San Jose Police Department Traffic and Pedestrian Stop Study

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1. INTRODUCTION

In February 2016, the City of San Jose contracted with the Center for Law and Human Behavior at The University of Texas at El Paso to conduct a statistical analysis of the San Jose Police Department's (SJPD) limited detention (or stop) data collected from September 1, 2013 through March 31, 2016. The San Jose Police Department (SJPD) has been voluntarily collecting data on traffic and pedestrian stops for over a decade. To date, however, these data have not been analyzed to inform policy and training decisions that may reduce racial and/or ethnic disparities in police stops or stop outcomes. The SJPD and the City's Independent Police Auditor have committed to examining possible racial/ethnic disparities in stops through quantitative analyses of these data. Thus, the purpose of this analysis is to identify patterns or trends in the data that may reveal racial and/or ethnic disparities in SJPD stops or stop outcomes. The study also included ride-alongs and focus group interviews with department personnel and community stakeholders for the purpose of helping the UTEP research team better understand the context of crime and police activity in San Jose, as well as any patterns or trends that might emerge from the quantitative analysis of the stop data. The results of from this study will provide SJPD administrators with additional information to better direct policy, practice, and training in an effort to provide fair and constitutional policing to the residents and visitors of the City of San Jose.

This report is organized into 12 sections, which includes two appendices. Following this Introduction, the second section is an Executive Summary and provides a brief overview of the key findings and recommendations from the report. The third section (Review of the Literature) provides a summary of the national literature on racial profiling and racially-biased policing, particularly as they relate to vehicle and pedestrian stops. This section helps frame the San Jose study and allows stakeholders to better understand the backdrop under which the current study takes place. Section 4 summarizes the results from a data audit conducted by the UTEP research team prior to undertaking the primary analyses and describes the overall analytic approach used by the research team. The full data audit can be found in Section 11 (Appendix A) of the report. The fifth section of the report describes the limited detention data in detail and provides frequencies and other relevant descriptive statistics on the key variables subjected to analysis. Section 6 of the report presents the research findings related to vehicle stops, while Section 7 reports the findings related to pedestrian stops. Section 8 summarizes the qualitative data that were collected and outlines key themes and findings that emerged from the ride-alongs, focus groups, and stakeholder meetings that were conducted as part of the project. Section 9 of the report provides data analysis, training, and community engagement recommendations to the SJPD that flow from the overall project findings, while Section 10 lists the references and sources cited in the report. Finally, recommendations for improving the collection of stop data by the SJPD are detailed in Section 12 (Appendix B) of the report.

2. EXECUTIVE SUMMARY

In February 2016, the City of San Jose contracted with the Center for Law and Human Behavior at The University of Texas at El Paso to conduct a statistical analysis of the San Jose Police Department's (SJPD) limited detention (or stop) data collected from September 1, 2013 through March 31, 2016. The San Jose Police Department (SJPD) has been voluntarily collecting data on traffic and pedestrian stops for over a decade. To date, however, these data have not been analyzed to inform policy and training decisions that may reduce racial and/or ethnic disparities in police stops or stop outcomes. The SJPD and the City's Independent Police Auditor have committed to examining possible racial/ethnic disparities in stops through quantitative analyses of these data, focus groups with SJPD personnel and community stakeholders, and ride-alongs with SJPD officers. Thus, the purpose of this project is to identify patterns or trends in the limited detention data that may reveal racial and/or ethnic disparities in SJPD stops or stop outcomes.

Vehicle Stops

After removing cases with missing, irrelevant (truancy or "other" call types) or logically inconsistent data, the UTEP research team analyzed 53,337 traffic stops that took place over a 30 month period (September 1, 2013 through March 31, 2016) for patterns of racial disparity. The research team employed two primary strategies for comparing the racial composition of motorists stopped by the SJPD to an estimate of the population of motorists available or expected to be stopped. SJPD traffic stops were compared to the racial composition of at-fault and not-at-fault drivers involved in two vehicle collisions, and the racial composition of drivers stopped during the day (when driver race/ethnicity is most readily observable) was compared against the racial composition of drivers stopped at night. The research team also used multilevel, cross-classified regression models to examine racial disparities in stops, limited detention decisions (curb sitting, handcuffing, sitting in a police vehicle) and stop outcomes, including no action taken, citations, arrests, and searches.

Vehicle Stop Findings

- City-wide, stops of Black motorists *exceeded* the estimated population of Black drivers and Black traffic violators derived from the traffic collision benchmark data. Depending upon whether all roadways or only city streets were modeled, and whether at-fault or not-at-fault drivers were used for comparison, Black motorists were between 1.6 and 1.9 times more likely to be stopped compared to their representation in the collision data.
- City-wide, stops of Hispanic motorists also *exceeded* the estimated population of Hispanic drivers and Hispanic traffic violators derived from the traffic collision benchmark data. Depending upon whether all roadways or only city streets were modeled, and whether at-fault or not-at-fault drivers were used for comparison, Hispanic motorists were between 1.7 and 2.6 times more likely to be stopped compared to their representation in the collision data.
- Using daytime/nighttime regression modeling, no statistically significant differences were found in the rates of vehicle stops for drivers of difference races/ethnicities after

controlling for a variety of situational, officer, and district characteristics.[1]

- Black citizens were 2.8 times *more likely* than White citizens to be curb sat after considering other potential factors including reason for the stop, officer characteristics, and district characteristics. Citizen racial/ethnic groups did not differ in their likelihood of a vehicle stop including being sat in a police vehicle. Asian citizens were 91% *less likely* than White citizens to be handcuffed after controlling for all other available factors.
- Citizen racial/ethnic groups did not differ in their likelihood of a vehicle stop concluding without an official report after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics.
- Black citizens were 9.0 times *more likely* and Hispanic citizens were 3.4 times *more likely* to experience a field interview following a vehicle stop compared to White citizens after controlling for the reason for the stop, officer, and district characteristics.
- Black citizens were *less likely* to be issued a traffic citation compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics.
- Black and Hispanic citizens were 2.1 and 2.3 times *more likely* to be issued a criminal citation compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics.
- No statistically significant differences were found among citizen racial/ethnic groups in the likelihood of being arrested or arrested pursuant to a warrant.
- Black and Hispanic citizens were 2.0 and 1.7 times *more likely* to be searched compared to White citizens after considering all other available factors. Asian citizens were less likely to be searched than White citizens.
- Following a search, Hispanic and Asian citizens were *less likely* to be found carrying contraband compared to similarly-situated White citizens after considering all other available factors.

Pedestrian Stops

After removing cases with missing, irrelevant (truancy or "other" call types) or logically inconsistent data, the UTEP research team analyzed 25,033 pedestrian stops that took place over a 30 month period (September 1, 2013 through March 31, 2016) for patterns of racial disparity. The research team employed two primary strategies for comparing the racial composition of pedestrians stopped by the SJPD to an estimate of the population of pedestrians available or expected to be stopped. First, pedestrian stops were compared city-wide and by police district to the racial composition of suspects in violent crimes reported by citizens to the SJPD. Second, pedestrian stops were compared to the racial composition of suspects reported by citizens who called 911 for selected types of crimes or community concerns – prostitution, narcotics/drug-related complaints, suspicious persons, and disturbances. These comparisons were conducted within police beats at selected "hot

[1] Given the availability of ambient lighting in the City of San Jose and the known racial/ethnic characteristics of the different SJPD districts, the sensitivity of the daytime/night benchmarking approach may be limited. Thus, the research team has greater confidence in the traffic collision data comparisons and the racial disparities they reveal.

spots" in the city, which were identified with geospatial mapping as areas of the city with high concentrations of citizen calls for the selected complaint types. These high call volume areas were concentrated in the downtown beats and along the Monterey Road corridor to the south of downtown. The research team also used multilevel, cross-classified regression models to examine racial disparities in stops, limited detention decisions (curb sitting, handcuffing, sitting in a police vehicle) and stop outcomes, including no action taken, citations, arrests, and searches.

Pedestrian Stop Findings

- City-wide, Black citizens were stopped *less frequently* than their representation among violent crime suspects reported to the police. The rate of Black citizens involved in pedestrian stops also was lower than their involvement as suspects in calls for service in 13 of the 18 beats analyzed. In some beats, Black citizens were stopped at *significantly lower* rates than would be expected given their representation among suspects reported by citizen callers for selected types of calls. Finally, Black citizens were stopped *less frequently* than White citizens after controlling for the reason for the stop, officer, and district characteristics.
- City-wide, there was no statistically significant difference in the rate at which Hispanic citizens were stopped compared to their representation among reported violent crime suspect. However, Hispanic citizens were stopped *more frequently* than would be expected given their representation among suspects reported by 911 callers for selected types of calls. Finally, Hispanic citizens were stopped more often compared to White citizens after controlling for the reason for the stop, officer, and district characteristics.
- Like Black citizens, Asian citizens were stopped *less frequently* city-wide than their representation among violent crime suspects reported to the police. However, they were stopped at rates statistically indistinguishable from their involvement as suspects in selected calls for service recorded in high volume call areas. They were *less likely* to be stopped compared to White citizens after considering all other available factors.
- Hispanic citizens were 2.4 times *more likely* than White citizens to be handcuffed during a pedestrian stop. No other statistically significant differences emerged regarding detention actions received by minority citizens during pedestrian stops.
- Hispanic and Asian citizens were *less likely* to receive a no report required outcome compared to White citizens after controlling for all other available factors.
- For field interviews, Hispanic and Asian citizens were *more likely* to receive this outcome compared to White citizens after considering all other available factors.
- The analysis of traffic citations found no statistical differences across citizen racial/ethnic groups in the likelihood of receiving this outcome after controlling for all other available factors.
- No statistical differences were found in the likelihood that minority citizens received a criminal citation compared to White citizens after considering all other available factors.
- Minority citizens were statistically indistinguishable from White citizens with regard to their likelihood of an arrest or an arrest by warrant after considering all other available factors.

- No statistical relationship was discovered between citizen racial/ethnic groups and the likelihood of a search or the discovery of contraband following a search during a pedestrian stop.

Recommendations

The SJPD currently collects only a limited amount of information on stops, and some units (e.g. Traffic Unit) do not capture information on each individual stopped. The SJPD should modify its data collection protocols so that relevant information is collected on each stop made. It should also consider expanding the data fields that it collects, which would allow for a more complete statistical analysis and allow research analysts to better model the factors that influence police stops and stop outcomes, including detention actions, searches, arrests, and citations among others. Additional data collection will soon be mandated by California AB 953, and this presents an opportune time for the SJPD to revise its data collection methods and protocols. A complete set of data collection recommendations appears in Appendix B of this report.

The SJPD also should consider developing the capacity, either internally or through a contracted analysis team, to identify racially or ethnically disparate stop patterns by individual officers and to proactively address such patterns if they emerge through early intervention and training. Commonly known as "internal benchmarking," this approach recognizes that racial disparities in stops are often driven by the stop practices of a relatively small number of officers who can be identified and positively influenced to reduce overall disparities. The SJPD has recently taken some positive steps through training to raise awareness among its officers of implicit biases they may hold. In the future, the SJPD also should evaluate and adopt evidence-based training for improving police-citizen interactions and reducing the influence of discriminatory factors, such as race and ethnicity, in contacts with citizens. Finally, the SJPD should engage with the community in discussing the results of this and future stop data analysis reports, and it should develop the capacity to disseminate better and more relevant information about crime patterns and trends in the city, including citizen calls for service, and how those patterns intersect with race and ethnicity.

3. LITERATURE REVIEW

Over the past two decades, public interest in racially-biased policing has increased. This has been accompanied by a proliferation of research on the topic. Researchers have focused especially on the nature of police contact with citizens in routine traffic and pedestrian stops. In some cases, access to data on police stops has been facilitated by state laws that require the collection of driver race and other information on some or all traffic stops. In other cases, law enforcement agencies have been required to collect data on stops because of a settlement in a lawsuit or as the result of a consent decree entered into with the U.S. Department of Justice. Finally, some agencies, like the San Jose Police Department, have facilitated research into racially-biased policing by voluntarily collecting data on each traffic or pedestrian stop made by their officers. These data generally include information on the reasons for the stop, the race or ethnicity of the driver or pedestrian, and any actions taken as a result of the stop (e.g., citations, arrests, searches) (Ridgeway, 2010).

With access to the appropriate information, researchers have been able to conduct analyses that often reveal patterns of racial disproportionality in police stops and stop outcomes, which may, in turn, help agencies understand where and why disparities are occurring so that they can take steps to reduce or eliminate them. Ultimately, it is rarely possible to say, based on aggregate statistical analyses, whether individual police officers make decisions based on race or if racial disparities in policing result from systematic bias. Factors such as racial differences in driving behavior, offending, demeanor or resistance, or differential police deployment offer alternative explanations. The data needed to control for or rule out non-racially-biased explanations for observed racial disparities often are not collected or are impractical to obtain. Even while taking into account race-neutral explanatory factors, research has shown mixed results regarding whether minority citizens are stopped, searched, arrested, or subjected to the use of force more often than non-minorities. Within individual studies, researchers may find conflicting outcomes when using one analytical method versus another.

The purpose of this literature review is to discuss the findings from a selection of the most comprehensive and methodologically rigorous studies of racial bias in police stops. It is not intended to serve as a comprehensive review of *all* reported studies, but rather it is designed to summarize the findings and methodological challenges revealed in some of the most significant studies of racial profiling conducted to date.

Benchmarks

In order to evaluate the degree to which law enforcement may initiate traffic and pedestrian stops that disproportionately target specific racial groups, it is not sufficient to simply examine the percentage of stops that target minorities (i.e., calculate that 35% of stops involved Black drivers or pedestrians). Instead, it is necessary that researchers determine the extent to which different racial and ethnic groups would be represented in stops if no racial bias was present. Namely, one must find a measure of the racial and ethnic proportions of the population available or at risk to be stopped (i.e., the composition of the drivers or pedestrians who are in the locations where the stops occur). This measure is commonly referred to as a *benchmark*. Choosing an appropriate benchmark

has been the most controversial aspect of racial profiling research (Ridgeway & MacDonald, 2010) and provides the greatest challenge for researchers.

Walker (2003) proposed that an effective benchmark should accomplish three main goals. First, it must be scientifically credible; it must be able to stand up to peer review. Second, a good benchmark must have practical utility. It should be able to provide insight into any findings. Third, a benchmark should have political credibility. Namely, it must take context into account and be recognized as valid by stakeholders. Withrow and Williams (2015) added to these criteria that a benchmark should also take into account the measurement challenges that exist within the research context.

Benchmarking Traffic Stops

Traditionally, the most commonly used benchmark in studying racial profiling in traffic stops has been census data of the residential population. Researchers will often limit the comparison to persons of driving age (i.e., older than 15 years of age) or use drivers' license data (Tillyer, Engel, & Cherkauskas, 2010). This approach is popular because it is relatively easy to procure this information. In nearly every other regard, census data fails as a benchmark. The largest problem is that residential census data are unlikely to capture who is actually driving in a given area (Novak, 2004; Tillyer, Engel, & Cherkauskas, 2010). It cannot account for the presence of out-of-area drivers or how driving patterns may vary by race. Additionally, this benchmark does not account for actual driving behavior. Rather, it assumes that different ethnic groups violate driving laws at the same rate (Ridgeway& MacDonald, 2010).

Because of the problems inherent in this approach, other benchmarks have been developed. Among these is the use of red light cameras and aerial patrols to capture the race of those found to be violating traffic laws. These measures have the advantage of being race-blind, as they measure objective behaviors (e.g., speeding, running red lights). They also are advantageous in that they measure an actual traffic violation and thus target the population that is available and at risk to be stopped. On the other hand, they cannot account for other behaviors that contribute to stop risk, such as driving quantity (Tillyer, Engel, & Cherkauskas, 2010), seatbelt usage, or equipment violations (Ridgeway & MacDonald, 2010).

Another way to measure the racial composition of the driving population is via observation (Alpert, Smith, & Dunham, 2004). Observation offers the advantage of capturing the actual driving population, and it is also able to capture offending behavior (e.g., speeding). The main drawback to this approach is that it is expensive and time-consuming, although Lovrich et al. (2007) found that the use of digital photography can reduce costs. Another problem is that observers may not be able to differentiate between races beyond designating drivers as Black or non-Black (Alpert, Smith, & Dunham, 2004). Finally, because of the cost of deploying teams of observers to count cars and violators and record drivers' race/ethnicity, field observation typically provides a snapshot only of drivers in small or well-defined geographic areas such as at specific intersections or along stretches of a well-traveled highway.

