 1.71)</td>
<td>1.57**</td>
<td>(1.15, 2.15)</td>
</tr>
<tr>
<td>Number of Arrests</td>
<td>1.20</td>
<td>(0.95, 1.52)</td>
<td>1.20</td>
<td>(0.95, 1.52)</td>
</tr>
<tr>
<td>Asian: % of Population in Poverty</td>
<td></td>
<td></td>
<td>0.79</td>
<td>(0.66, 0.95)</td>
</tr>
<tr>
<td>Black: % of Population in Poverty</td>
<td></td>
<td></td>
<td>0.73***</td>
<td>(0.61, 0.87)</td>
</tr>
<tr>
<td>Latinx: % of Population in Poverty</td>
<td></td>
<td></td>
<td>0.77**</td>
<td>(0.65, 0.92)</td>
</tr>
</tbody>
</table>
**SECTION III: RACIAL DISPARITIES IN BART PD USE OF FORCE**

This section describes findings related to use-of-force incidents reported by BART PD. In addition to presenting descriptive statistics, we describe findings from multilevel regression models designed to assess whether any observed racial disparities in BART PD use of force can be explained by neighborhood characteristics. Such characteristics include poverty, crime rates, and racial demographics.

When multiple types of force were reported to have been used on a single person during a given incident, or when multiple officers were involved in a given incident, our analysis counts the event as a single incident. A single incident, then, could include multiple force types, multiple applications of force, or multiple officers using force against a single individual.

In Figures 18 and 19, on page 30, though, the types of force used in use-of-force incidents are presented differently: Each different force type used on an individual in a single incident is counted once, regardless of the number of officers involved or the number of times the force type was used.

**Summary of Findings**

Racial disparities were observed in incidents resulting in use of force by BART PD officers. Although Black persons make up less than 9% of the residential population, 63% of persons to experience force were Black. On a per capita basis, Black persons were 13 times more likely than White persons to have BART PD force used upon them. All other racial groups were subjected to force at per capita rates lower than that of White persons.

As is typical in police departments, the force type most commonly used in BART PD use-of-force incidents was hands-on, accounting for 66% of incidents. The second most frequent force type was firearms (23%), which included 322 incidents of a firearm display or pointing and one recorded incident in which a firearm was discharged. The frequency of firearm incidents by BART PD officers may warrant additional attention within a law enforcement agency whose primary responsibilities are passenger safety and fare enforcement, and whose activities take place largely in confined spaces such as train cars and BART stations.

As with other BART PD force incidents, most people who experienced firearm incidents were Black (63%). Most firearm incidents occurred in Zone 1 or Zone 3 (that is, in or south of Oakland). No other BART zone recorded more than 35 firearm incidents across the observation period.

15 Incidents involving the discharge of a firearm were not consistently included in the use-of-force datasets shared with us. But per email from BART PD personnel, September 9, 2019, we were advised that five OIS and two other discharges were recorded by BART PD from 2009 through 2017.
Use-of-Force Findings

Figure 16, above, reports the number of use-of-force incidents that BART PD recorded for all racial groups each quarter from January–March 2012 through October–December 2017.

In the six years of the observation period, BART PD officers recorded 1,760 incidents in which force was used. The number of recorded incidents varied by quarter, with a high of 108 incidents recorded in the second quarter of 2017 and a low of 43 incidents recorded in the first quarter of 2012. The number of recorded incidents increased annually from 233 in 2012 to 335 in 2017.

Figure 17 shows the race and age of persons upon whom force was used for incidents recorded by BART PD between 2012 and 2017.

In every age group, Black persons constituted a large majority of persons upon whom force was used, while White persons made up less than a quarter of persons who experienced force, Latinx persons made up less than 15%, and Asian persons made up less than 5%. Overall, of 1,645 incidents for which racial data were available, 63% of people who experienced force were Black, 20% were White, 12% were Latinx, 2.7% were Asian, and 3.2% were classified Other.
Figure 18 depicts the relative frequency of force types used by BART PD officers in incidents recorded between 2012 and 2017. Unlike the incident counts otherwise reported in this chapter, Figures 18 and 19 count each force type reported in an incident separately (regardless of the number of officers involved in the incident). For example, if, on a single individual on a single occasion, one officer used physical restraint and a Taser electronic weapon, and another officer also used physical restraint, we would count two force types used in the incident: one physical restraint and one Taser.

The most frequent force type used in BART PD use-of-force incidents was hands-on: Physical restraint was recorded in 66% of all use-of-force incidents, with another 3.4% of force incidents involving physical striking. The second most common force type recorded in BART PD use-of-force incidents was firearm (display, pointing, or discharge), which was recorded in 23% of all incidents. (Firearm incidents are examined in greater detail later in this section.) Electronic Control Device/Taser was recorded in 4.6% of incidents, and all other force types (pepper spray, OC spray, etc.) were recorded in 0.4% of incidents.

Figure 19. Force Types Recorded in Use-of-Force Incidents by Race, 2012–2017

<table>
<thead>
<tr>
<th>Force Type</th>
<th>White</th>
<th>Black</th>
<th>Latinx</th>
<th>Asian</th>
<th>Other Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Restraint</td>
<td>22%</td>
<td>64%</td>
<td>14%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Firearm</td>
<td>17%</td>
<td>65%</td>
<td>14%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Electronic Control Device/Taser</td>
<td>21%</td>
<td>65%</td>
<td>13%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Physical Striking</td>
<td>34%</td>
<td>65%</td>
<td>13%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>OC Spray/Pepper Spray</td>
<td>7%</td>
<td>69%</td>
<td>24%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Baton</td>
<td>25%</td>
<td>66%</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>34%</td>
<td>58%</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Canine</td>
<td>40%</td>
<td>40%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The above percentages represent the use of force types recorded in use-of-force incidents by race for the years 2012–2017.
spray, baton, canine, and other) were each recorded in fewer than 1.5% of all force incidents.

Figure 19 depicts the race of persons upon whom each of the four most common force types was used in incidents recorded by BART PD between 2012 and 2017.

Every force type recorded by BART PD was used more frequently on Black persons than on persons of any other racial group. Black persons made up 62% of those who experienced physical restraint, 65% of those who experienced firearm incidents, 65% of those who experienced physical restraint, 65% of those who experienced ECD/Taser, and 58% of those who experienced physical striking. Black persons also made up 67% of those who experienced the baton and 65% of those who experienced pepper spray (not shown).

Figure 20 shows BART PD use-of-force incidents by race and officer assignment between 2012 and 2017. “A-Platoon” refers to the morning shift; “B-Platoon” refers to the afternoon shift; and “C-Platoon” refers to the night shift.

The racial distribution of force incidents was roughly similar across officer assignments—a majority or plurality of force incidents in every unit involved Black persons—but the number of incidents recorded varied widely by assignment, from fewer than 100 incidents in C-Platoon (the night shift) to more than 600 incidents recorded in

<table>
<thead>
<tr>
<th>Race</th>
<th>A-Platoon</th>
<th>B-Platoon</th>
<th>B/C-Platoon</th>
<th>C-Platoon</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>67%</td>
<td>66%</td>
<td>64%</td>
<td>62%</td>
<td>64%</td>
</tr>
<tr>
<td>White</td>
<td>27%</td>
<td>30%</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Latinx</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Asian</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Other Race</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>
A-Platoon and more than 700 in B-Platoon across the same time period.

The racial distribution of force incidents was roughly similar across geographic zones—a majority of force incidents in every zone involved Black persons. The number of incidents recorded by each unit in the six-year period varied widely, however, from fewer than 100 in Zone 5 to more than 450 in Zone 1 (Figure 21).

Figure 22 shows the number of force incidents as a proportion of the benchmark population for each racial group.

Because force is used on Black residents more frequently despite their making up just 8.7% of the population served by BART, the per capita rate at which Black riders were subjected to force was higher than for any non-Black group. As noted earlier, of 1,645 force incidents for which BART PD officers recorded racial data, 63% involved force being used upon a Black person.

A Black resident was 13 times more likely to have BART PD force used upon them than their White counterpart. Specifically, BART PD recorded 1.2 use-of-force incidents per 1,000 Black residents, compared to 0.09 incidents per 1,000 White residents. Per capita, BART PD recorded
slightly fewer use-of-force incidents involving Latinx residents (0.07 per 1,000 residents) and Asian residents (0.02 per 1,000 residents).

Figure 23 shows the number of force incidents as a proportion of the benchmark population for each racial group, for each year of the observation period.

The large racial disparity in per capita use of force was observed in every year for which data were collected. In no year did any other group experience force at more than a tenth of the per capita rate at which Black residents experienced force. For Black residents, the per capita use-of-force rate ranged from 1.0 to 1.5 per 1,000 Black residents. By comparison, White persons experienced force at rates ranging from 0.07 to 0.12 per 1,000 residents; the Latinx per capita rate ranged from 0.04 to 0.10 per 1,000 residents; and the Asian per capita rate ranged from 0.0 to 0.02 per 1,000 residents. The per capita rate for Native American persons is not reported due to low frequency (two incidents).