One particularly promising benchmarking method involves the use of collision data (Lovrich et al., 2007; Withrow & Williams, 2015), or, more specifically, information about not-at-fault drivers (Alpert, Smith, & Dunham, 2004). This method is advantageous because it models a theoretically random event - when an individual is involved in an accident as a not-at-fault driver; therefore, the composition of not-at-fault victims should accurately represent the racial composition of the driving population. It should also account for driving frequency and exposure to police supervision rates. These data also have the advantage of being easy to obtain, and Lovrich et al. (2007) found it to be a better benchmark than observation data when measuring the Hispanic driving population. The main limitations of this approach are that not all crash data include the race of the involved drivers, some jurisdictions limit the type or severity of crashes that are investigated, and sometimes it is not evident that one driver is fully at fault (Tillyer, Engel, & Cherkauskas, 2010).

Another potential method of measuring racial profiling is examining the difference between the racial compositions of nighttime versus daytime stops (Grogger & Ridgeway, 2006). This approach assumes that it is harder to determine the race of a driver when there is less light, and thus nighttime stops should be more race-neutral compared to daytime stops. If this is true, racial disparities may be evident if the composition of stops differs between daytime and nighttime hours. However, this benchmark may be problematic as there is no direct measure to determine how changes in daylight affect the ability to detect race. Additionally, ethnic groups may vary in driving patterns, such as what time of day or night they are most likely to drive.

One additional way to investigate racial profiling is through the use of internal benchmarks (Ridgeway & MacDonald, 2010). In this method, the activities of a given police officer are compared to those of other officers working similar assignments at the same times and in similar locations. These comparisons are meant to reveal whether or not certain officers treat individuals of certain racial groups differently or more harshly than others and may reveal whether observed, aggregate racial disparities are the result of the activities of a few biased police officers. However, this method will be rendered useless, and may actually mask racial profiling, if the problem is systematic and all or most of the officers in an agency disproportionately stop minority individuals.

Benchmarking Pedestrian Stops

As with traffic stops, census data is frequently used as a benchmark when studying racial profiling in pedestrian stops (i.e., stops and frisks, discussed in greater detail below). The same problems discussed above are also problematic with the use of census data for this purpose. Fagan (2010) demonstrated that the use of census data as a benchmark for pedestrian stops can be enhanced by controlling for other, non-racial features of an area. In New York City, Fagan examined whether NYPD officers stopped minorities more frequently than their representation in the population of New York's police precincts. He used controls at the precinct level for known crime rates, socio-economic status, percent foreign-born, age distribution, and patrol strength. Including this additional information is advantageous as it allows one to demonstrate whether the racial composition of an area predicts the number of minority citizen stops after controlling for other, non-race factors that might also predict police stops.

In response to the limitations associated with using census data, some researchers have used data on arrests and crime suspect descriptions as a marker of the population that should be the focus of pedestrian stops. Ostensibly, the racial composition of those stopped should mirror the proportions of minorities represented in arrestees or the proportion of suspects described as belonging to minority groups (Ridgeway & MacDonald, 2010). However, these benchmarking methods also have methodological weaknesses. The use of arrest data, for instance, is problematic because if minority individuals are disproportionately targeted for arrest, then arrest data will reflect this disparity. Additionally, arrests may not occur in the same area in which a crime was committed.

The use of suspect data also has limitations. For instance, many reported crimes lack suspect descriptions. Fagan (2010) also noted that in New York City less than one out of four stops were actually based on a match between the person being detained and a suspect description known to the police. Additionally, the majority of people stopped in New York were never charged with a criminal offense, which suggests that the racial composition of those suspected of a crime was a poor predictor of arrest among those who were stopped (*Floyd v. City of New York*, 2013). Nonetheless, the evidentiary standard for conducting a pedestrian stop is quite low – reasonable suspicion – and, therefore, it is to be expected that most pedestrian stops will not result in a criminal sanction (*Terry v. Ohio*, 1968). Although not without its methodological weaknesses, the racial composition of criminal suspects (not of arrestees) in a given geographic area, when available, remains a logical benchmark for those at risk for being stopped.

Another possible benchmark for pedestrian stops is citizen calls for service (CFS). When citizens observe criminal activity and call emergency lines to request an immediate police response, these calls represent a potential benchmark for pedestrian stops. In some cases, these calls for service include callers' descriptions of suspects' race, which can serve as an indicator of who is suspected by citizens of being involved in criminal activity (Engel, Smith, & Cullen, 2012). Engel, Smith, and Cullen, for example, used CFS as a benchmark for the racial composition of outside drug arrests made by the Seattle Police Department. A strength of CFS data is that they are not biased by the police. Additionally, these data may account for differences in exposure to police, as police departments often deploy more officers to areas with higher CFS demands. Limitations of this benchmark relate to errors in citizens' perception of race as well as the possibility that citizens themselves may have racial biases.

Traffic Stops

When examining racial disparities in traffic stops, there are two important features to observe. First, we are concerned with the initial stop decision (i.e., who do police pull over and for what reasons). Second, we are interested in disparities in post-stop outcomes (e.g., whether a stop results in a citation being issued). In the following sections, we review studies that discuss racial profiling as it relates to the initial stop decisions as well as post-stop outcomes.

The Initial Stop Decision

In evaluating possible racial bias in traffic stops, researchers and other stakeholders are often interested in officers' initial decisions to stop drivers. As discussed in the Benchmarking section

above, it is necessary to compare the proportion of people stopped in a particular racial or ethnic group of interest to a baseline measure of the population of those persons available to be stopped. It is evident that findings of racial disparities vary depending on what benchmark is used. This highlights the importance of considering the strengths and weaknesses of each benchmark, and of using multiple benchmarks, if possible, when studying racial bias in traffic stops.

One of the earliest studies of racial disparities in traffic stops examined stops made on the New Jersey turnpike between 1988 and 1991 in response to several lawsuits alleging racial discrimination (Lamberth, 1994). Using observational data as a benchmark, Lamberth found that while only about 13.5% of the total driving population observed along a stretch of the highway was Black, the population of stopped motorists in this area was approximately 35% Black. This study indicated that Black motorists were stopped disproportionately to their representation among drivers observed within a defined stretch of the New Jersey turnpike.

Observational data were also used as a benchmark by the Alpert Group (2004) in its study of racial disparities in officers' decisions to conduct traffic stops in Miami-Dade County. Specifically, researchers from the Alpert Group observed the race of traffic violators at several key locations in Miami-Dade County. Unlike Lamberth's (1994) findings in New Jersey, the Alpert Group found no evidence that police stopped Black drivers at a rate greater than found for observed violations. Another early study by Smith and Petrocelli (2001) was carried out in Richmond, Virginia. Police traffic stop data was collected over a six-week period and then analyzed using census data as a benchmark. The census data was adjusted so as to only include the population of residents age 16 and older, to reflect the population of people eligible to drive. Using this method, Smith and Petrocelli found that relative to age-adjusted census data, the stop rate for Black motorists was nearly 50% greater than that for White motorists.

When using census data or community driving population as a benchmark, most studies showed that African-American drivers were over-represented in the number of stops made (Greenwald, 2011; Illinois Department of Transportation, 2014; Lovrich et al., 2007; Renauer, Henning, & Covelli, 2009). In their examination of traffic stops made in Portland, Oregon between 2004 and 2008, Renauer, Henning, and Covelli also found that Hispanic motorists were over-represented relative to their presence in the population. Smith et al. (2004) conducted a large-scale study of traffic stops in North Carolina between spring of 2000 and 2001 using the state's licensed driving population as a benchmark. They found that African-Americans were somewhat over-represented compared to their proportion of the licensed driving population. In another influential study, Rojek, Rosenfeld, and Decker (2004) used a modified census benchmark and found that in Missouri, Hispanic motorists were actually under-represented, but Black motorists were over-represented. As discussed in the Benchmarking section above, census or licensed driver data, although readily available, is no longer considered a valid benchmark for traffic stops because subsequent research has shown it to be a poor estimate for the racial composition of drivers in a given area.

Conversely, when researchers in Cincinnati used the veil of darkness method, comparing daytime stops to nighttime stops, no evidence of racial profiling was found. In a study of traffic stops in

Cincinnati in 2008, Ridgeway (2009), compared the racial distribution of stops made during daytime to that of stops made at nighttime. Recall that if stops were the result of racial profiling, we would expect to see more stops of minorities during daytime hours when race is more visible. Ridgeway took advantage of Daylight Savings Time (DST) to account for potential differences in the times different races were more likely to drive. Namely, they were able to compare weeks where it was still daylight at 6:30 P.M. to weeks where it was dark before 6:30 P.M. Using this method, Ridgeway found no evidence of racial bias.

Similarly, Lovrich et al. (2007), in a review of stops made by the Washington State Patrol between November 2005 and September 2006, found that Black motorists were actually under-represented in daytime stops. Likewise, other researchers also found that African American drivers were more likely to be stopped at night as opposed to during daylight hours (Renauer, Henning, & Covelli, 2009; Ridgeway, 2009; Worden, McLean, & Wheeler, 2012). Evidence of racial bias when using radar-based stops as a benchmark[2] was less clear, with Lovrich et al. (2007) finding no evidence of over-representation of Blacks, Native Americans, Asians/Pacific Islanders or East Indians in self-initiated stops made by the Washington State Patrol compared to stops due to radar. They did, however, find that Hispanics were over-represented in one of 34 Autonomous Patrol Areas (APAs).[3]

In Lovrich et al.'s (2007) study of the Washington State Patrol, calls for service (CFS) and vehicle assists were also used as a benchmark. Theoretically, these are "blind" benchmarks, as they potentially serve as an unbiased estimate of the racial composition of the driving population on the interstate highways. They found no evidence that minorities were over-represented in officers' initial stop decisions compared to CFS or vehicle assists and only one area in which Asians/Pacific Islanders were over-represented.

In addition to the observational data described earlier, the Alpert Group (2004) also used crash data as a benchmark in Miami-Dade County. Using this denominator, they found that while Black motorists were not over-represented in predominantly Black areas, they were over-represented among drivers stopped in non-Black and racially mixed areas. Also using collision data as a benchmark, Lovrich et al. (2007) found that there were no APAs in which minorities were over-represented.

Post-Stop Outcomes

Post-stop outcomes can also serve to examine potential racial bias in police stops of citizens. For example, if researchers find that of all motorists stopped, Black motorists were significantly more likely than White motorists to have their vehicles searched by police after controlling for other factors that could influence the decision to search, then this could provide evidence of biased policing. Post-stop outcomes of interest include citations issued (whether or not citations were

[2] The idea here is that radar stops, where the vehicle is identified at a distance beyond the line of sight of the radar operator, offer a potentially unbiased estimate of the racial composition of speeders in a given geographic area.

[3] Analyses were carried out at both the statewide and individual Autonomous Patrol Area (APA) levels.

issued, how many citations were issued), searches, hit rates, arrests, and use of force. Post-stop outcomes are especially useful to examine for racial disparities, as they do not require the use of an external benchmark. Because of the difficulty and/or expense of obtaining valid benchmark data, some studies, such as that by Engel et al. (2012) in Arizona, opt to only examine post-stop data, providing only brief descriptions of initial stop decisions.

A key methodological consideration in analyzing post-stop outcome data is to control, whenever possible, for non-racial factors that may influence the outcome of interest. For example, the severity of the violation that led to a stop is a key predictor of whether the officer will issue a citation to the driver. If one racial group commits serious traffic infractions more frequently than another, then one would expect this racial group to disproportionately receive traffic citations from the police. Accounting for the reason for the stop and/or the severity of the violation is important to help isolate the role that race or ethnicity plays in the decision by the police to issue a citation. For example, in one of the largest and most comprehensive studies of pedestrian and motor vehicle stops conducted in the U.S., researchers in Los Angeles (between the summers of 2004 and 2005), controlled for several factors that may have influenced the post-stop outcomes of searches, citations, and arrests by the LAPD (Alpert et al., 2006). These included controls for encounter characteristics[4], geographic characteristics[5], officer characteristics[6], and suspect characteristics[7]. The LAPD study found that including these control variables in the analyses substantially reduced or eliminated observed racial disparities in the post-stop outcomes.

Findings have been mixed as to whether there are racial disparities in the number of citations issued to drivers. Studies in Cincinnati (Ridgeway, 2009) and Los Angeles (Alpert, 2006) found that Black motorists were actually less likely than similarly-situated White motorists to receive citations. At the same time, the Illinois Department of Transportation (2014) found that minorities were given more citations than White drivers. In a study of traffic stops made by the Arizona Department of Public Safety (DPS) in 2010, Engel et al. (2012) found that Blacks and Hispanics in Arizona were more likely than Whites to receive three or more citations during a given stop. Similarly, in Washington, Lovrich et al. (2007) found that Black drivers were somewhat more likely than Whites to be issued traffic citations as a result of a stop by the Washington State Patrol, with corresponding differences in the number of violations cited and the seriousness of violations. This study of the Washington State Patrol also found that Native Americans, Asians, East Indians, and Hispanics were more likely than White motorists to receive citations in a majority of APAs.

Because differences were found in the number and seriousness of citations for minority drivers, it is possible that these disparities reflect, to some extent, differences in driving behavior. Interestingly, an early study of traffic stops made in North Carolina between June 2001 and March 2002 found that there were greater racial disparities when considering more objective violations (e.g., speeding,

[4] E.g., day, time, reason for stop

[5] E.g., crime rates in the area of the stop

[6] E.g., length of service, type of assignment

[7] E.g., age and gender

expired license plates) than when considering more subjective violations (e.g. driving too close, failure to yield) (Smith et al., 2004). One would expect that if racial bias was causing disparities, those disparities would be most evident in the rates of high discretion citations. These data suggest that differences in post-stop outcomes may result from differences in driving behavior in some jurisdictions.

Searches are another post-stop outcome of interest. When considering searches as indicators of racial bias, it is necessary to consider the varying amounts of discretion that officers have when conducting searches. A low discretion search is conducted when an arrest takes place or when a car is impounded. Because these searches are generally mandatory, they are unlikely to reflect racial bias. In a high discretion search, an officer may ask a driver for permission to search his or her vehicle. These consent searches are more likely to introduce the possibility of racial bias in policing.

Most reported studies indicate that Blacks and other minorities, especially Native Americans, are searched at higher rates than Whites (Lovrich et al., 2007; Zimmerman, 2015; Renauer, Henning, & Covelli, 2009; Illinois Department of Transportation, 2014; Greenwald, 2011; Alpert et al., 2006; Engel et al., 2012; Pickerill, Mosher, & Pratt, 2009). When considering high discretion searches, there is mixed evidence. Engel et al. (2012) found that in Arizona, Black and Hispanic motorists were more likely than White motorists to be asked for consent to search; Alpert et al. (2006) reported similar findings in Los Angeles. The Illinois Department of Transportation (2014) found that African Americans and Hispanics were about twice as likely as Whites to be subjected to a consent search compared to how often they were stopped. At the same time, Lovrich et al. (2007) and Pickerill, Mosher, and Pratt (2009) examined stops made by the Washington State Patrol and found that while there were disparities in how frequently minorities were searched compared to Whites, search rates were similar among racial groups for both low and high discretion searches. In his examination of traffic stops in Cincinnati, Ridgeway (2009) found that officers were actually less likely to conduct high discretion searches of Black drivers than similarly situated non-Black drivers.

One method of studying disparities in officers' treatment of minorities post-stop is through hit rates. Hit rates describe the rate at which searches uncover contraband. The logic behind hit rates derives from an economic theory called the "outcome test" (Fridell, 2004). The idea behind the outcome test is that if sanctions are distributed equitably, without racial bias, then outcomes should be the same for both minority and Caucasian groups. This logic applies to hit rates: if there is racial bias in conducting searches, then one would expect a lower hit rate for minority drivers than for white drivers, reflecting the possibility that officers may have a lower standard of suspicion when deciding to search minorities.

Most reports indicated that hit rates were about the same for White and minority drivers (Ridgeway, 2009; Lovrich et al., 2007; Greenwald, 2011). One study of highway traffic stops in North Carolina found that while African American drivers were stopped at higher rates than White drivers, they also had *higher* hit rates than Whites. However, the Illinois Department of Transportation (2014) found hit rates of 27% for White drivers but only 18% for minority drivers. Similarly, Engel et al. (2012) found that in Arizona, hit rates were lower for Hispanics during discretionary searches; in fact,

Hispanics were over two times less likely that White drivers to have contraband seized following a search. It is important to note that the outcome test is only valid when the decision to search cars is evidence-based. In many cases, searches occur not only based on suspicion, but also incident to arrest or during inventory searches (Engel, 2008). Because these particular types of searches are largely non-discretionary, they are less likely to reflect systematic officer bias.