Use of Firearms in Force Incidents
Firearms were the second most common force type recorded by BART PD officers: Overall, 23% of recorded use-of-force incidents involved a firearm, with a total 323
incidents recorded in the six-year period (one incident involved discharge of a firearm; 322 involved the display or pointing of a firearm). We did not receive information about the reasons for the display, pointing, or discharge of firearms. The proportion of recorded use-of-force incidents that involved firearms warrants further investigation.

As with other BART PD use-of-force incidents, a majority of firearm incidents involved Black persons (Figure 24). Of 323 firearm incidents, 205 (63%) involved Black persons. White persons were involved in 55 firearm incidents (17%), Latinx persons in 44 (14%), and Asian persons in eight (2.5%). In 11 firearm incidents (3.4%), the person was described as being of “Other” racial ascription.

Firearm incidents were much more common in and around Oakland than elsewhere: As shown in Figure 25, more than half of all firearm incidents (53%) were recorded in BART Zones 1 or 3. Firearm incidents were by far the most frequent in Zone 1, which accounted for 113 such incidents, or 35% of the total. This was nearly twice the frequency as in the next highest work group, Zone 3 (South Bay), which logged 59 incidents across the six-year period. Every other BART PD work group recorded fewer than 35 firearm incidents.

In every work zone across BART, Black persons made up a majority of individuals who experienced firearm incidents. The disparity was lowest in Zones 2 and 5, where Black persons accounted for 50%, and highest in Zone 2C and the “Other” work group, where 75% of persons involved in firearm incidents were Black.

**Multilevel Regression Analysis**

To better understand factors that might contribute to the observed Black–White disparity in BART PD use of force, we turned to multilevel regression analysis. We used this technique to explore whether factors other than a person’s race might be statistically associated with observed disparities. For example, higher crime rates in neighborhoods with larger shares of Black residents might explain, at least in part, the disproportionately high rate at which force is used against Black persons.

The statistical analysis we conducted examined whether the following factors may explain why Black persons are overrepresented, relative to population, in BART PD use-of-force incidents: (1) the race of individual riders; (2) neighborhood demographics surrounding a BART station; (3) poverty rates surrounding a BART station; and (4) local crime rates surrounding each BART station. Our statistical analysis calculates whether, alone or in combination, these factors may contribute either to the overall number of stops at a BART station or to the Black–White racial disparity observed at the station. The findings are reported in Table 3 and summarized on below.

Using this methodology, our findings were as follows:

- After controlling for crime rates, poverty rates, and racial demographics, Black persons experienced use of force at a rate approximately 15 times higher than the use-of-force rate for White persons. Thus, the Black–White racial disparity in use-of-force incidents was not fully explained by local crime rates, poverty rates, or the racial demographics of surrounding station areas.

- Racial disparity in use-of-force incidents was higher in wealthier neighborhoods and lower in neighborhoods with higher poverty rates. That is, the Black–White disparity was larger in wealthier neighborhoods than in poorer ones.

- Latinx persons experienced use of force at about the same rate as White persons.

- The number of use-of-force incidents involving Asian persons was too small to be used in the regression analysis.

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16 Per email from BART PD personnel, September 9, 2019, we are advised that from 2012 to 2015, OIS and discharges were not necessarily recorded in the use-of-force dataset but were recorded in separate, handwritten files. We are further advised by BART PD that it recorded five OIS from 2009 through 2017, as well as two non-OIS firearm discharges.

17 The crime rate is calculated using the rate of BART arrests for Part I crimes (as classified by the Uniform Crime Reporting system) in neighboring census tracts.
## Table 3. Regressions Predicting Frequency of Use of Force

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated Incidence</td>
<td>95% Confidence</td>
<td>Estimated Incidence</td>
<td>95% Confidence</td>
</tr>
<tr>
<td></td>
<td>Ratio</td>
<td>Interval</td>
<td>Ratio</td>
<td>Interval</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.00***</td>
<td>(0.00, 0.00)</td>
<td>0.00***</td>
<td>(0.00, 0.00)</td>
</tr>
<tr>
<td>Black</td>
<td>14.43***</td>
<td>(10.42, 19.98)</td>
<td>15.03***</td>
<td>(10.93, 20.67)</td>
</tr>
<tr>
<td>Latinx</td>
<td>0.84</td>
<td>(0.59, 1.18)</td>
<td>0.87</td>
<td>(0.61, 1.24)</td>
</tr>
<tr>
<td>Black % of Population</td>
<td>1.31</td>
<td>(1.00, 1.71)</td>
<td>1.25</td>
<td>(0.98, 1.59)</td>
</tr>
<tr>
<td>% of Population in</td>
<td>0.86</td>
<td>(0.66, 1.11)</td>
<td>1.25</td>
<td>(0.92, 1.69)</td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Arrests</td>
<td>1.42***</td>
<td>(1.17, 1.74)</td>
<td>1.40***</td>
<td>(1.17, 1.68)</td>
</tr>
<tr>
<td>Black: % of Population in Poverty</td>
<td></td>
<td></td>
<td>0.49***</td>
<td>(0.36, 0.65)</td>
</tr>
<tr>
<td>Latinx: % of Population in Poverty</td>
<td></td>
<td></td>
<td>0.82</td>
<td>(0.58, 1.16)</td>
</tr>
</tbody>
</table>
We now turn to the results of the climate survey administered to BART PD officers.

Decades of empirical research reveals that social attitudes, including those not consciously recognized or acknowledged by an individual, can make that individual vulnerable to enacting bias—sometimes more so than conscious intent. Accordingly, it is important to assess attitudes that can have implications for how officers operate in the field. Attitudes are often interconnected with beliefs, so it is important to evaluate beliefs as well. Consequently, the climate survey measured attitudes and beliefs that social science has shown can:

- increase the risk that officers will engage in inequitable and burdensome policing practices;
- increase the likelihood that officers will be resistant to policies and procedures that enhance community trust; and
- undermine the optimal job performance of officers.

The climate survey assessed BART PD officers’ implicit and explicit bias as well as perceptions of organizational justice, all of which may affect the risk that cognitive bias could result in racially disparate behavior. The presence of risk factors, or even the presence of biased perceptions, does not guarantee that officers will behave in biased ways. Rather, these factors signal cognitive vulnerabilities, which can be compounded or mitigated by situational factors, such as departmental policy or customary norms and practices. Awareness and mitigation of these risks can help ensure more equitable treatment of community members by BART PD officers.

Each sworn BART PD officer was invited to complete the climate survey. The survey was administered electronically, and officers had the option to take it during or after work hours. In total, 41 officers completed the survey. Of the 40 respondents who provided racial identity data, 35% identified as White, and 65% identified as non-White.18

The small sample size precludes detailed analysis of gender or racial disparities in the survey results. Moreover, the sample was composed largely of supervisors and executives. As such, the results are unlikely to reflect the views of most BART PD officers. Nonetheless, they illuminate the views of the officers who responded to the survey. They may highlight strengths that the department can build on, as appropriate, as well as opportunities for intervention to address attitudes that can undermine optimal police practices and community relationships.

Summary of Climate Survey Results
Among officers who participated in the survey, responses were suggestive of both departmental strengths as well as risk factors that may affect the fairness of BART PD policing practices. On the positive side, survey respondents expressed egalitarian views with respect to the social groups our survey asked about. They gave broadly similar favorability ratings to different major racial groups, immigrants, Muslims, gay men, lesbians, persons with mental health challenges, and transgender persons. Respondents also expressed strong commitment to community-oriented and procedurally just policing, and strong disapproval of corrupt practices. All of this tends to favor the development of police—community trust.

On the other hand, survey respondents expressed considerable distrust of the community; they believed that community members in general, and Black persons in

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18 We do not present findings related to rank or gender to protect the anonymity of survey participants.
particular, hold negative attitudes toward police, and they reported some concern that community members may stereotype them as racist.

Finally, the survey results indicate that respondents are well positioned to perform optimally when engaging in their duties. General job satisfaction, moderate job stress, and sound physical and emotional/mental health all contribute to optimal job performance.

Climate Survey Results

In this section we outline the social constructs measured in relationship to inequitable and burdensome policing, community trust, and optimal job performance. A social construct is an idea or viewpoint constructed by a group of people to make sense of the world; it is held as true, whether or not it reflects actual reality. The beliefs and attitudes measured by these constructs are described in this section, as is their relevance to the enhancement of equitable policing practices. All were assessed in the officer climate survey.

The tables that follow define the survey measures that addressed each of these outcomes of interest, and present the mean (average) scores and standard deviations for all respondents who provided usable answers to the survey questions. The discussion following each table summarizes the results, emphasizing responses to questions with average scores that tend toward the high or low side of the measurement scale, which may indicate attitudes or beliefs that could substantially influence officers’ behavior in the field.