Another outcome of interest is the rate at which stopped drivers are arrested. One of the earliest studies of its kind focused on police stops and arrests of Black motorists on the New Jersey turnpike (Lamberth, 1994). This study compared arrest rates of Blacks to a baseline of their observed driving population rather than to the arrest rates of other racial groups stopped by the New Jersey State Police. Lamberth found that while Blacks comprised 13.5% of the driving population observed on the turnpike, they accounted for over 70% of all arrests made. While these disparities are striking, they highlight the importance of choosing the correct comparison population.

Comparing the percentage of African American drivers arrested to their proportion of the driving population is an invalid comparison because it does not account for factors that may have caused the higher arrest rates for African Americans independently of police bias. If African American drivers, for example, had a higher rate of outstanding arrest warrants than Whites, then this might have explained their higher arrest rate. A better comparison would have been to compare the arrest rate of Black drivers under conditions of high discretion to the arrest rate of other similarly-situated racial groups.

That said, more recent studies in Los Angeles (Alpert et al., 2006) and Arizona (Engel, 2012) also found that minorities were more likely to be arrested than Whites. An examination of traffic stop data in Missouri found that Black motorists were twice as likely to be arrested in comparison to White motorists (Rojek, Rosenfeld, & Decker, 2004). On the other hand, Alpert et al. (2006) found that arrest disparities were no longer significant once low-discretion arrests were removed from analyses (e.g. warrant arrests, DUI arrests, etc.). Similarly, the Alpert Group (2004) found that in Miami-Dade, Black drivers were more likely to be arrested but that most of this disparity was due to Black motorists being more likely to have warrants compared to other racial groups. They concluded that this could not be an indicator of racial bias because officers have no discretion in deciding whether or not to arrest individuals with warrants. Additionally, an earlier study by Smith and Petrocelli (2001) found that in Richmond, Virginia, Blacks were more likely than White motorists to receive warnings, while White motorists were more likely to be arrested.

Few studies address differences in use of force. In their study of stops made by the Washington State Patrol, Lovrich et al. (2007) were able to analyze data on use of force for part of 2005 and with enhanced data for 2006-2007. Lovrich et al. differentiated between different levels of severity of force. These included low levels of force (e.g., verbal commands), moderate levels of force (e.g., escorts, Taser, chemical), intermediate levels of force (e.g., total limb control, take down), and high levels of force (e.g., lethal force). By doing this, they were able to examine not only if the rates of use of force were different for minority drivers, but also if there were disparities in the level of force used. Enhanced data from 2006-2007 included the behavior of the stopped motorist (e.g., passive

resistance, active resistance), allowing researchers to examine if there was evidence of disproportionate use of force. Ultimately, Lovrich et al. found no evidence of a relationship between race and the Washington State Patrol's use of different levels of force.

Pedestrian Stops

Terry v. Ohio (1968) created the legal conditions under which a police officer can perform a stop and frisk; a "Terry stop" can be conducted when an officer has reasonable suspicion that a suspect has either committed a crime, is in the process of committing a crime, or intends to commit crime. Additionally, if the officer determines the suspect is armed and dangerous, he or she can perform an external pat down of the suspect's outer garments to check for weapons. Originally intended to enhance officer safety, and with the full support of the Supreme Court despite numerous 4th and 14th Amendment challenges (Pufong & Kluball, 2009), this tactic blossomed into a full blown policing strategy in the wake of the publication of the "broken windows" treatise espoused by Wilson and Kelling (1982). Most notably, the NYPD's implementation of "quality of life policing" in the 1990s made extensive use of stop and frisk to target low-level, socially disruptive crime and take guns off of the street (Bratton & Knobler, 1998). The results were seemingly astonishing, with felonies reduced by approximately 80% during that decade (twice the rate of other major cities) and continuing to stay at that low level or decrease even further in the post-2000 period (Zimring, 2011).

Despite the reported success of stop and frisk, allegations of a racially biased application of the tactic flourished. These claims were validated by a New York Attorney General's report which asserted that Blacks and Hispanics were stopped at significantly higher rates than Whites (after controlling for differing crime rates) across all crime categories and, overwhelmingly, those stops did not result in an arrest (Spitzer, 1999). In the wake of that report, the Center for Constitutional Rights (CCR) filed a class action lawsuit against the NYPD, alleging that its stop and frisk policy violated both 4th Amendment protections (officers routinely lacked reasonable suspicion) and the 14th Amendment's Equal Protection Clause (officers conducted stop and frisk based on race or national origin). Ultimately, the city settled the case in 2003 by way of a consent decree and agreed to implement an anti-racial profiling policy and actively audit officers who engage in stop and frisk (*Daniels v. City of New York,* 2003*)*. Realizing that the NYPD was largely disregarding the settlement agreement, the CCR again filed suit in 2008 against the NYPD on the same grounds, culminating in the city agreeing with the plaintiffs, dropping its appeal and agreeing to new reforms and monitoring (*Floyd v. City of New York,* 2013*)*.

Consistent with these rulings, the preponderance of empirical research supports the assertion that stop and frisk, as practiced by the NYPD, runs counter to equal protection under the law (Fagan, 2010, 2012; Fagan et.al. 2010; Gelman et. al., 2007). Additionally, studies examining the extent to which stop and frisk tactics are racially biased tend to support the claim that non-Whites are disproportionately targeted by the police (Avdija, 2014; Gelman et. al., 2007; Rojek, Rosenfeld & Decker, 2012).

The Initial Stop Decision

One study by Gelman, Fagan, and Kiss (2007) used two separate benchmarks to assess disparities in pedestrian stops in New York. First, they examined stop rates in comparison to the overall population. Using census data, they found that while Blacks and Hispanics only represented 26% and 24% of the population, respectively, they represented 51% and 33% of stops made. As a second benchmark, they used estimated rates of crime committed by each ethnic group. In order to estimate crime rates, they used arrest rates (what proportion of arrests made involved minorities as opposed to White pedestrians). Comparing the ratio of pedestrian stops made to arrest rates by ethnicity, they found that Blacks were stopped 23% more often than Whites and that Hispanics were stopped 39% more often than Whites. Like most benchmarks, those used by Gelman, Fagan, and Kiss have limitations. Census data provides an estimate of the *residential* population of a given area, which may be quite different than the population of pedestrians out on the street who are engaging in activities likely to result in stops by police. Likewise, using arrest data as a benchmark is an exercise in circular reasoning. If police arrests are racially biased, then comparing the population of persons stopped to this benchmark is inherently flawed. The overrepresentation of minorities in stops by the NYPD, even when compared to arrests, is thus all the more striking and suggestive of possible racial bias (Gelman, Fagan, & Kiss, 2007).

In a separate study of stop and frisk practices in New York City (Ridgeway, 2007), raw data indicated that 89% of stops involved minorities, with 53% of stops involving Black suspects and 29% involving Hispanic suspects. Based on their representation in the residential census, Blacks were stopped at a 50% greater rate than would be expected. However, when using crime-suspect descriptions as a benchmark, Ridgeway found that Black pedestrians were actually stopped at a 20%-30% lower rate than would be expected, while Hispanics were over represented by 5% to 10%. In addition to crime-suspect descriptions, Ridgeway also used arrest rates as a baseline measure and found that Black pedestrians were stopped at about the same rate as would be expected, while Hispanics were slightly over-represented. These data highlight how the use of different benchmarks can result in dramatically different findings. At bottom, a benchmark for pedestrian stops should provide a reasonably valid estimate of the population of persons available and at risk for being stopped in a given geographic area.

In his expert witness report in support of a class action lawsuit against the NYPD, Fagan (2010) disputed the validity of Ridgeway's (2007) analysis of stop and frisk data in New York City. In his own analysis of data from over two million pedestrian stops, Fagan used the residential population of NYPD police precincts as his primary benchmark, controlling for precinct-level socioeconomic conditions, crime, and police deployment. He came to the conclusion that Black and Hispanic pedestrians were stopped more frequently than White pedestrians, a conclusion that the federal district court judge agreed with in ruling in favor of the plaintiffs against the city (CITE to Floyd v. New York).

The American Civil Liberties Union (ACLU, 2015) conducted an examination of stop and frisk practices in Chicago and also found evidence of racial disparities. Using census data as a

benchmark, they found that while Blacks account for only 32% of Chicago's population, they make up 72% of pedestrian stops by the Chicago Police Department. While the ACLU believes these findings indicate racial bias, the use of census data as the only benchmark makes it impossible to say with certainty whether or not these differences result from police bias.

Post-Stop Outcomes

Post-stop outcomes of interest include arrests, searches, use of force, and seizure of contraband. In a study of post-stop outcomes in Los Angeles, Alpert et al. (2006) found that pedestrians were 78.6% more likely than drivers to be arrested. While their analysis did not directly compare arrest rates of minority and White pedestrians, their findings generally indicate a higher likelihood of arrest resulting from pedestrian stops as compared to traffic stops.

Fagan (2010) found that Blacks were 31.4% more likely than White suspects to be arrested versus summonsed. However, the rates of arrests differed depending on what type of crime was suspected (e.g., weapon offenses vs. reference of property stops). Due to a lack of readily available data on reasons for arrests or summonses in New York, it is impossible to say if the difference in arrest rates resulted from differences in suspects' behavior or possible racial profiling by the NYPD.

Conversely, in their earlier study of stop and frisk practices in New York, Gelman, Fagan, and Kiss (2007), found that stops of Black and Hispanic pedestrians were less likely than stops of White pedestrians to result in arrest. Gelman, Fagan, and Kiss suggested that based on the concept of the outcome test (described in the previous section), this may indicate police bias in deciding who to stop. Namely, police could be using lower thresholds of suspicion to stop minorities or they could perceive minorities' behavior as more threatening than that of Whites.

In their study of post-stop outcomes in Los Angeles, Alpert et al. (2006) found that pedestrians were over three times as likely as drivers to be subject to pat-downs or frisks. In a separate review of data on stop and frisk practices in New York City, Ridgeway (2007) noted that while 45% of Black and Hispanic suspects were frisked, in comparison to 29% of White suspects, White suspects were 70% more likely than Black suspects to have a weapon on them. This changed however when controls were added to adjust for stop circumstances[8]. When comparing only similarly situated Black and White suspects, the degree of disparity was diminished, such that hit rates were 6.7% for White pedestrians and 5.6% for similarly situated Black suspects.

Fagan (2010) also examined whether minorities were more likely than White suspects to be subjected to use of force. He found that force was far more likely to be used against Black (24.12%) and Hispanic (24.75%) suspects than against White suspects (17.85%). These rates indicate that force was 14% more likely to be used in stops of Black suspects compared to White suspects and 9.3% more likely for Hispanics. Ridgeway (2007) found that force was likelier to be used against Black suspects, but to a much smaller degree (the rate of use of force was 1.5% higher for Black

[8] Controls included factors such as the location of the stop, whether or not the suspect had been reported by a witness, suspect behavior (e.g. appearing to be casing or acting as a lookout), etc.

than for White suspects).

Summary and Conclusion

The research findings on racial disparities in police stops and stop outcomes are mixed. While many studies show evidence of racial disparities in the initial traffic stop decision, some do not, and the choice and/or availability of the benchmark can have a significant effect on the findings. The UTEP Center for Law and Human Behavior (CLHB) team plans to use two benchmarks for traffic stops – not-at-fault drivers in traffic collisions and a comparison of daytime to nighttime stops. Both of these benchmarks are theoretically grounded and have been used in previous, methodologically rigorous studies.

Findings regarding racial disparities in the initial *pedestrian stop* decision are also mixed and are not nearly as numerous as studies of traffic stops. Again, the benchmark chosen can have a significant impact on the findings. When researchers from the RAND Corporation used crime suspect descriptions as a benchmark for pedestrian stops by the NYPD, they found that Blacks were actually *underrepresented* compared to their percentage among crime suspects, while Hispanics were somewhat overrepresented. In contrast, Fagan (2010) found significant overrepresentation of minorities (Blacks and Hispanics) among NYPD pedestrian stops using an adjusted census-based benchmark for his analysis. The UTEP CLHB team will evaluate the possibility of using *both* of these benchmarks in its analysis of SJPD pedestrian stops. We are confident that we can replicate and even improve upon Fagan's census-based benchmark, but we are hopeful that the reported crime data and/or calls for service data that we obtained from the SJPD will contain a sufficient number of suspect descriptions that include race and/or ethnicity to serve as a useable benchmark as well. We do not believe that arrest data are an appropriate benchmark for pedestrian stops because they may themselves reflect systematic police bias. Therefore, we will not use arrest data as a benchmark for pedestrian stops.

The findings on racial disparities in post-stop outcomes are relatively consistent (with some exceptions) and typically reveal that minority drivers and/or pedestrians are cited, searched, or arrested more often than similarly-situated Whites. The availability and quality of data, particularly fields that identify (1) the reason for the stop, search, and/or arrest, (2) evidence or contraband found following a search, and (3) the arrest or citation charge, often make a difference in the degree of racial disparity revealed. In Los Angeles, for example, racial search and arrest disparities were reduced or eliminated when low discretion searches and/or arrests were accounted for in the analyses. The findings on racial disparities in the use of force following a stop are less consistent in the literature. The UTEP team will perform analyses of all post-stop outcomes available in the data collected by the SJPD and will note the limitations in the data (and thus in our analysis) where appropriate.

4. DATA OVERVIEW & ANALYTIC PLAN

The purpose of this project is to identify patterns or trends in the San Jose Police Department's (SJPD) limited detention data that may reveal racial and/or ethnic disparities in police stops or actions taking during the course of the stop. To accomplish this goal, data from several sources were accessed including the limited detention data, calls for service, and reported crime from the SJPD. The research team also retrieved collision data from the State of California for benchmarking purposes and downloaded Census data to further develop measures that reflect the composition of San Jose police districts and neighborhoods. Each of these datasets are described in detail in this section, and an overview of the analytic strategy is also presented.

Limited Detention Data

The limited detention data (LDD) reflect all vehicle and pedestrian stops initiated by SJPD officers during the study period. The LDD include information on the race/ethnicity of the citizen, encounter characteristics (i.e., date and time, type of encounter, reason for the stop, detention related information, geographic location of the stop, and the stop outcome or resolution), and an officer identifier. LDD were provided to the research team from the SJPD for all officer-initiated contacts with citizens between September 1, 2013 and March 31, 2016. The initial step in data analysis is to assess the quality of the data. To accomplish this, a data audit was conducted in spring 2016. An initial *Limited Detention Data Audit Report* was submitted to SJPD in June 2016. This report analyzed data provided for SJPD activity between September 2013 and February 2016.[9] The original audit report is included in Appendix A of this report, but the following section outlines the basic findings of the audit.

Limited Detention Data Audit

The data audit offered an assessment of the strengths, weaknesses, and logical inconsistencies within the data that may impact the subsequent analyses. A data audit can be undertaken at various levels of intensity.

1. Level 1: This is an initial assessment of how much information is *missing* or represented by *incorrect information* on fields of interest/variables.[10] For example, a Level 1 analysis would indicate how many stops[11] in the limited detention data were missing information on a citizen's gender. This assessment would also include an identification of responses that do not conform to acceptable responses based on the codebook provided by the SJPD. For example, a case that contains a 'Z' to reflect a citizen's race/ethnicity would be categorized as incorrect information because that code does not correspond with any pre-identified racial/ethnic group as defined by the SJPD.
2. Level 2: A more advanced data audit includes an assessment of whether there is *missing* information across variables (i.e., fields of interest). For example, there are three variables

[9] Subsequent to the completion and submission of the Limited Detention Data Audit Report, data for March 2016 became available. As such, all subsequent analyses for this report include this additional month of data.

[10] Fields of interest are also referred to as variables.

[11] Each stop is also referred to as a case in the data. Thus, stops and cases are used interchangeably.

that record information on detentions. By logic and policy, any one case should have information recorded on the reason for the detention, the detention type, and the detention disposition. This is important because cases cannot be comprehensively analyzed when there is missing information on fields of interest. A level 2 data audit would identify cases that possess missing information across variables.

3. Level 3: The highest level of data audit involves examining the *logical inconsistencies* across variables. In other words, this assessment considers the substance of each variable in relation to other variables in the same case. Using the detention variables as an example, it would be logically inconsistent for the detention reason variable to indicate "No Curb, Handcuff, or Police Vehicle" but the detention type variable to indicate "Curb Sat". If a citizen was "curb sat", there should be a reason provided for why this action was undertaken by the officer. Again, this is important to ensure that the subsequent analyses are performed on the most robust and accurate data available.

The initial data audit applied a Level 1 & 2 assessment on the limited detention data and associated officer information. Here is a summary of the findings from the initial data audit (see Appendix A for the full report):

- LDD was provided to the research team based on SJPD activity from September 2013 through February 2016. The LDD included 97,714 stops conducted by the SJPD and additional information on 1,021 officers was also provided.
- An assessment of the limited detention data revealed that 11.3% of the cases were missing information on the fields of interest.
- The officer data contained missing or duplicate information in 2.5% of the cases, resulting in valid information for 994 officers.
- Linking the limited detention data and officer information revealed that 23.5% of the stops could not be associated with officer characteristics. Thus, the limited detention data were reduced from 97,714 cases to 74,594 valid cases.[12]
- When considering both the missing information and the linkage with officer information, 66.3% (64,831) of the limited detention data would have been available for future analyses.