Table 4. Constructs Related to Inequitable and Burdensome Policing

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition and Scaling</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Dominance Orientation</td>
<td>The endorsement of social hierarchies in which some groups have power and privilege while others do not. Such a perspective can make individuals feel justified in treating others inequitably. [Measured on a scale from 1 to 7, with higher values indicating stronger endorsement of social hierarchies.]</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Stereotype Threat</td>
<td>Anxiety that one will inadvertently confirm a stereotype related to a social group in which one has membership. This anxiety can cause individuals in positions of power to escalate tense interactions (particularly with marginalized groups) in ways that can be harmful to those they interact with. [Measured on a scale from 1 to 7, with higher values indicating greater worry about confirming stereotypes about police officers.]</td>
<td>4.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Mental Health Stigma</td>
<td>Harboring prejudicial attitudes toward individuals with mental health challenges [Measured on a scale from 1 to 7, with higher values indicating greater stigmatization of individuals with mental health challenges.]</td>
<td>3.5</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Continued on the next page
Perceptions of Juvenile Responsibility

Perceptions about the ability of adolescents to function with the same level of maturity and rational thinking as adults. More lenient attitudes about adolescent responsibility align with biological research on adolescent development, wherein youth do not fully develop maturity and the understanding of long-term consequences until they have reached young adulthood. Misconceptions about juvenile responsibility place one at risk of interacting with and punishing youth in inappropriate ways.

*Measured on a scale from 1 to 7, with higher values indicating more lenient attitudes about juvenile responsibility.*

|                | 
|----------------|---|---|
|                | 3.8 | 1.0 |

Positive or Negative Feelings Toward Various Social Groups

Self-assessment of “warm” or “cold” feelings toward a particular social group.

*Measured on a scale from 0 (cold) to 100 (warm).*

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Warm (0-100)</th>
<th>Cold (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black persons</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>White persons</td>
<td>74</td>
<td>23</td>
</tr>
<tr>
<td>Latinx persons</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>Asian persons</td>
<td>78</td>
<td>23</td>
</tr>
<tr>
<td>Immigrants</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>Muslims</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Gay men</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>Lesbians</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>Transgender women</td>
<td>74</td>
<td>24</td>
</tr>
<tr>
<td>Transgender men</td>
<td>74</td>
<td>24</td>
</tr>
<tr>
<td>Persons with mental illness</td>
<td>74</td>
<td>24</td>
</tr>
</tbody>
</table>

Perceptions of Community Attitudes Toward Police

Self-assessment of “warm” or “cold” feelings a particular social group has toward police.

*Measured on a scale from 0 (cold) to 100 (warm).*

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Warm (0-100)</th>
<th>Cold (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BART community toward police</td>
<td>41</td>
<td>29</td>
</tr>
<tr>
<td>Black persons toward police</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td>White persons toward police</td>
<td>59</td>
<td>26</td>
</tr>
<tr>
<td>Latinx persons toward police</td>
<td>48</td>
<td>21</td>
</tr>
<tr>
<td>Asian persons toward police</td>
<td>58</td>
<td>27</td>
</tr>
</tbody>
</table>
INEQUITABLE AND BURDENSOME POLICING

The inequitable or burdensome policing of others is characterized by biased judgments and behaviors as well as by engaging with individuals in ways that are unnecessarily confrontational, demeaning, or otherwise taxing. The beliefs and attitudes in Table 4 are considered risk factors for engaging in inequitable or burdensome policing.

Survey respondents expressed a relatively egalitarian perspective toward different social groups and showed little evidence of a social dominance orientation. Endorsement of a social dominance orientation would be measured by agreement with statements such as “It’s probably a good thing that certain groups are at the top and others are at the bottom” and “Some groups are simply inferior to other groups.” Rejection of a social dominance orientation might be indicated by agreement with a statement such as “No one group should dominate in society.” Because endorsement of a social dominance orientation can lead to inequitable behaviors, this finding is encouraging.

Five questions on the climate survey were designed to assess stereotype threat, or anxiety about confirming a stereotype related to police officers. Feelings of stereotype threat were measured by agreement with statements such as “I worry that people may stereotype me as prejudiced because I am a police officer,” “I worry that something I say might be misinterpreted as prejudiced because I am a police officer,” and “I worry that people’s evaluations of me might be negatively affected because I am a police officer.” The absence of such feelings would be indicated by agreement with statements such as “I never worry that someone will suspect me of being prejudiced just because I am a police officer.”

The average score across all questions was 4.2 on a 7-point scale, indicating neither affirmation nor denial that respondents experienced stereotype threat. The experience of anxiety as a result of stereotype threat can be mentally taxing, triggering defensiveness that can undermine respectful officer–community communications and prompt inadvertent and sometimes unjust errors in judgment or behavior. Survey respondents may be vulnerable to the effects of stereotype threat, even if they are not aware that such anxiety might negatively affect their interactions with the community.

Stereotype threat may be related in part to officers’ views that some members of the community hold the police generally in low regard. On a “feeling thermometer” from 0 (most unfavorable rating, or “coldest”) to 100 (most favorable rating, or “warmest”), BART PD officers expressed a belief that the BART community and Black persons in particular hold cold feelings toward police, rating community feelings toward BART PD at 41 and Black people’s feelings toward BART PD at 42. By contrast, survey respondents perceived Latinx persons to feel neither cold nor warm toward police (48), and perceived that White and Asian persons felt positively toward police (59 and 58, respectively).

An encouraging finding was that survey respondents themselves expressed fairly consistent favorability ratings on the feeling thermometer toward members of different major racial groups, toward Muslims and immigrants, and toward gay men, lesbians, and transgender persons, with favorability scores for all groups in the range of 73 to 78 on a 100-point scale.

The survey also revealed some misconceptions about juvenile responsibility among officers. Beliefs about adolescent development and juvenile responsibility were measured by agreement or disagreement, on a scale from 1 to 7, with statements such as “An adolescent’s ability to control their impulses and understand the consequences of their actions should be taken into consideration when deciding the punishment for an adolescent,” “An adolescent who commits a violent offense should be eligible to receive the same punishment an adult would receive,” “Peer pressure should be taken into consideration when deciding the punishment for an adolescent,” and “Adolescents convicted of committing violent offenses should not be sentenced to prison for life.”

The average score on such survey measures was 3.8, indicating that survey respondents did not strongly agree or disagree with such statements. To the extent that officers may expect children or teenagers to control their impulses and exercise judgment the way adults are expected to do, they may be inclined to interact with youth
as if they were adults, instead of relying on age-appropriate methods that meet the needs of youth and yield better results. Furthermore, because Black children and youth are more likely to be judged older than their actual age, they are at heightened risk of being subjected to inappropriately punitive treatment.19

The climate survey showed some evidence of mental health stigma among BART PD officers. Endorsement of mental health stigma was measured by agreement with statements such as “A person with mental health issues could snap out of the problem,” “People with mental health issues are unpredictable,” “A mental health issue is a sign of personal weakness,” “People with mental health issues are dangerous,” and “I would not want to work with a person with mental health issues.” On average, survey respondents did not reject such prejudices, but were neutral toward them.

COMMUNITY TRUST
Community trust is present when community members perceive police officers to be reliable stewards of goodwill and guardians of public safety in whom they have confidence. Trust is earned, and law enforcement officials must continually demonstrate their trustworthiness through policies and daily interactions with the public. However, there are certain perspectives and attitudes that may make individual officers more or less inclined to support policies or practices that create or enhance community trust. Such perspectives and attitudes are captured in the constructs in Table 5.

BART PD officers expressed substantial support for both community-oriented policing and procedurally just policing. These findings are encouraging, as fair and responsive interactions with community members are critical to building community trust in the police force.

Support for community-oriented policing was measured by agreement with statements affirming that it is important to “be responsive to issues people in the community think are important, even if they are minor issues” and to “allow community members to voice their opinions when you interact with them.” Survey respondents expressed strong support for community-oriented policing, with a mean score of 5.5 on a scale of 1–7.

Support for procedural justice in policing was even stronger: The mean score was 6.6 on a 7-point scale. Such support was measured by agreement with statements affirming that it is important to “treat community members with respect during your encounters with them,” “be impartial in the way you interact with community members,” and “be fair in your treatment of community members.”

At the same time, officers expressed moderate distrust of community members. Trustworthiness of community members was measured by agreement with statements such as “Community residents tell the police the whole story when they are being questioned,” “Community residents can be trusted to do the right thing,” and “Community residents are willing to help the police identify criminals.” On average, respondents expressed somewhat low trust in the community, averaging 3.0 on a scale from 1 to 7. These findings may be consistent with respondents’ perceptions that the BART community as a whole has a negative attitude toward them (see Perceptions of Community Attitudes Toward Police in Table 4). This finding may indicate a need for building greater trust between BART PD officers and the communities they serve and protect.

Survey respondents believed that critical media coverage of the police had deleterious effects, as measured by agreement with statements such as that adverse publicity had “negatively impacted the way I do my job,” “forced some U.S. law enforcement agencies to make policy changes that ultimately threaten officer safety,” “made it more difficult for me to be motivated at work,” “caused me to be less proactive on the job than I was in the past,” or “caused me to be more apprehensive about using force even though it may be necessary.” Their responses averaged 5.0, indicating that these respondents did share such concerns.

Overall, the survey results show BART PD officers hold attitudes and beliefs that can encourage community trust in the department. Officers strongly supported community-oriented policing and procedurally just policing practices, both of which are critical to building

19 Goff, Jackson, DiLeone, Lewis, Culotta, and DiTomaso (2014).
confidence in the police among community members. However, officers did also express a distrust of community members, which can undermine reciprocal trust. Officers overwhelmingly rejected a departmental culture that tolerates corruption, and they expressed concern that unfavorable media coverage could affect their work and their interactions with the community.