The research team communicated several data limitations to the SJPD during the data audit process. As a result, the SJPD provided one additional month of data (March 2016) and a revised list of SJPD officers and their relevant characteristics (age, race, years of service, etc.) to the research team. After applying a Level 3 audit to the full data set provided (September 2013 – March 2016), the final data set (see the Limited Detention Data section below) contained 86,364 cases available for analysis and reduced the percentage of missing cases to 8.6%.

Calls for Service Data

Calls for service (CFS) data were obtained from the City of San Jose from September 2013 through March 2016 and comprised 8,833,144 data entries. These data reflect situations in which citizens call

[12] This rate of missing information was vastly reduced after discussions with SJPD command staff and receipt of new officer information. Specific information is provided below.

the police for assistance with regard to specific problems that often occur outdoors and are correlated with pedestrian stops: prostitution, narcotics, suspicious persons, and disturbances. Due to the substantial number of calls for service, hot spot mapping identified the beats across the city that had elevated rates of these activities.[13] Based on these hot spot analyses, syntax was used to flag entries that potentially contained data on suspect race/ethnicity within the selected beats. This process involved reviewing all qualitative descriptions provided by citizens and identifying the percent of those calls for service that corresponded with racial/ethnic groups of interest. The choice of flags used was determined by going through selections of CFS data and observing what racial/ethnic terms were commonly used. Testing of flags rarely produced false negatives but often produced false positives where flags indicated the presences of suspect race/ethnicity when these data were not present. Because of this, UTEP student research assistants read and manually coded race for suspects in all instances where the syntax flagged a case for suspect race/ethnicity information.

Students reviewed flagged entries and coded suspect race/ethnicity when such data was present. Entries were coded as either 1, denoting White suspects; 2, denoting Black suspects; 3, denoting Hispanic suspects; 4, denoting Asian suspects; and 5, denoting suspects of other races. In some cases, entries contained unclear race/ethnicity information (e.g., "Hispanic or Asian male") or race information on multiple suspects. In cases where race/ethnicity information was unclear, the graduate students used the code 99. When entries contained data for multiple suspects, race/ethnicity was coded according to the majority of persons in the group (e.g., "four White males and one Black male" would be coded as White). In cases where there was an even split for race/ethnicity (e.g., "one White male and one Hispanic male) or no indication of majority (e.g., "White and Hispanic males"), the case was coded as 9, indicating no dominant race/ethnicity.

After coding was completed, frequencies were run to identify how many suspects there were of each race/ethnicity. In some cases, multiple lines of data corresponded to a single event. In order to account for this, the research team aggregated on Event Number to determine how many unique events were examined. These data were then used as a benchmark for pedestrian stops (discussed in detail below).

Reported Crime Data

Criminal suspect information was drawn from San Jose Police Department crime reports between January 1, 2013 and March 31, 2016. The crime reports capture the race/ethnicity of crime suspects reported by citizens and officers in cases where arrests were made. In order to avoid any potential issue of bias in officer decisions to arrest in the data, cases with arrested individuals were excluded from the analysis. This resulted in a reduction of cases for analysis from 9,985 to 8,931 and included only cases where suspect race/ethnicity was identified by citizens. Additional cases were also

[13] Prostitution: Beat 1 - District L, Beat 5 - District S, Beat 6 – District S; Narcotics: Beat 2 –District E, Beat 3 – District E, Beat 1 – District K, Beat 2 – District K, Beat 2 – District C, Beat 3 – District C, Beat 1 – District P; Suspicious Persons: beat 2 – District E, Beat 3 – District E, Beat 1 – District K, Beat 2 – District K; Disturbances: Beat 2 – District E, Beat 3 – District E, Beat 1 – District K, Beat 2 – District K.

eliminated due to missing suspect race/ethnicity information or a lack of information on the police district where the crime occurred. This resulted in 8,472 cases for analysis. The racial/ethnic composition of crime suspects was then calculated for the city as a whole and for each police district. Like the racial composition of suspects in the calls for service data, these rates offer a benchmark for stops of pedestrians.

Collision Data

Unlike many states, the State of California's uniform traffic collision report (CHP 555) includes fields for the race/ethnicity of the drivers involved in traffic collisions. Moreover, California requires all law enforcement agencies in the state, including the SJPD, to report their traffic collision data centrally to the Statewide Integrated Traffic Records System (SWITRS) maintained by the California Highway Patrol. Traffic collisions investigation by a California law enforcement agency and subsequent data reporting are required for any traffic crash that results in an injury or fatality. Although not mandated, CHP also encourages agencies to submit their 555 forms for collisions involving only property damage. It is generally common practice in large agencies around California to submit their 555 forms for all collisions to CHP for inclusion in the SWITRS database (see Wolfe et al., 2015).

The collision data were separated into two groups. One group differentiated between "not-at-fault" and "at-fault" collisions, while the second method of categorization involved separating those that occurred on freeways versus those on city streets. Across the city and within each district, the rate of these collisions by driver race/ethnicity was calculated. These rates offer a benchmark against which the rate of vehicle stops can be compared.

As detailed in the U.S Department of Justice's (USDOJ) Assessment of the San Francisco Police Department (2016)[14], the use of information about drivers in two vehicle collisions to estimate the driving or at-risk (violating) populations in a given area has its roots in the traffic safety literature from the 1960s and 70s (Carr, 1969; Haight, 1970; Koornstra, 1973). In the early 2000s, Alpert, Smith, and Dunham (2004) re-conceptualized and extended this approach and applied it within a racial profiling context. Following the theoretical proposition from Stamatiadis and Deacon (1997) that *not-at-fault* drivers in two-vehicle crashes provide a reasonably reliable estimate of the driving population, Alpert et al. (2004) validated and used the racial composition of not-at-fault drivers as a benchmark for traffic stops made by the Miami-Dade Police Department. Subsequently, the approach has been used in Mundelein, Illinois (Mundelein Police Department, 2016) and the State of Washington (Lovrich et al., 2007), and it has been cited as a "best practice" in racial profiling research (McLean & Rojek, 2016; Tillyer, Engel, & Cherkauskas, 2010). Recently, Withrow and Williams (2015) extended the technique to *at-fault* drivers involved in collisions as a proxy for risky drivers or those more likely to violate traffic laws.

[14] Two members of the UTEP research team (Smith & Tillyer) for this study also were members of the research team that helped produce the San Francisco Police Department assessment report issued by the U.S. Department of Justice's Office of Community Oriented Policing Services (COPS). The San Francisco assessment report examined racial disparities in SFPD traffic stops and uses of force.

Census Data

The U.S. Census was used as a source of information regarding the contextual nature of police-citizen contacts in San Jose. Socio-economic variables, including the racial/ethnic composition of the population, the percent of the population below the poverty line, and the percent of the population between the ages of 15 and 24 were downloaded for use in the multivariate models. These area characteristics were accessed at the census tract level and apportioned to the police district within San Jose. This resulted in a series of socio-economic variables that help account for the district context within which police-citizen contacts occurred.

Table 4-1 outlines a number of key sociodemographic and crime characteristics of San Jose and its 17 police districts. These characteristics include population demographics (race, ethnicity, and age), poverty, income, percent foreign born residents, percent renters, percent female-headed households, percent vacant housing units, the unemployment rate, and the violent crime rate for the city and each of the police districts. These variables are used in a variety of the analyses that appear throughout the report and are important to account for as possible covariates of police stop activity. These data were obtained from the U.S. Census Fact Finder website and reflect data for San Jose from the 2014 American Community Survey and/or 2010 Census. Reported at the census tract level by the U.S. Census Bureau, the data were apportioned to SJPD police districts from San Jose census tracts using spatial weighting techniques. Overall, the population data show San Jose to be a diverse city of approximately 1 million people that includes substantial proportions of White (45.8%), Asian (32.2%), and Hispanic (33.8%) residents. While African-American residents make up only 3.1 percent of the population, the city includes a variety races and ethnicities that comprise another 18.9 percent of the population. From an economic and crime standpoint, the city's highest concentration of citizens living in poverty is in the Central Division, but there are pockets of relatively high unemployment in the Foothill (M district) and Western (L district) divisions as well. The Central Division's D and E districts have the highest violent crime rates in the city followed by the M district from Foothill and the L district from Western Division.

Table 4-1: City and SJPD district characteristics

District	Total pop.	% White	% Black	% Asian	% Other	% Hispanic	% Age 15-24	% Poverty	Mean income	% non-U.S. born	% Renter	% FHH[a]	% Vacant units	Un-emp. rate	Violent crime rate
City-wide	995,646	45.8%	3.1%	32.2%	18.9%	33.8%	13.2%	11.8%	$104,832.70	38.2%	42.6%	5.7%	3.6%	9.7%	0.25
Central															
D District	1,414	42.1%	2.0%	36.5%	19.4%	29.7%	10.9%	21.7%	$84,908.38	39.0%	58.1%	1.4%	4.3%	10.3%	0.73
E District	11,079	52.0%	7.1%	20.8%	20.1%	40.5%	15.3%	20.8%	$89,351.65	33.7%	73.6%	4.4%	11.3%	13.0%	1.76
K District	33,736	48.0%	4.8%	20.3%	26.9%	49.6%	30.1%	27.8%	$66,591.42	36.2%	70.7%	7.5%	5.6%	12.6%	0.44
R District	62,652	22.4%	2.6%	61.0%	14.0%	18.0%	10.6%	8.7%	$113,609.32	53.5%	48.7%	3.1%	4.9%	9.1%	0.21
V District	27,718	49.4%	3.1%	17.5%	30.0%	51.6%	14.3%	17.8%	$88,808.69	32.0%	62.5%	4.0%	2.7%	11.6%	0.29
Foothill															
C District	57,490	38.0%	2.6%	25.7%	33.7%	65.8%	16.2%	18.6%	$72,658.82	50.6%	43.2%	11.2%	1.8%	12.4%	0.41
M District	44,851	32.3%	2.6%	34.4%	30.7%	55.4%	13.5%	21.4%	$62,641.17	52.5%	60.3%	8.1%	2.5%	12.6%	0.44
P District	91,803	29.4%	2.7%	54.0%	13.9%	26.4%	13.2%	8.8%	$126,877.12	45.0%	22.7%	4.2%	2.7%	10.7%	0.21
W District	81,303	28.9%	2.6%	44.9%	23.6%	33.9%	13.3%	10.2%	$99,888.38	44.0%	32.1%	4.9%	2.2%	10.2%	0.15
Southern															
A District	85,332	64.2%	2.3%	23.0%	10.5%	15.2%	11.4%	5.1%	$139,591.04	28.0%	28.4%	4.0%	2.9%	7.2%	0.13
T District	78,415	68.5%	2.5%	15.0%	14.0%	22.5%	10.2%	6.7%	$128,688.32	20.4%	30.5%	4.4%	3.3%	8.4%	0.10
X District	82,964	50.0%	4.0%	30.5%	15.5%	42.2%	14.5%	11.8%	$89,281.28	39.7%	43.2%	8.2%	3.3%	9.6%	0.21
Y District	76,716	60.3%	3.1%	21.3%	15.3%	30.1%	11.2%	6.4%	$119,586.28	26.6%	26.9%	6.3%	3.5%	9.1%	0.15
Western															
F District	47,146	55.7%	4.1%	15.8%	24.4%	34.6%	11.1%	12.8%	$105,690.11	27.2%	58.2%	6.4%	5.4%	9.3%	0.25
L District	69,973	34.7%	3.2%	41.7%	20.4%	42.6%	14.3%	19.5%	$72,464.06	47.6%	49.8%	9.6%	4.2%	12.2%	0.43
N District	88,051	44.8%	2.6%	41.5%	11.1%	19.5%	11.9%	8.9%	$115,044.48	42.8%	50.4%	4.9%	3.7%	7.2%	0.12
S District	55,003	59.8%	4.3%	10.8%	25.1%	41.6%	11.1%	14.1%	$107,641.81	27.3%	54.6%	4.8%	4.2%	8.1%	0.30

[a]FHH refers to percent female-headed households.

Analytic Strategy

The specific research questions to be addressed in this project are as follows:

1. Do citizens of a specific race/ethnicity experience disproportionate vehicle and/or pedestrian stops?
2. Do citizens of a specific race/ethnicity experience disproportionate treatment during the encounter (i.e., detention) or at the conclusion of a stop (i.e., citations, arrests, searches, etc.)?

Answering these questions involves similar, but slightly different, approaches based on the nature of the data available.

Vehicle & Pedestrian Stops

With regard to stops, descriptive statistics are used to summarize the frequency of occurrence. Next, bivariate analyses offer an assessment of how the distribution of citizen racial/ethnic groups is represented across vehicle and pedestrian stops. While these statistics are informative, the nature of stop data requires a comparison or benchmark to properly interpret disparity. For instance, if 50% of all vehicle stops involve Hispanic drivers, that number needs to be compared against the expected rate of stops for that group to assess whether or not there is disproportionality. Frequently, the Census population of a jurisdiction is used as a benchmark; however, simple comparisons of the racial/ethnic composition of stops to the Census population are problematic. The most significant limitation to this benchmark is that it assumes the residential population (as represented in the Census data) reflect the actual risk of being stopped by SJPD officers. This is an inaccurate assumption for a variety of reasons including, but not limited to, the inability of the Census data to reflect the frequency of driving and the type of driving undertaken which could put a citizen at risk of being stopped. In short, using the census population as a benchmark for vehicle stops is not recommended or appropriate (please see Alpert, Smith, & Dunham, 2004 or Fridell, 2004, 2005 for more information). Similarly, the use of Census data is not an appropriate benchmark for pedestrian stops.

For vehicle stops, two benchmarks are used. The first benchmark uses traffic collision data. In order to benchmark the racial composition of *at-fault* and *not-at-fault* drivers involved in two-vehicle crashes against the racial/ethnic composition of vehicle stops made by the SJPD, 36 months of San Jose traffic collision data reported to the California Highway Patrol by either the CHP or the SJPD was obtained. These data involve more than 10,000 two-vehicle crashes that occurred from January 1, 2013 through December 31, 2015 (2016 SWITRS data were not used because they are not yet publicly available as of the writing of this report). Traffic crash data was compared to police stop data with not-at-fault drivers serving as an estimate of the *driving population* in the city, while at-fault drivers represented an estimate for those who *violate* traffic laws. If SJPD officers disproportionately stop minority drivers, a higher percentage of minority stops would be expected compared to the percentage of minority drivers involved in traffic collisions (USDOJ, 2016).

A second benchmarking approach uses the LDD and compares the racial composition of vehicle stops made under conditions where police reasonably could identify the driver's race prior to the stop against the racial composition of stops where the police might be unable to determine the

driver's race before initiating the stop. In 2006, Grogger and Ridgeway pioneered a method in Oakland, CA employing this approach, which they labeled the "behind the veil of darkness" method for identifying racial disparities in police traffic stop practices. Ridgeway subsequently used this method in Cincinnati, Ohio (2009), and others have used it in Minneapolis, Minnesota (Ritter & Bael, 2009), Syracuse, New York (Worden, McLean, & Wheeler, 2010), and Greensboro and Raleigh, North Carolina (Taniguchi et al., 2016a, 2016b).

Following Grogger and Ridgeway (2006) and others, the "veil of darkness" method was used to compare the racial composition of vehicle stops made during daylight hours to the racial composition of stops made at night when, theoretically, San Jose police may be less likely to see the driver's race prior to initiating a traffic stop. The veil of darkness method makes use of natural changes in lighting, as well as daylight savings time, which occur over the course of a year. Using sunset and civil twilight (dusk) times published for San Jose by the Naval Observatory, stops were coded as occurring either during the day (before sunset) or at night (after the end of civil twilight). For example, a stop made at 7 p.m. in December or January would be a nighttime stop, while a stop made at 7 p.m. in June or July would be a daytime stop because of the variation in daylight that takes place across the seasons. This method focuses on the "inter-twilight" period of each day, or the period between 4:50 p.m. when the sun sets at its earliest during the year and 9:07 p.m. when civil twilight ends at its latest. Following Grogger and Ridgeway (2006), the roughly half-hour period after sunset but before the end of civil twilight when it is not clear if a stop occurred during daylight or at night was excluded. Limiting the analysis to the inter-twilight period reduces the chances that the racial composition of the driving population might vary significantly between day and night (Grogger & Ridgeway, 2006). In sum, the veil of darkness method compares the racial composition of daytime stops to that of nighttime stops across the year and between the hours of 4:50 p.m. and 9:07 p.m. If racial profiling is occurring, a higher percentage of minority drivers stopped during the day would be expected (when driver race/ethnicity is theoretically more visible) compared to at night (USDOJ, 2016).