Table 5. Constructs Related to Community Trust

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition and Scaling</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Support for Community-Oriented Policing</td>
<td>The perspective that community-oriented policing is a worthwhile endeavor. Officers who harbor this perspective are assumed to be more likely to support and engage in practices that enhance community trust, which is a necessary component of community policing. Officers who do not support community policing would be expected to do the opposite. [Measured on a scale from 1 to 7, with higher values indicating greater endorsement of procedurally just policing.]</td>
<td>5.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Trust in Community</td>
<td>Perceptions of the level of trustworthiness of community members. Officers who feel they cannot trust the community are likely to be less inclined to support practices or policies that will build community trust overall. [Measured on a scale from 1 to 7, with higher values indicating greater endorsement of procedurally just policing.]</td>
<td>3.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Support for Procedurally Just Policing</td>
<td>Procedurally just policing is characterized by respectful interactions with individuals and objective decision making on the part of law enforcement. Officers who support these practices are likely to be more inclined to support policies and practices that enhance community trust; the opposite would be the case for officers who do not support procedurally just policing. [Measured on a scale from 1 to 7, with higher values indicating greater endorsement of procedurally just policing.]</td>
<td>6.6</td>
<td>0.47</td>
</tr>
<tr>
<td>Effects of Publicity</td>
<td>The perspective that negative media coverage of police officers has made the job of law enforcement more dangerous and has depressed morale. Officers who feel this way may be more apprehensive about engaging with community members, and therefore be less inclined to engage in practices or support policies that enhance community trust. [Measured on a scale from 1 to 7, with higher values indicating greater agreement with statements about the negative effects of media coverage on officer safety.]</td>
<td>5.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Construct</td>
<td>Definition and Scaling</td>
<td>Mean</td>
<td>SD</td>
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<td>Physical Health</td>
<td>A state of physical well-being. Those reporting sound physical health are better positioned to perform competently within their professional roles. [Measured on a scale from 1 to 7, with higher values indicating better physical health.]</td>
<td>5.0</td>
<td>1.4</td>
</tr>
<tr>
<td>Mental Health</td>
<td>A state of mental well-being. Those reporting sound mental health are better positioned to perform competently within their professional roles. Positive affect [Measured on a scale from 1 to 7, with higher values indicating the experience of positive emotions and/or a healthy self-concept.]</td>
<td>5.0</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Negative affect [Measured on a scale from 1 to 7, with higher values indicating the experience of negative emotions and/or a poor self-concept.]</td>
<td>1.9</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Overall affect [A cumulative score summing a respondent’s positive affect scale with a reverse scoring of the negative affect scale. Measured on a scale from 1 to 7, with higher values indicating the experience of greater positive emotions relative to negative emotions.]</td>
<td>5.7</td>
<td>0.77</td>
</tr>
<tr>
<td>Job Stress</td>
<td>Mental or emotional strain caused by the workplace environment. Those reporting low levels of job stress are better positioned to perform competently within their professional roles. [Measured on a scale from 1 to 7, with higher values indicating higher levels of stress.]</td>
<td>4.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Satisfaction in response to the workplace environment. Those reporting high levels of job satisfaction are better positioned to perform competently within their professional roles. [Measured on a scale from 1 to 7, with higher values indicating greater job satisfaction.]</td>
<td>4.0</td>
<td>1.1</td>
</tr>
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</table>
officials, as they can deplete the physical and mental energy necessary to be effective in the workplace. The states of physical, mental, and emotional health relevant to job performance are described in Table 6.

On average, respondents reported good physical and mental health, rating their physical health at 5.0 on a 7-point scale. They reported frequent experience of positive emotions—such as feeling alert, inspired, determined, attentive, and active—and infrequent experience of negative emotions, such as feeling upset, hostile, ashamed, nervous, afraid, angry, angry at self, disgusted, or disgusted with self. The climate survey also asked officers how often in the past six months they had experienced an array of other symptoms of emotional or mental distress, such as finding it difficult to relax, getting agitated, or finding it hard to work up the initiative to do things. Overall, on a scale of 1 (greatest emotional comfort) to 7 (greatest emotional discomfort), officers’ negative affect score averaged 1.9, indicating robust emotional well-being.

Responding officers, on average, expressed neither satisfaction nor dissatisfaction with their jobs (with a mean of 4.0 on a scale of 1–7). They experienced moderate levels of on-the-job stress (mean of 4.3), as measured by responses to statements such as “How often do you feel calm and at ease when you are working?” and “How often do you feel tense or uptight when you are working?”