In addition to reporting the percentages of stops by racial/ethnic group conducted during the daytime and nighttime, a logistic regression equation was also estimated that predicts the odds that a traffic stop occurred during the day versus the night (1 = day stop, 0 = night stop). This model explores whether driver race/ethnicity was associated with the odds of being stopped during a particular time of day after controlling for other relevant factors. Specifically, a host of stop, officer, and district characteristics are considered that may partially explain day versus night stop behavior. Each of these variables are discussed in more detail below. This logistic regression model offers an assessment of whether Blacks, Hispanics, or Asians were more or less likely to be stopped by the SJPD during the daytime relative to Whites (consistent with a racial profiling hypothesis), net of other factors that may explain such an outcome.

For pedestrian stops, two benchmarks are used. The first benchmark compares reported violent crime suspects to pedestrian stops. In this comparison, the percentage of each racial/ethnic group is calculated from the crime suspect data and assessed in relation to the percentage of each racial/ethnic group represented in pedestrian stops. A second benchmark uses the racial

composition of reported suspects in selected calls for service (drug-related, disturbances, prostitution, and suspicious persons) to compare against the percentage of each racial/ethnic group in pedestrian stops.

To further assess the relationship between citizen race/ethnicity and pedestrian stops, a series of logistic regression models were estimated. These models offer evidence as to whether any of the citizen racial/ethnic groups differ in their likelihood of a pedestrian stop net of other relevant variables.

Stop Activities

To answer the second research question, actions undertaken during the stop and those taken to conclude the stop (vehicle and pedestrian) are investigated. Actions undertaken during the stop include whether or not a citizen's freedom of movement was restrained beyond the stop itself. Such actions may include curb sitting, handcuffing, or sitting a citizen in a police vehicle. At the conclusion of a police-citizen encounter, a number of different outcomes could occur, including not issuing a report, conducting a field interview, issuing a citation (traffic and criminal), initiating an arrest (with and without a warrant), and/or conducting a search. Within the stops that resulted in a search, further analyses examined whether contraband was discovered and whether such a discovery varied by citizen race/ethnicity. Analyses of these "outcomes" (i.e., detention and/or other actions undertaken at the conclusion of a stop) followed a series of steps. Initially, the racial/ethnic group distribution was examined across all post-stop outcomes, which provided a descriptive snapshot of whether race/ethnicity was associated with any of the post-stop outcomes. Thereafter, a series of multivariate, multilevel regression models were estimated to assess whether a driver's race/ethnicity was associated with the odds of receiving the specific outcome, net of the influence of other driver, officer, and district characteristics. This type of modeling is a useful tool in identifying whether a relationship between driver race/ethnicity and stop outcomes remains when other potentially influential factors are considered. In short, these models allow for a simultaneous assessment of all available factors that may influence a specific outcome. Importantly, these models are only as accurate as the information available. One known limitation is that other factors not measured may confound the results. For example, citizen behavior or demeanor may influence the decision an officer makes when concluding the encounter. Unfortunately, no information was available on this factor, and as such, the stop outcome findings are only accurate if this unmeasured factor exerted no influence over the officer's decision-making. This fact reinforces the critical nature of collecting complete and accurate information on all police-citizen encounters.

One further complication inherent in the data is that they are hierarchical, which requires more complex modeling techniques to reflect the nested nature of the data. As previously discussed, a single officer frequently initiates more than one stop within the LDD, and similarly, more than one stop occurs within any single district. Furthermore, a single officer may initiate stops across districts over the course of the study period. As a result, multilevel, cross-classified models were estimated to properly account for stop-level, officer-level, and neighborhood level factors that may be associated with specific outcomes. In short, the results of the multivariate, multilevel models provide empirical evidence regarding whether citizen race/ethnicity was related to any of the stop (e.g. curb sitting,

handcuffing) and post-stop (e.g. arrest, search, citation) outcomes analyzed while also considering the impact of officer and district characteristics.

For the purposes of analysis, each of the outcome variables were coded in a dichotomous fashion with each outcome given a Yes/No (1 = yes, 0 = no) identifier depending on whether that specific outcome occurred within any single stop. It is important to note that all these categories are mutually exclusive with the exception of a search. In other words, when officers record stop outcomes, they are trained to record the most serious action taken. Thus, a traffic stop resulting in a citation and an arrest would be identified as an arrest in the subsequent analyses.

The factors potentially associated with outcomes include stop, officer, and district characteristics. Based on the LDD, the multivariate models presented below considered driver race/ethnicity with a series of dummy variables: *White*, *Black*, *Hispanic*, *Asian*, and *Other* (1 = yes, 0 = no). Non-Hispanic Whites served as the reference category (i.e., they were omitted from the multivariate equations). Accordingly, all race/ethnicity coefficients should be interpreted in relation to non-Hispanic Whites. Reason for the stop was also collected and represented with a series of dummy variables reflecting: a *consensual* stop, a *vehicle code* violation, a *municipal code* violation, a *penal code* violation, or a *watch bulletin* (1 = yes, 0 = no). Consensual stops were the omitted category, and all reason for the stop coefficients in the regression models should be interpreted in reference to non-moving violations.

The LDD also contain information about the characteristics of the officer who conducted the traffic stop. To account for the possibility that officer characteristics may partially explain actions undertaken during the stop, several factors are considered. First, officer race/ethnicity was measured with a series of dummy variables: *Black* (1 = yes, 0 = no), *Hispanic* (1 = yes, 0 = no), *Asian* (1 = yes, 0 = no), and *other* (1 = yes, 0 = no). Non-Hispanic Whites serve as the reference category. *Male* (1 = yes, 0 = no) was included in the models to control for officer gender. *Years of service* is a continuous variable that captures officers' years of law enforcement experience.[15]

Finally, district-level structural characteristics were included. Within each model presented below, the violent crime rate of the district in which the stop took place was included. This factor was included because it can potentially influence officer behavior within neighborhoods. The percentage of the population below the poverty line and the percentage of the district population between the ages of 15 and 24 (*% young*) were also included. It is important to account for these factors because each factor may be independently associated with contextual risk during a traffic stop and shape officer behavior within the encounter.

[15] We excluded officer age from the multivariate models because it was highly correlated with years of service.

5. LIMITED DETENTION DATA

This chapter outlines initial decisions undertaken by the research team to prepare the limited detention data for analysis. It specifically outlines the number of cases removed from further consideration and the reasons why these cases were removed. It also summarizes the general characteristics of the limited detention data received from the San Jose Police Department.

Data received from the SJPD from September 1, 2013 through March 31, 2016 included 100,277 cases.[16] As outlined in the Limited Detention Data Audit Report, an assessment of the data is a critical initial step that involves multiple components prior to data analyses. Assessing the data for missing information (i.e., Levels 1 & 2) on the following variables: date and time, geographic location (agency location and map coordinates), reason for the stop, call type, citizen race/ethnicity, encounter outcome (search, arrest, etc.), detention information, and officer ID resulted in the loss of 11,378 cases and left 88,899 cases for analysis.

Officer information was received for 1,827 officers (i.e., cases). When officer information was merged with limited detention data, a total of 88,550 cases contained complete information on all relevant variables (encounter and officer variables). An additional 2,186 cases were found to be logically inconsistent when applying logical rules across variables. In particular, the Reason for Detention and Detention Type variables were analyzed in this Level 3 assessment of the data.

In addition to cases removed because of missing data shown in Table 5-1, another 3,045 cases were removed because they identified as initiated during a selective enforcement detail. The research team learned during focus group interviews with the Traffic Unit that when motorcycle officers engage in special enforcement operations that involve, for example, radar enforcement at a particular location, officers will stop multiple cars in quick succession and issue citations to the drivers without reporting limited detention data for each driver stopped. Instead, because of the pace of the stops, officers will wait and report demographic and stop outcome data to the police dispatcher for a group of drivers (e.g. 4 White males and 1 Hispanic Female). The Traffic Officers acknowledged that this practice introduces the possibility of significant error into the limited detention data for special enforcement detail stops. As a result of this practice and the possibility of error in the data, the research team eliminated the special enforcement detail stops from the analysis. This left a total of **83,381 cases** available for analysis with no missing information, no logical inconsistencies, and no special enforcement cases.

Out of the initial total of 100,277 stops reported by the SJPD from September 1, 2013 through March 31, 2016, 13.9[17] percent of the cases were removed prior to the analysis because of data

[16] Note this reflects an increase in overall cases compared to those analyzed in the Limited Detention Data Audit Report (Appendix A - submitted to SJPD in June 2016) because one additional month (March 2016) of data was received after submission of the data audit report.

[17] This rate does not include selective enforcement stops and is calculated by dividing 86,364 by 100,277 (and multiplying by 100).

problems. Ideally, no more than **five percent** of police stops captured by the SJPD should have missing or other data problems associated with them.[18]

Table 5-1: Missing Data

	Total Cases	Missing		Available for Analysis
Limited Detention Data	**N**	**N**	**%**	**N**
Date & Time (year, month, day)	100,277	0	0.0	100,277
Organizational Unit				
Divisions	100,277	2,697	2.7	97,580
Districts	100,277	1,722	1.7	98,555
Beats	100,277	1,484	1.5	98,793
Reason for the Stop	100,277	4,979	5.0	95,298
Call Type (combined from initial and final)	100,277	0	0.0	100,277
Citizen Race/Ethnicity	100,277	5,560	5.5	94,717
Search	100,277	5,600	5.6	94,677
Detention				
Reason	100,277	8,580	8.6	91,697
Type	100,277	7,104	7.1	93,173
Disposition	100,277	4,755	4.7	95,522
Badge Number	100,277	140	0.1	100,137
X/Y coordinates (Geographic Locator)	100,277	0	0.0	100,277
Sub-Total Available for Analysis	**100,277**	**11,378**	**11.3**	**88,889***
Non-Matched LDD and Officer Data (based on 1,827 officers)	88,889	349	0.1	88,550
Internal Inconsistencies between Reason and Type (Level 3 analysis)	88,550	2,186	2.5	86,364
Selective Enforcement Cases	86,364	3,045	3.5	83,381**
Final Total Valid for Analysis				**83,381**

*The "Sub-Total Available for Analysis" reflects the total number of cases available for analysis based on a cumulative assessment of missing information on all variables. A single case may have missing information on multiple variables, thus, the total missing is less than the sum of all individual variables. These do not reflect the final number of cases available for analysis, as they do not include officer information and inaccurate values or inconsistent entries.
**62 cases were initiated as a result of the selective enforcement detail and also contained a level 3 inconsistency.

[18] See the Data Audit appendix for details.

Table 5-2 provides a breakdown of the 83,381stops by type of stop, year, and location. At 33,963, the SJPD recorded the most stops in 2014, while 2015 was slightly lower at 29,107 stops. The stops for 2013 (September – December) and 2016 (January – March) reflect partial years and thus are much lower than the complete years of 2014-15. The majority of stops made by the SJPD in any given year are traffic stops; about two-thirds of stops are traffic stops, and about one-third are pedestrian stops. Across the study period, the Foothill and Western Divisions recorded the most stops, and at the district level, the C district and L district had the most stops. Districts that recorded the fewest number of stops include the T, N, and A districts.[19]

Table 5-2: Descriptives – Date & Location

	Total Cases (N=83,381)		Traffic (N=53,337)		Pedestrian (N=25,033)	
Limited Detention Data	**N**	**%**	**N**	**%**	**N**	**%**
Date						
2013	13,361	16.0	8,496	15.9	4,075	16.3
2014	33,963	40.7	21,463	40.2	11,125	44.4
2015	29,107	34.9	19,629	36.8	8,454	33.8
2016	6,950	8.3	3,749	7.0	1,379	5.5
Organizational Unit						
Central Division	17,248	20.7	9,753	18.3	6,795	27.1
Foothill Division	27,091	32.5	18,602	34.9	6,150	24.6
Southern Division	15,099	18.1	10,442	19.6	3,810	15.2
Western Division	23,493	28.7	14,540	27.3	8,278	33.1
D District, Central	21	0.0	12	0.0	8	0.0
E District, Central	5,047	6.1	2,477	4.6	2,383	9.5
K District, Central	4,579	5.5	2,334	4.4	2,054	8.2
R District, Central	3,875	4.6	2,579	4.8	1,128	4.5
V District, Central	3,726	4.5	2,351	4.4	1,122	4.9
C District, Foothill	10,600	12.7	7,241	13.6	2,406	9.6
M District, Foothill	9,008	10.8	5,865	11.0	2,294	9.2
P District, Foothill	4,410	5.3	3,327	6.2	824	3.3
W District, Foothill	3,073	3.7	2,169	4.1	626	2.5
A District, Southern	2,673	3.2	1,887	3.5	679	2.7

[19] The D district reflect police contacts that involved officers assigned to the Airport.

T District, Southern	2,064	2.5	1,442	2.7	521	2.1
X District, Southern	6,583	7.9	4,379	8.2	1,732	6.9
Y District, Southern	3,779	4.5	2,734	5.1	878	3.5
F District, Western	3,026	3.6	1,921	3.6	986	3.9
L District, Western	10,342	12.4	6,519	12.2	3,189	12.7
N District, Western	2,481	3.0	2,501	2.8	853	3.4
S District, Western	8,094	9.7	4,599	8.6	3,250	13.0

NOTE: Truant (N = 2,196) and Other (N = 2,815) call types were not analyzed.

Figure 5-1 shows the trend in the number of stops conducted per month over the course of the study period. The graph shows a moderately decreasing trend in the number of stops. The monthly high occurred in November 2013 when the SJPD conducted more than 3,750 stops. During the last month of the study (March 2016), that number has dropped to about 2,500. This decreasing trend is likely the result of the decline in the number of SJPD officers available to make stops during the study period.

Figure 5-1: Police-Citizen Contacts by Month

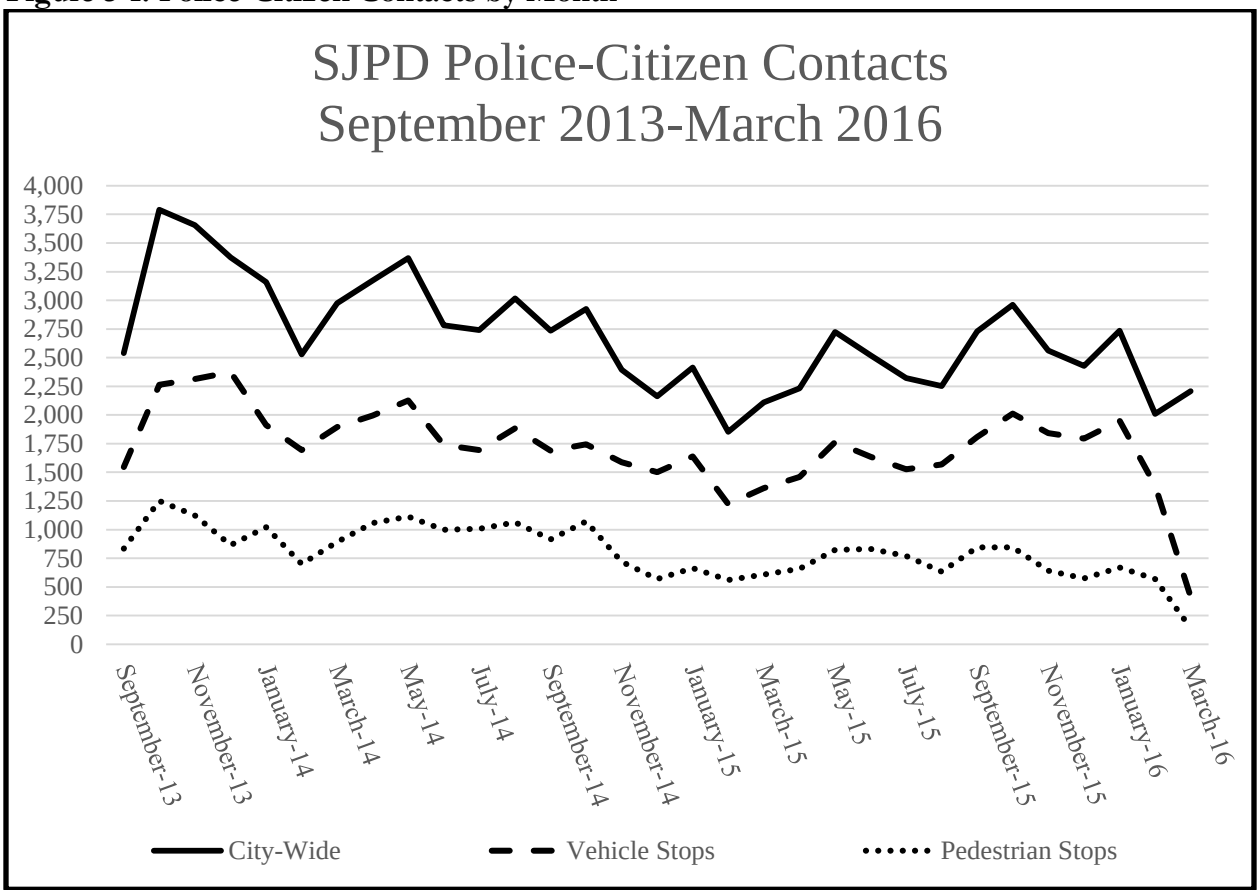

Table 5-3 breaks the stops down by type and by race/ethnicity. Overall, the data show that the SJPD made about twice as many traffic stops as pedestrian stops. The most common reason for both traffic and pedestrian stops was a vehicle code violation. While stopping a pedestrian for a vehicle code violation sounds counterintuitive, in California, there are number of California Vehicle Code provisions that impose duties on pedestrians (e.g. yielding the right of way to vehicles outside of a crosswalk, crossing between signal-controlled intersections) that could serve as the basis for a pedestrian stop if a violation was observed. In addition to vehicle code violations, a significant percentage of both traffic (8%) and pedestrian (22.2%) stops were recorded as "Consensual." From a race and ethnicity standpoint, Hispanic citizens comprised the largest percentage of persons stopped at 57% of all stops. Whites comprised the next highest percentage of persons stopped (17.4%) followed by Asians (9.5%) and Blacks (9.7%).