The survey revealed generally positive officer perceptions of organizational distributive and interactional justice within BART PD. Respondents ranked the department’s distributive justice (that is, the fairness of departmental procedures defining officer misconduct and governing officer assignments and promotion) fairly positively, averaging 4.5 on a scale of 1 to 7. They expressed strong agreement on measures of organizational interactional justice, averaging 5.2 on measures such as whether their supervisors held values similar to their own and stood up well for values important to them, gave them opportunities to express their opinions and concerns, and treated them with dignity and respect and without personal bias. These survey items also addressed whether fellow officers treated respondents with dignity and respect and without personal bias, gave them the opportunity to express their opinions and concerns, and cared about their well-being.

| Organizational Distributive Justice | Perceptions by individuals within an organization that they are treated fairly with regard to the outcomes of decisions and the distribution of organizational resources. Individuals who perceive a lack of organizational distributive justice are at risk of engaging in inappropriate and unethical behaviors. [Measured on a scale from 1 to 7, with higher values indicating greater distributive justice.] | 4.5 | 1.5 |
| Organizational Interactional Justice | Perceptions by individuals within an organization that they are treated with dignity and respect within the organization. Individuals who perceive a lack of organizational interactional justice are at risk of engaging in inappropriate and unethical behaviors. [Measured on a scale from 1 to 7, with higher values indicating greater interactional justice.] | 5.2 | 1.4 |
Based on these findings, we offer six specific recommendations for BART PD. While this is not an exhaustive list of possible solutions to the disparities and risk factors we have identified, we recommend that BART PD adopt the following actionable steps to enhance their commitment to fair and equitable policing:

1. **Implement key changes to data collection efforts**, specifically with respect to stops, searches, and use-of-force incidents, as follows:

   a. Update the BART PD policy manual by adopting a written policy requiring officers to collect data on all stops in accordance with the Racial and Identity Profiling Act of 2015 (RIPA).

   b. Adopt a policy requiring supervisors to review stop and use-of-force records in a timely fashion to ensure that their supervisors are completing them properly.

   c. Ensure that officers are trained to record racial data for every stop and use-of-force incident. Officers should not ask persons for racial self-identification, but should record their perception of the person’s racial identity. If they are not sure, they should record “Unknown.”

   d. Record every search, and include in these records the reason for the search and whether contraband was found. Yield rate data can be calculated based on categorical lists of contraband or a more detailed accounting that allows for specific weapons or drugs to be identified. These categories are listed in the RIPA stop data regulations and are also required to be reported under BART PD Policy 322.5.

   e. Record the nature of the offense(s) when a person is arrested at a vehicle or rider stop or after a use-of-force incident.

   f. In use-of-force incidents involving firearms, record whether the weapon was discharged and whether any person was injured. Officer-involved shootings should be included in use-of-force data sets.

   g. Implement the recommendations for RIPA compliance outlined in the COPS Stop Data Guidebook: Pilot Implementation Reports, which was drafted by CPE and the Policing Project.

2. **Adopt a policy requiring officers to write a brief narrative explanation of the reason for each stop they conduct** and submit the same to their supervisors at the end of each shift. While RIPA already requires that this information be collected and submitted to the California Attorney General, we recommend that BART PD establish a policy requiring that it also be submitted to supervisors on a daily basis for review. We further recommend

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that BART PD adopt a policy requiring supervisors to review these reports in a timely manner to ensure that stops are supported by reasonable suspicion and consistent with BART PD policy and applicable law.

3. **Monitor the locations and times of fare enforcement operations**—which represent a large majority of BART PD’s activities—to ensure efficient and equitable deployment.

4. **Revise the BART PD policy on drawing/deploying firearms** (Policy 300.3.5) to clarify when an officer may draw a firearm or point a firearm at a member of the public, and about the role of bystander safety in the determination of whether to draw, point, or discharge a firearm. We recommend that BART PD adopt a policy stating that officers may only draw or display their firearms if they reasonably believe that there is a substantial risk that the situation may escalate to the point where deadly force may be justified.

5. **Redouble efforts to build mutual trust and open productive channels of communication between BART PD and the community.** The climate survey data show that some officers distrust the community and believe that community members, especially members of Black communities, have a negative attitude toward police. We recommend BART PD explore the underlying causes of distrust for both officers and community members. This could include hosting open dialogues (e.g., listening sessions) or administering a community survey. Once the core issues are brought to light, BART PD must implement responsive change in a way that is transparent to both officers and community members.

6. **Work in collaboration with the BART Office of the Independent Police Auditor and the BART Police Citizen Review Board** to implement the recommendations made in this report.
BIBLIOGRAPHY

This report is informed by a wealth of research in diverse social sciences. Here we list some of the most relevant published works.