Table 5-3: Descriptives – Contact & Citizen Information

	Total Cases (N=83,381)		Traffic (N=53,337)		Pedestrian (N=25,033)	
Limited Detention Data	**N**	**%**	**N**	**%**	**N**	**%**
Call Type						
Vehicle	53,337	64.0	--	--	--	--
Pedestrian	25,033	30.0	--	--	--	--
Truant	2,196	2.6	--	--	--	--
Other	2,815	3.4	--	--	--	--
Reason for the Stop						
Consensual	6,688	8.0	822	1.5	5,559	22.2
Municipal Code Violation	4,737	5.7	355	0.7	4,098	16.4
Penal Code Violation	6,081	7.3	554	1.0	3,200	12.8
Vehicle Code Violation	63,858	76.6	50,669	95.0	11,252	44.9
Watch Bulletin	905	1.1	288	0.5	529	2.1
Unknown	1,112	1.3	649	1.2	395	1.6
Citizen Race/Ethnicity						
White	14,531	17.4	8,649	16.2	5,265	21.0
Black	8,103	9.7	4,220	7.9	3,439	13.7
Hispanic	47,542	57.0	30,045	56.3	14,210	56.8
Asian	7,899	9.5	6,527	12.2	1,007	4.0
Other	3,326	4.0	2,591	4.9	537	2.1
Unknown	1,980	2.4	1,305	2.4	575	2.3

NOTE: Truant (N = 2,196) and Other (N = 2,815) Call Types were not analyzed.

Table 5-4 shows the outcomes of stops, whether a stop resulted in a limited detention (handcuffed, curb sat, etc.), and the reason for the limited detention. The most common outcome of a stop was "no report required," indicating that the person was released without being cited, searched, or arrested. Overall, 63% of stops resulted in the citizen being released with no action taken. Besides "no action taken," the most common outcome of a traffic stop was either a search (24%) or a citation (21%). In addition, 8.7% of traffic stops resulted in a criminal citation, and 2.6% resulted in an arrest. For pedestrian stops, 7.6% resulted in a criminal citation, and 5.5% resulted in an arrest. In most cases, a citizen who was stopped was not subjected to a further limited detention such as being handcuffed or made to sit on a curb (83.6%). Altogether, approximately 16.3% of stops resulted in a limited detention. The most common reason given for a limited detention was "safety concerns" by the officer (60% of stops resulting in a limited detention).

Table 5-4: Descriptives – Outcomes & Detentions

	Total Cases (N=83,381)		Traffic (N=53,337)		Pedestrian (N=25,033)	
Limited Detention Data	**N**	**%**	**N**	**%**	**N**	**%**
Incident Outcomes						
No Report Required	52,596	63.1	33,568	62.9	17,446	69.7
Filed Interview Completed	2,600	3.1	834	1.6	1,675	6.7
Traffic Citation	12,424	14.9	11,176	21.0	875	3.5
Criminal Citation	6,900	8.3	4,626	8.7	1,890	7.6
Arrest	5,141	6.2	1,386	2.6	1,385	5.5
Arrest by Warrant	2,274	2.7	899	1.7	1,278	5.1
Other/Unknown	1,446	1.7	848	1.6	484	1.9
Search	27,645	33.2	12,927	24.2	12,988	51.9
Evidence Discovered	4,312	15.6	1,904	14.7	2,016	15.5
Detention Reason						
None	69,669	83.6	47,032	88.2	19,075	76.2
Flight Risk	909	1.1	310	0.6	540	2.2
Medical Condition	86	0.1	47	0.1	36	0.1
Safety Concerns	8,236	9.9	3,843	7.2	3,721	14.9
Weapons/Violence	113	0.1	46	0.1	58	0.2
Other/Mixed	4,368	5.2	2,059	3.9	1,603	6.4
Detention Type						
None	69,669	83.6	47,032	88.2	19,075	76.2
Curb Sat	5,263	6.3	2,579	4.8	2,430	9.7
Handcuffed	5,789	6.9	2,483	4.7	2,931	11.7
Sat in Police Vehicle	2,621	3.1	1,220	2.3	586	2.3
Other/Mixed	39	0.0	23	0.0	11	0.0

NOTE: Truant (N = 2,196) and Other (N = 2,815) Call Types were not analyzed.

Table 5-5 indicates that Patrol officers made the majority of stops (83.9%) followed by VCET (gang enforcement) officers (4.7%). SJPD officers making stops were overwhelmingly male (93.8%), and the majority were White (51%) or Hispanic (23.1%).

Table 5-5: Descriptives – Officer Information by Stops

	Total Cases (N=83,381)				Traffic (N=53,337)		Pedestrian (N=25,033)	
Officer Information	**Min**	**Max**	**Average**	**%**	**Average**	**%**	**Average**	**%**
Unit								
Patrol	0	1	--	83.9	--	86.8	--	85.0
Violent Crime (VCET)	0	1	--	4.7	--	4.2	--	6.2
Metro	0	1	--	2.5	--	2.3	--	3.4
Traffic	0	1	--	2.7	--	4.0	--	0.2
Truancy	0	1	--	3.1	--	0.3	--	0.8
Downtown Service	0	1	--	0.9	--	0.5	--	1.9
Other	0	1	--	2.0	--	1.9	--	2.5
Number of Stops	1	797	265.98	--	256.68	--	277.27	--
Male Officer	0	1	--	93.8	--	93.1	--	95.3
Officer Race/Ethnicity								
White	0	1	--	51.0	--	51.4	--	51.2
Black	0	1	--	2.7	--	2.9	--	2.4
Hispanic	0	1	--	23.1	--	22.9	--	24.3
Asian	0	1	--	13.5	--	13.2	--	11.9
Other	0	1	--	9.7	--	9.5	--	10.3

NOTE: Truant (N = 2,196) and Other (N = 2,815) Call Types were not analyzed.

Table 5-6 provides a further breakdown of SJPD officer demographics. Note this table differs from the previous table because it reports on the characteristics of the officers (N=1,827) as opposed to the number of stops. Mirroring those making stops, the great majority of SJPD officers are male (91.1%). SJPD officers average 34 years of age and just under 7 years of service.

Table 5-6: Descriptives – Officer Information

	Min	Max	Average	%
Male Officer	0	1	--	91.1
Officer Race/Ethnicity				
White	0	1	--	56.0
Black	0	1	--	4.4
Hispanic	0	1	--	24.2
Asian	0	1	--	9.3
Other	0	1	--	6.1
Length of Service	0	31	6.66	--
Officer Age	22	65	34.42	--

6. VEHICLE STOPS

Chapter 6 summarizes the analyses undertaken to examine vehicle stops initiated by the San Jose Police Department during the study period. Initially, characteristics of the vehicle stops are summarized and benchmark comparisons are presented to assess whether the racial/ethnic composition of vehicle stops deviates from the estimated pool of drivers or traffic violators at risk for being stopped. A multivariate model was also estimated and results are reported on the nature of vehicle stops during the inter-twilight period. Chapter 6 also reports on analyses of stop activities, such as detentions, citations, arrests, and searches. These results progress from descriptive statistics through bivariate analyses and conclude with multilevel models to identify characteristics that correlate with the likelihood of a specific stop activity occurring.

Vehicle Stop Results

Table 6-1 shows the racial/ethnic composition of motorists stopped by the SJPD. Approximately 57% of drivers stopped were Hispanic, 16.8% were White, and 12.6% were Asian. Black motorists comprised 8.1% of those stopped.

Table 6-1: Distribution of Vehicle Stops by Driver Race/Ethnicity

Driver race/ethnicity (N=49,839)	Number of stops	Percent of stops
White (non-Hispanic)	8,373	16.8
Black (non-Hispanic)	4,046	8.1
Hispanic*	28,641	57.5
Asian	6,295	12.6
Other	2,484	5.0

* Includes Hispanics of any race.
2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.

Table 6-2 reports the racial composition of traffic stops by police district. Two districts in Foothill Division (C & M) had the highest concentration of Hispanic motorists stopped (more than 70%) while District E in the Central Division showed the highest concentration of Black motorists stopped (13.5%). Stops of White motorists were highest in the Southern Division districts of A and T. Stops of Asian motorists were highest in District P (Foothill Division) and District R (Central Division).

Table 6-2: Distribution of Vehicle Stops by Driver Race/Ethnicity by SJPD District

District (N=49,839)	Percent of White Veh Stops	Percent of Black Veh Stops	Percent of Hispanic* Veh Stops	Percent of Asian Veh Stops	Percent of Other Veh Stops
Central					
D District (Airport) (N = 12)	25.0	8.3	33.3	16.7	16.7
E District (N = 2,370)	23.1	13.5	44.2	11.7	7.6
K District (N = 2,198)	14.5	11.1	62.8	8.3	3.3
R District (N = 2,310)	16.9	10.8	43.4	20.4	8.4
V District (N = 2,128)	18.1	7.9	57.7	10.7	5.6
Foothill					
C District (N = 6,627)	5.6	4.9	75.5	10.9	3.3
M District (N = 5,488)	6.7	5.2	73.0	11.7	3.3
P District (N = 3,035)	10.2	6.2	53.3	24.3	6.0
W District (N = 2,049)	13.3	6.2	55.7	19.6	5.3
Southern					
A District (N = 1,826)	43.9	6.7	33.7	7.3	8.5
T District (N=1,390)	43.8	8.1	33.9	8.3	6.0
X District (N=4,168)	15.5	8.6	61.7	10.2	4.1
Y District (N=2,640)	33.2	9.2	43.4	8.1	6.1
Western					
F District (N=1,827)	30.2	10.9	40.9	10.6	7.4
L District (N=5,937)	11.5	7.9	59.3	18.0	3.4
N District (N=1,438)	22.3	8.6	44.6	15.0	9.6
S District (N=4,396)	21.0	11.5	56.9	6.1	4.4

* Includes Hispanics of any race.
2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.

Benchmarking

While descriptive statistics offer an initial overview of how vehicle stops were spread across racial/ethnic groups, they are somewhat limited in their ability to answer the key research questions. For example, the fact that Hispanic drivers represent 57.5% of all vehicle stops during the study period is not particularly meaningful unless it is compared against the percent of Hispanic motorists expected to be stopped during that time period. As previously outlined (see Chapter 4), the current

study employs two benchmarks to use as comparisons for the vehicle stop data: collision data and day/nighttime data.[20]

Collision Data Benchmark – Not-At-Fault

The following tables explore Black, Hispanic, and Asian rates of vehicle stops in relation to their representation in the "not-at-fault" collision data. The collision data were split into two different groups for further comparison. One benchmark reflects the "not-at-fault" collisions that occurred on any roadway within the geographic area patrolled by the SJPD. A second benchmark only reflects collisions on non-freeways within the same geographic area. This second benchmark was created based on the following logic. Comparing the rate of collisions (by racial/ethnic group) indicated that these groups were differentially represented on freeways compared to city streets. For example, the percent of "not-at-fault" collisions involving Black drivers on any road across the city was 4.6%, whereas this same rate changes to 5.3% when only city streets are examined (see Table 6-3). This difference suggests that these roadways have different types of drivers. Importantly, based on the focus group discussions undertaken with SJPD personnel, it became clear that the significant majority of vehicle stops occur on city streets. Thus, the benchmark based on city streets only may offer a preferred benchmark to the all roads benchmark. Throughout this chapter, both benchmarks are presented in each table for comparison purposes and transparency. All comparisons were tested for statistical significance and annotated with an asterisk(s) when statistically significant at the .05 level or below (less than a five percent chance that the difference observed was the result of chance).

Table 6-3 compares the percent of vehicle stops involving a Black citizen to the percent of Black citizens involved in "not-at-fault" collisions on all roads and city streets only. These percentages are presented at the city and district level. Overall, the percent of Black citizens stopped (8.1%) exceeded both of the collision data benchmarks (4.6% and 5.3%, respectively). In short, Black citizens were between 1.9 and 1.6 times more likely to be stopped compared to their representation in the collision data. At the district level, nine of the seventeen districts demonstrated a similar pattern. Note that stops made by the VCET unit were excluded from these benchmark comparisons on the ground that the VCET unit's primary mission is gang enforcement. According to focus groups interviews with VCET and other SJPD personnel, gangs are racially and ethnically based in San Jose, which likely skews the racial composition of VCET stops.

[20] Please refer to Chapter 3 for a full description of these two approaches including their use in previous studies.

Table 6-3: Comparison of Vehicle Stops to "not-at-fault" Collisions (Black)

District (N = 49,839)	Percent of Vehicle Stops of Black Citizens	All Roads & Freeways		City Streets Only	
		Percent of "not-at-fault" Collisions of Black Citizens	Odds ratio	Percent of "not-at-fault" Collisions of Black Citizens	Odds ratio
City-Wide	8.1	4.6***	1.85	5.3***	1.58
Central					
D District (Airport)	8.3	11.1	--	12.5	--
E District	13.4	7.0*	2.05	7.0*	2.05
K District	11.1	5.7**	2.07	5.7**	2.07
R District	10.8	4.0***	2.90	3.9***	3.00
V District	7.9	3.6***	2.30	3.5†	2.33
Foothill					
C District	4.9	5.6	--	7.2	--
M District	5.2	3.6	--	3.4	--
P District	6.2	6.2	--	6.2	--
W District	6.2	5.3	--	5.3	--
Southern					
A District	6.7	4.4†	1.57	4.2†	1.65
T District	8.1	4.2***	1.99	4.4*	1.90
X District	8.6	7.2	--	7.3	--
Y District	9.2	4.5***	2.15	7.0	--
Western					
F District	10.9	3.6***	3.26	6.2*	1.86
L District	7.9	5.5†	1.48	5.5†	1.48
N District	8.6	5.6	--	5.7	3.95
S District	11.5	5.6**	2.18	5.4**	2.29

2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

For Hispanic citizens, Table 6-4 indicates that this ethnic group comprised 57.5% of all vehicle stops compared to 34.4% and 42.8% of "not-at-fault" collisions that occurred on all roads or city streets only, respectively. This pattern also appears in 14 of the 17 districts. In sum, Hispanic citizens were between 2.6 and 1.8 times more likely to be stopped compared to their representation in either collision benchmark.

Table 6-4: Comparison of Vehicle Stops to "not-at-fault" Collisions (Hispanic)

District (N = 49,839)	Percent of Vehicle Stops of Hispanic Citizens	All Roads & Freeways		City Streets Only	
		Percent of "not-at-fault" Collisions of Hispanic Citizens	Odds ratio	Percent of "not-at-fault" Collisions of Hispanic Citizens	Odds ratio
City-Wide	57.5	34.4***	2.57	42.8***	1.80
Central					
D District (Airport)	33.3	22.2	--	12.5	--
E District	44.2	46.5	--	46.5	--
K District	62.8	54.5**	1.41	54.5**	1.41
R District	43.4	42.4	--	42.9	--
V District	57.7	21.1***	5.10	50.4†	1.35
Foothill					
C District	75.5	42.1***	4.24	65.3**	1.64
M District	73.0	57.6***	1.99	57.8***	1.97
P District	53.3	43.0**	1.51	43.0**	1.51
W District	55.7	51.0†	1.21	51.1†	1.20
Southern					
A District	33.7	26.5**	1.41	26.7**	1.39
T District	33.9	26.7***	1.41	22.9***	1.73
X District	61.7	40.7***	2.35	41.1***	2.31
Y District	43.4	31.5***	1.66	31.6**	1.66
Western					
F District	40.9	29.5***	1.65	42.4	--
L District	59.3	50.5***	1.43	50.5***	1.43
N District	44.6	19.4***	3.34	20.0***	3.23
S District	56.9	44.4***	1.66	44.8***	1.63

2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Table 6-5 indicates that Asian citizens were represented in 12.6% of all vehicle stops compared to 22.8% and 19.2% of "not-at-fault" collisions occurring on all roads or city streets only, respectively. This pattern also appears in 15 of the 17 districts. In sum, Asian citizens were considerably less likely to be stopped compared to their representation in either collision benchmark.

Table 6-5: Comparison of Vehicle Stops to "not-at-fault" Collisions (Asian)

District (N = 49,839)	Percent of Vehicle Stops of Asian Citizens	All Roads & Freeways		City Streets Only	
		Percent of "not-at-fault" Collisions of Asian Citizens	Odds ratio	Percent of "not-at-fault" Collisions of Asian Citizens	Odds ratio
City-Wide	12.6	22.8***	0.49	19.2***	0.61
Central					
D District (Airport)	16.7	22.2	--	25.0	--
E District	11.7	16.9†	0.65	16.9†	0.65
K District	8.3	20.4***	0.35	20.4***	0.35
R District	20.4	26.2**	0.72	26.2**	0.72
V District	10.7	26.4***	0.33	17.0*	0.58
Foothill					
C District	10.9	29.7***	0.29	19.8***	0.49
M District	11.7	22.4***	0.46	22.6***	0.45
P District	24.3	29.8*	0.75	29.8*	0.75
W District	19.6	25.6**	0.71	25.4**	0.71
Southern					
A District	7.3	10.0†	0.71	9.6	--
T District	8.3	15.0***	0.51	9.7	--
X District	10.2	21.6***	0.42	21.8***	0.41
Y District	8.1	23.7***	0.28	12.3†	0.63
Western					
F District	10.6	24.2***	0.37	11.6	--
L District	18.0	22.8*	0.74	22.8*	0.74
N District	15.0	26.9***	0.48	26.2***	0.50
S District	6.1	6.7	--	6.8	--

2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Collision Data Benchmark –At-Fault

Following the results reported in the previous sub-section for not-at-fault collisions, the following tables report on the comparison between vehicle stops and "at-fault" collisions occurring on all roads and only on city streets. Table 6-6 indicates the percent of Black citizens stopped (8.1%) exceeded both of the collision data benchmarks (4.9% and 5.4%, respectively). In short, Black citizens were between 1.7 and 1.6 times more likely to be stopped compared to their representation in the "at-fault" collision data. At the district level, nine of the seventeen districts demonstrated a similar pattern.

Table 6-6: Comparison of Vehicle Stops to "at-fault" Collisions (Black)

District (N = 49,839)	Percent of Vehicle Stops of Black Citizens	All Roads & Freeways		City Streets Only	
		Percent of "at-fault" Collisions of Black Citizens	Odds ratio	Percent of "at-fault" Collisions of Black Citizens	Odds ratio
City-Wide	8.1	4.9***	1.70	5.4***	1.55
Central					
D District (Airport)	8.3	0.0	--	0.0	--
E District	13.4	9.1	--	9.1	--
K District	11.1	7.6†	1.52	7.6†	1.52
R District	10.8	4.1***	2.85	4.2***	2.79
V District	7.9	5.3**	1.53	7.3	--
Foothill					
C District	4.9	4.0	--	4.3	--
M District	5.2	2.7†	1.97	2.8†	1.95
P District	6.2	8.2	--	8.2	--
W District	6.2	4.3	--	4.3	--
Southern					
A District	6.7	6.6	--	6.6	--
T District	8.1	4.7**	1.80	3.5**	2.41
X District	8.6	6.5	--	6.6	--
Y District	9.2	4.4***	2.22	2.2**	4.56
Western					
F District	10.9	4.9***	2.37	8.0	--
L District	7.9	5.5	--	5.5	--
N District	8.6	2.3**	3.98	2.4**	3.83
S District	11.5	6.0**	2.03	6.1*	1.99

2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

For Hispanic citizens, Table 6-7 indicates that this ethnic group comprised 57.5% of all vehicle stops compared to 40.0% and 44.6% of "at-fault" collisions occurring on all roads or city streets only, respectively. This pattern also appears in 11 of the 17 districts. In sum, Hispanic citizens were between 2.0 and 1.7 times more likely to be stopped compared to their representation in either at-fault collision benchmark.

Table 6-7: Comparison of Vehicle Stops to "at-fault" Collisions (Hispanic)

District (N = 49,839)	Percent of Vehicle Stops of Hispanic Citizens	All Roads & Freeways		City Streets Only	
		Percent of "at-fault" Collisions of Hispanic Citizens	Odds ratio	Percent of "at-fault" Collisions of Hispanic Citizens	Odds ratio
City-Wide	57.5	40.0***	2.03	44.6***	1.68
Central					
D District (Airport)	33.3	12.5	--	14.3	--
E District	44.2	37.4	--	37.4	--
K District	62.8	57.4	--	57.4	--
R District	43.4	46.3	--	46.1	--
V District	57.7	28.5***	3.42	49.1†	1.41
Foothill					
C District	75.5	50.3***	3.05	68.3†	1.43
M District	73.0	60.9***	1.73	61.3***	1.71
P District	53.3	44.4*	1.43	44.4*	1.43
W District	55.7	57.7	--	57.9	--
Southern					
A District	33.7	24.9**	1.53	25.1**	1.52
T District	33.9	34.2	--	26.0**	1.46
X District	61.7	42.8***	2.16	42.9***	2.15
Y District	43.4	40.7†	1.11	37.7	--
Western					
F District	40.9	35.8**	1.24	37.6	--
L District	59.3	55.5	--	55.5	--
N District	44.6	21.3***	2.99	22.0***	2.86
S District	56.9	42.2***	1.81	43.0***	1.75

2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Table 6-8 indicates that Asian citizens were represented in 12.6% of all vehicle stops compared to 18.2% and 16.6% of "at-fault" collisions occurring on all roads or city streets only, respectively. This pattern also appears in nine of the 17 districts. In sum, Asian citizens were considerably less likely to be stopped compared to their representation in either at fault collision benchmark.

Table 6-8: Comparison of Vehicle Stops to "at-fault" Collisions (Asian)

District (N = 49,839)	Percent of Vehicle Stops of Asian Citizens	All Roads & Freeways		City Streets Only	
		Percent of "at-fault" Collisions of Asian Citizens	Odds ratio	Percent of "at-fault" Collisions of Asian Citizens	Odds ratio
City-Wide	12.6	18.2***	0.65	16.6***	0.73
Central					
D District (Airport)	16.7	25.0	--	28.6	--
E District	11.7	16.2	--	16.2	--
K District	8.3	15.2***	0.50	15.2***	0.50
R District	20.4	19.3	--	19.4	--
V District	10.7	19.0***	0.50	17.3*	0.57
Foothill					
C District	10.9	21.8***	0.44	12.9	--
M District	11.7	23.0***	0.44	22.5***	0.46
P District	24.3	22.7	--	22.7	--
W District	19.6	20.0	--	19.7	--
Southern					
A District	7.3	9.8	--	9.9	--
T District	8.3	14.6***	0.53	11.6†	0.69
X District	10.2	17.8***	0.53	17.9***	0.52
Y District	8.1	20.1***	0.35	10.9	--
Western					
F District	10.6	17.5***	0.56	16.8**	0.58
L District	18.0	17.5	--	17.5	--
N District	15.0	25.3***	0.52	25.6***	0.51
S District	6.1	8.6	--	7.9	--

2,257 stops made by the Violent Crime Enforcement Team (VCET) were excluded from these analyses.
1,241 additional cases were excluded due to unknown race/ethnicity information.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Veil of Darkness Benchmark

In the inter-twilight period, the overall rate of daylight (versus nighttime) stops was 51.7%. Table 6-9 summarizes the bivariate relationship between citizen race/ethnicity and their representation in vehicle stops during the inter-twilight period. A comparison of each group between day and night indicates statistically significant differences in the rates of stops for all groups. For example, White drivers were stopped more often during nighttime hours (17.2%) compared to daylight hours (14.8%). Similarly, Black, Asian, and Other citizens also experienced a higher rate of stops during nighttime hours compared to daylight hours. Conversely, Hispanic citizens comprised 65.0% of all vehicle stops during daylight hours and 57.8% of all vehicle stops initiated at night. Importantly, this bivariate analysis offers some indication that there is disproportionality in vehicle stops for groups when comparing daylight to nighttime hours; however, this conclusion should be tempered by the fact that no other factors are considered in this analysis that may be related to the likelihood of a vehicle stop. As a result, a multivariate model (see below) was estimated to simultaneously consider the influence of other factors (beyond the race/ethnicity of the driver) on the likelihood of a vehicle stop.

Table 6-9: Bivariate comparison of percent of stops by citizen race/ethnicity across day versus nighttime vehicle stops

Driver race/ethnicity (N=12,016)	Day (N=6,157)	Night (N=5,859)	Odds Ratio
White	14.8	17.2	0.84***
Black	6.7	7.8	0.85*
Hispanic	65.0	57.8	1.35***
Asian	9.7	12.1	0.78***
Other	3.8	5.1	0.73***

As previously outlined, a multivariate, multilevel regression model is a useful tool to identify whether a relationship between driver race/ethnicity and stops remains when other potentially influential factors are considered, including other driver, officer, and district characteristics. In short, these models allow for a simultaneous assessment of all available factors that may influence a specific outcome. The existence of statistical significance (i.e., a relationship beyond chance is indicated by an asterisk; the more asterisks, the higher confidence in a statistical relationship). Importantly, these models are only as accurate as the information available. One known limitation is that factors not measured may confound the results. Table 6-10 summarizes the results of a multilevel model exploring the correlates of daylight vehicle stops. Several sets of potential influencers on such a vehicle stop are considered including driver characteristics, the type of stop, officer characteristics, and district characteristics. Results indicate that there was no statistical difference in the rate of vehicle stops during the daytime or nighttime for drivers of different races/ethnicities. In other words, once other potential factors were considered, the bivariate relationship between vehicle stops and citizen race/ethnicity was eliminated, including the initial overrepresentation of Hispanic motorists among daytime stops. This finding suggests that SJPD officers did not target minority drivers for stops during the daytime when driver race may be more readily visible to the police.

Table 6-10: Cross-classified multilevel model predicting whether inter-twilight stop occurred in daylight versus nighttime

Variable (N = 11,967)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-0.13 (0.20)	0.88
Driver Characteristics		
Black (non-Hispanic) driver[a]	0.07 (0.14)	1.07
Hispanic driver	0.14 (0.10)	1.15
Asian driver	-0.20 (0.12)	0.82
Other race driver	-0.06 (0.17)	0.95
Type of Stop		
Vehicle code violation[b]	0.08 (0.17)	1.09
Penal code violation	0.50 (0.27)	1.65
Municipal code violation	-0.25 (0.33)	0.78
Watch bulletin	0.06 (0.32)	1.06
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.10 (0.34)	1.11
Hispanic officer	0.08 (0.15)	1.08
Asian officer	-0.17 (0.18)	0.84
Other race officer	0.21 (0.22)	1.24
Officer gender (male)	0.37 (0.23)	1.45
Length of SJPD service (years)	-0.01 (0.01)	0.99
District Characteristics[d]		
Violent crime rate	-0.46 (0.24)	0.63
% Population below poverty line	-0.02 (0.02)	0.98
% Youth (age 15-24 years old)	0.04 (0.02)	1.04

161 stops were excluded from these analyses because the type of stop was unknown.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept and all driver race dummy codes (i.e., Black, Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are predictors of variation of the likelihood that Hispanic drivers experienced daylight (compared to nighttime) stops in the inter-twilight period (compared to White drivers). Results from the full versions of the models are available from the authors upon request.

[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was statistically significant, $\chi^2(4) = 10.78$, $p = 0.03$. Although driver race variables (as a set) significantly contributed to the model, note that none of the race variables independently reached statistical significance, as reported in the table above.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop type variables to the model was not statistically significant, $\chi^2(4) = 5.70$, $p = 0.22$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of all officer race variables to the model was not statistically significant, $\chi^2(4) = 3.59$, $p > .50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 2.11$, $p > .50$.

$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Vehicle Stop Activities

This section explores the use of limited detention actions and stop outcomes. Initially, descriptive statistics are presented followed by bivariate comparisons between these activities and citizen race/ethnicity. Thereafter, multivariate, multilevel models are estimated to assess whether any relationship exists between these activities and citizen race/ethnicity net of the impact of other relevant factors, including but not limited to type of stop, officer characteristics, and/or district characteristics.

Vehicle Stop Activities Results - Bivariate

Stop activities include three sub-types: detentions, stop outcomes, and searches (including discovery of contraband). The large majority of vehicle stops did not result in a further detention (89.0%), while the most common type of detention was to curb sit a citizen (4.5%) followed by handcuffing (4.1%). Table 6-11 also indicates that "no report required" was the most common conclusion of a stop (63.6%), while 21.9% of all vehicle stops resulted in a traffic citation. Finally, searches were conducted in 22.9% of all vehicle stops. Searches uncovered contraband in 14.2% of those vehicle stops involving a search.

Table 6-11: Description of stop activities

Variables (*N* = 49,678)	Percent	Range
Detention Type		
No curb sat, handcuff, or vehicle sat	89.0	0 – 1
Curb sat	4.5	0 – 1
Handcuff	4.1	0 – 1
Sat in police vehicle	2.4	0 – 1
Other / unknown	0.0	0 – 1
Stop Outcome		
No report required	63.6	0 – 1
Field interview	1.6	0 – 1
Traffic citation	21.9	0 – 1
Criminal citation	8.9	0 – 1
Arrest	2.4	0 – 1
Arrest made by warrant	1.6	0 – 1
Other / unknown	0.7	0 – 1
Search Activity		
No search conducted	77.1	0 – 1
Search conducted	22.9	0 – 1
No contraband found	85.8% searches / 19.6% stops	0
Contraband found	14.2% searches / 3.2% stops	1

161 stops were excluded from these analyses because the type of stop was unknown.

Table 6-12 reports on the bivariate relationship between stop activities and citizen race/ethnicity. Results indicate that Black and Hispanic citizens experienced a higher rate of curb sitting, handcuffing, and sitting in a police vehicle compared to the overall rates of these activities and compared to White citizens. Conversely, White and Asian citizens were consistently underrepresented in detention actions compared to the overall average rate. With regard to stop outcomes, a slightly more nuanced pattern emerges. White and Asian citizens were issued traffic citations at higher rates compared to the overall average, while Black and Hispanic citizens received criminal citations and were arrested due to warrants at elevated rates compared to others. Vehicle stops resulting in an arrest (not based on a warrant) were roughly equally spread across White, Black, and Hispanic citizens. Search activity was concentrated among Black and Hispanic citizens while the rate of contraband discovery was higher among White and Asian citizens. Importantly, these initial results only represent relationships in a vacuum without consideration of any other potentially relevant factors. As a result, it is critical to estimate multivariate models to ensure that the observed relationships remain after considering other factors.

Table 6-12: Citizen race/ethnicity in stop activities

	Overall (N=49,678)	White (N=8,350)	Black (N=4,031)	Hispanic (N=28,552)	Asian (N=6,277)	Other (N=2,468)
Detention Type						
No detention	89.0	92.2	85.2	87.0	94.6	92.7
Curb sat	4.5	2.8	5.5	5.5	2.1	2.7
Handcuff	4.1	3.2	5.8	4.8	2.0	3.0
Sat in police vehicle	2.4	1.8	3.5	2.7	1.3	1.6
Stop Outcome						
No Report Required	63.0	66.2	66.1	61.3	64.2	63.4
Field Interview	1.6	0.9	1.9	2.0	0.6	0.9
Traffic Citation	21.9	23.4	16.4	19.9	30.1	28.4
Criminal Citation	8.9	5.3	9.8	11.7	2.5	4.3
Arrest	2.4	2.2	2.4	2.6	1.5	2.0
Arrest by Warrant	1.5	1.3	2.5	1.8	0.6	0.4
Other / Unknown	0.7	0.7	0.9	0.7	0.5	0.6
Search Activity						
No search	77.1	83.7	72.1	72.4	89.3	87.2
Search conducted	22.9	16.3	27.9	27.6	10.7	12.8
No contraband	85.8	81.6	86.2	86.6	84.7	83.6
Contraband found	14.2	18.4	13.8	13.4	15.3	16.4

161 stops were excluded from these analyses because the type of stop was unknown.

Vehicle Stop Activities Results - Multivariate

As outlined previously, multivariate models are appropriate and critical to properly identify a potential relationship between actions undertaken by SJPD officers and minority citizens. The process to estimate such models is complicated, but important to broadly explain in order to ensure

that the results of the models are clear. One of the challenges of exploring these data and answering the research questions stems from the nested nature of the data. For example, a single officer likely initiates multiple vehicle stops, and those stops may occur across different districts. Thus, stops are "nested" within officers which are nested within districts. This is important to consider because any assessment of racial/ethnic disparities in stops ideally should take into account officer and district characteristics and should include the fact that multiple stops occur within each of these domains (i.e., officers and districts) and thus are *non-independent*. As a result, cross-classified, multilevel, multivariate models are appropriate when stops are nested within officers and districts. Moreover, these models are useful in identifying any potential relationship between different citizen racial/ethnic groups and their likelihood of experiencing a specific stop activity while simultaneously considering other factors that may impact this relationship.

The subsequent tables report only the final and appropriate models for simplicity of interpretation. Importantly, a series of models were estimated between the bivariate stage and the final models that are presented below. These tables are not reported, but are available upon request. Initially, models were estimated that examined whether there was a relationship between the stop activity and citizen race/ethnicity prior to considering the potential impact of other stop characteristics, officer factors, and/or district variables. For example, the relationship between citizen race/ethnicity and arrest, net of other factors, was examined. Regardless of whether or not this relationship was found to be statistically significant (i.e., of substantive interest), it is also relevant whether this relationship differed across officers and/or districts, if the analyses indicated that such differences were occurring. Perhaps Black citizens are found to have a higher likelihood of field interview (similar to the bivariate results) while also considering officer and district characteristics. The question then becomes whether that relationship exists equally across all officers or districts. In other words, are there specific officer or district characteristics that make the relationship between Black citizens and arrest more likely? These important questions require a different modeling technique to answer. Importantly, in all stop activity models, the relationship between citizen race/ethnicity and the stop activity differed across officers and districts thus requiring and justifying the more complicated models.

As a result of this situation, the tables presented below report on the final models that explored not only whether a relationship existed between the stop outcome and citizen race/ethnicity, but also what specific factors assist in understanding the reasons why such a relationship may exist. For example, it may be that the likelihood of a Black citizen being field interviewed is higher when the vehicle stop involves a female officer. In such a case, this information would be important for the SJPD, community stakeholders, and the broader scientific community to understand. The exploration of each outcome is provided below with this goal in mind.

The results of the final model examining curb sitting by SJPD officers are provided in Table 6-13. Across all vehicle stops analyzed, 4.5% of stops included this action. Of central importance to this study, Black citizens were 2.8 times more likely to be curb sat compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Curb sitting was statistically less likely to occur when the stop was made for a

vehicle code violation as compared to a consensual stop. While 70% of the variance in the odds of a Black citizen being curb sat was associated with differences across officers, none of the measured officer factors was statistically significant by itself.

Table 6-13: Cross-classified multilevel model predicting "curb sat" outcome

Variables (N = 47,737)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-3.40 (0.39)	0.03***
Driver Characteristics		
Black (non-Hispanic) driver[a]	1.03 (0.47)	2.80*
Hispanic driver	0.55 (0.37)	1.74
Asian driver	-0.56 (0.51)	0.57
Other race driver	-0.30 (0.62)	0.74
Type of Stop		
Vehicle code violation[b]	-0.48 (0.14)	0.62***
Penal code violation	0.29 (0.20)	1.33
Municipal code violation	0.22 (0.22)	1.25
Watch bulletin	-0.24 (0.27)	0.79
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.36 (0.71)	1.43
Hispanic officer	-0.04 (0.28)	0.96
Asian officer	0.05 (0.37)	1.05
Other race officer	0.39 (0.45)	1.48
Officer gender (male)	-0.40 (0.46)	0.67
Length of SJPD service (years)	0.01 (0.02)	1.01
District Characteristics[d]		
Violent crime rate	-0.14 (0.35)	0.87
% Population below poverty line	0.02 (0.03)	1.02
% Youth (age 15-24 years old)	-0.01 (0.04)	0.99
% differences in likelihood of a Black citizen-"curb sat" outcome related to officers		70.4%
% of these differences across officers related to known officer characteristics		12.3%
% differences in likelihood of a Black citizen-"curb sat" outcome related to districts		4.6%
% of these differences across districts related to known district characteristics		40.1%

161 stops were excluded from these analyses because the type of stop was unknown.
1941 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Black drivers experienced "curb sat" stop outcomes (compared to White drivers). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model

was statistically significant, $\chi^2(4) = 14.23$, $p = 0.006$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 47.82$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 1.10$, $p > 0.50$.
[e]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 0.98$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

SJPD officers applied handcuffs to citizens in 4.1% of all vehicle stops analyzed. Results from the final handcuffing model indicate that Asian citizens were significantly less likely than White citizens to be handcuffed during a traffic stop after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Black and Hispanic citizens, however, *were not* statistically distinguishable from White citizens in their odds of being handcuffed. Handcuffing was statistically more likely when the vehicle stop was initiated due to a penal code violation, municipal code violation, or a watch bulletin as compared to a consensual stop. Officer and district characteristics did not have a statistically significant influence on the likelihood of a citizen being handcuffed (see Table 6-14).

Table 6-14: Cross-classified multilevel model predicting "handcuff" outcome

Variables (N = 47,737)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.92 (0.40)	0.02***
Driver Characteristics		
Black (non-Hispanic) driver[a]	0.28 (0.55)	1.33
Hispanic driver	0.55 (0.38)	1.72
Asian driver	-2.44 (0.94)	0.09**
Other race driver	-1.26 (0.93)	0.28
Type of Stop		
Vehicle code violation[b]	-0.13 (0.18)	0.88
Penal code violation	0.95 (0.23)	2.58***
Municipal code violation	0.56 (0.27)	1.75*
Watch bulletin	1.10 (0.26)	3.00***
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.12 (0.76)	0.89
Hispanic officer	0.02 (0.31)	1.02
Asian officer	-0.26 (0.45)	0.77
Other race officer	-0.11 (0.46)	0.90
Officer gender (male)	0.53 (0.54)	1.70
Length of SJPD service (years)	0.02 (0.02)	1.02
District Characteristics[d]		

Violent crime rate	-0.45 (0.45)	0.64
% Population below poverty line	0.08 (0.04)	1.08
% Youth (age 15-24 years old)	-0.08 (0.05)	0.92

161 stops were excluded from these analyses because the type of stop was unknown.
1941 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Black drivers experienced "handcuff" stop outcomes (compared to White drivers). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was statistically significant, $\chi^2(4) = 16.28$, $p = 0.003$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 95.97$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 0.40$, $p > 0.50$.
[e]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 0.73$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Table 6-15 summarizes the results of a final model exploring the likelihood of SJPD officers sitting a citizen in their police vehicle during a vehicle stop. This action was undertaken in 2.4% of vehicle stops analyzed. Results from the final model indicate that there was no statistical difference in the likelihood of different racial/ethnic groups being sat in a police vehicle after considering other potential factors including the reason for the stop, the reason for the detention, officer characteristics, and district characteristics. This action was statistically more likely when the stop was made for any reason other than a consensual stop. In addition, male officers were more likely than female officers to sit a citizen in their police vehicle.

Table 6-15: Cross-classified multilevel model predicting "vehicle sat" outcome

Variables (N = 47,737)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-4.99 (0.49)	0.01***
Driver Characteristics		
Black (non-Hispanic) driver[a]	-0.25 (0.68)	0.78
Hispanic driver	0.28 (0.43)	1.32
Asian driver	-0.79 (0.66)	0.45
Other race driver	-1.55 (0.85)	0.21
Type of Stop		
Vehicle code violation[b]	0.54 (0.24)	1.72*
Penal code violation	1.01 (0.30)	2.75***
Municipal code violation	0.69 (0.35)	1.99*
Watch bulletin	1.11 (0.34)	3.04***

Officer Characteristics		
Black (non-Hispanic) officer[c]	0.61 (0.70)	1.84
Hispanic officer	-0.18 (0.31)	0.84
Asian officer	-0.08 (0.38)	0.93
Other race officer	0.39 (0.46)	1.48
Officer gender (male)	0.82 (0.43)	2.26†
Length of SJPD service (years)	0.004 (0.02)	1.00
District Characteristics[d]		
Violent crime rate	-0.42 (0.42)	0.66
% Population below poverty line	0.01 (0.04)	1.01
% Youth (age 15-24 years old)	0.10 (0.06)	1.10

161 stops were excluded from these analyses because the type of stop was unknown.
1941 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Black, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic drivers experienced "vehicle sat" stop outcomes (compared to White drivers). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was not statistically significant, $\chi^2(4) = 7.34$, $p = 0.12$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 17.28$, $p = 0.002$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 2.19$, $p > 0.50$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.59$, $p > 0.50$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Apart from detentions, vehicle stops also included a variety of potential outcomes (e.g., no report, citations, and arrests). The most common result of a vehicle stop (63.0%) was an officer not writing an official report on the citizen contact (beyond the completion of the form documenting the vehicle stop). Results from the final model indicate that citizen racial/ethnic groups did not differ in their likelihood of a vehicle stop concluding without an official report after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Officers were more likely to conclude a vehicle stop with an official report when the vehicle stop was initiated due to a vehicle or penal code violation. Importantly, this stop outcome was the most common resolution to a vehicle stop initiated by the SJPD, and these data indicate no statistical or substantive difference in treatment of citizens from different racial/ethnic groups (see Table 6-16).

Table 6-16: Cross-classified multilevel model predicting "no report required" outcome

Variables (N = 49,678)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	1.00 (0.18)	2.71***
Driver Characteristics		
Black (non-Hispanic) driver[a]	-0.02 (0.20)	0.98
Hispanic driver	-0.27 (0.13)	0.76
Asian driver	-0.07 (0.16)	0.93
Other race driver	-0.13 (0.22)	0.88
Type of Stop		
Vehicle code violation[b]	-0.53 (0.09)	0.59***
Penal code violation	-0.80 (0.13)	0.45***
Municipal code violation	-0.10 (0.16)	0.91
Watch bulletin	-0.02 (0.17)	0.98
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.05 (0.19)	1.05
Hispanic officer	0.10 (0.09)	1.11
Asian officer	0.04 (0.10)	1.04
Other race officer	0.21 (0.11)	1.24
Officer gender (male)	-0.12 (0.13)	0.89
Length of SJPD service (years)	-0.01 (0.005)	0.99
District Characteristics[d]		
Violent crime rate	0.03 (0.11)	1.03
% Population below poverty line	-0.01 (0.01)	0.99
% Youth (age 15-24 years old)	0.0004 (0.01)	1.00

161 stops were excluded from these analyses because the type of stop was unknown.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept and each of the driver race dummy codes (i.e., Black, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic drivers experienced a "no report required" outcome (compared to White drivers). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was not statistically significant, $\chi^2(4) = 6.51$, $p = 0.16$.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 64.46$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 4.06$, $p = 0.40$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 3.08$, $p = 0.38$.

$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Officers may also field interview citizens as an official resolution to a vehicle stop. This was a relatively uncommon outcome occurring in only 1.6% of all vehicle stops. Results from the final model indicate a statistical difference between citizen racial/ethnic groups in the likelihood of a field interview being conducted. Specifically, the odds of a Black citizen being field interviewed were 9.0 times higher when compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Hispanic citizens also had a higher likelihood of this outcome compared to White citizens (3.4 times more likely). Conducting a field interview was also more likely when the vehicle stop was initiated as a result of municipal code violation or watch bulletin; conversely, this outcome was less likely when the vehicle stop was precipitated by a vehicle or penal code violation.

As outlined previously, the analytic approach to understanding patterns of officer decision-making involved not only the investigation of whether minority citizens experienced disparate treatment but also what factors may assist in understanding these differences. In the case of field interviews, the differences experienced by Black citizens were predominately related to officer characteristics. In other words, 63.7% of the variation in treatment of Blacks (with regard to field interviews) was linked to officers, while another 27.6% of this difference was attributable to the context or district in which the vehicle stop occurred (these percentages appear at the base of Table 6-17).[21] Officer gender is one officer characteristic that assists in explaining some of the treatment of Black citizens. Specifically, the likelihood of a Black citizen being field interviewed decreased when a male officer was involved. Conversely, the relationship between a Black citizen and the likelihood of this outcome increased when the vehicle stop involved a female officer. While this broadly suggests that the experience of Black citizens (at least for this outcome) differs depending on the officer's gender, two caveats are in order. First, although the majority of the difference in the likelihood of a Black citizen being field interviewed was associated with officer characteristics (63.7%), the cumulative effect of all officer variables (including officer gender) explained only 10.3% of that variance. Related, only officer gender was statistically significant, which suggests that a variety of other officer related factors not included in these data and models also influenced the likelihood of a field interview. This suggests the need for a more comprehensive data collection effort to enable identification and understanding of relevant officer characteristics. Second, while there is a statistical difference in the experience of Black and Hispanic citizens with regard to field interviews, the overall substantive impact of this finding is limited. Field interviews occurred in only 1.6% of all vehicle stops; as a result, the actual impact on Black and Hispanic citizens, while not insignificant, is limited (representing 1.9% and 2.0% of stops for these citizen groups, respectively). In short, very few vehicle stops resulted in this outcome, and thus, the statistical difference in likelihood resulted in only a small number of racially or ethnically different outcomes across vehicle stops.

[21] This information is only provided for models that demonstrated a statistically significant relationship between citizen race/ethnicity and the outcome analyzed.

Table 6-17: Cross-classified multilevel model predicting "field interview" outcome

Variables (N = 49,678)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-4.96 (0.66)	0.01***
Driver Characteristics		
Black (non-Hispanic) driver[a]	2.19 (0.78)	8.95**
Hispanic driver	1.23 (0.67)	3.43†
Asian driver	-0.75 (1.04)	0.47
Other race driver	-0.87 (1.39)	0.42
Type of Stop		
Vehicle code violation[b]	-1.32 (0.12)	0.27***
Penal code violation	-0.39 (0.21)	0.68†
Municipal code violation	0.44 (0.19)	1.55*
Watch bulletin	0.59 (0.22)	1.80**
Officer Characteristics		
Black (non-Hispanic) officer[c]	-1.59 (1.24)	0.20
Hispanic officer	-0.30 (0.46)	0.74
Asian officer	0.40 (0.61)	1.49
Other race officer	0.001 (0.63)	1.00
Officer gender (male)	-1.81 (0.71)	0.16**
Length of SJPD service (years)	0.02 (0.03)	1.02
District Characteristics[d]		
Violent crime rate	-0.78 (0.95)	0.46
% Population below poverty line	0.06 (0.08)	1.06
% Youth (age 15-24 years old)	-0.09 (0.10)	0.91
% differences in likelihood of "field interview" among Black drivers related to officers		63.7%
% of these differences across officers related to known officer characteristics		10.3%
% differences in likelihood of "field interview" among Black drivers related to districts		27.6%
% of these differences across districts related to known district characteristics		25.9%

161 stops were excluded from these analyses because the type of stop was unknown.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Black drivers experienced a "field interview" outcome (compared to White drivers). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was statistically significant, $\chi^2(4) = 18.16$, $p = 0.001$.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 325.13$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 2.75$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and

Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.71$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Traffic citations were issued in 21.6% of all vehicle stops. Results from the final model indicate a statistical difference between citizen racial/ethnic groups and the likelihood of a *traffic* citation being issued. Specifically, Black citizens were less likely to be issued a traffic citation compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. A traffic citation was more likely to occur when the vehicle stop was initiated due to a vehicle or municipal code violation.

Further assessment of the relationship between Black citizens and receipt of a traffic citation revealed that this outcome was less likely to occur when a male officer was involved. That is, male officers were less likely to conclude a vehicle stop involving a Black citizen with a traffic citation compared to a female officer. Interestingly, only 22.4% of the variance in the relationship between Black citizens and traffic citations was associated with differences across officers, with the cumulative officer variables in this model explaining 24.8% of that difference. Only 1.0% of the difference in the relationship between Black citizens and traffic citations was related to the context (or district) where the vehicle stop occurred. Overall, the substantive impact of these findings is important to consider as slightly less than a quarter of all vehicle stops resulted in a traffic citation, and Black citizens were less likely than similarly situated White citizens to receive that outcome (see Table 6-18).

Table 6-18: Cross-classified multilevel model predicting "traffic citation" outcome

Variables (N = 49,678)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.38 (0.31)	0.03***
Driver Characteristics		
Black (non-Hispanic) driver[a]	-0.77 (0.24)	0.46**
Hispanic driver	-0.12 (0.16)	0.89
Asian driver	0.22 (0.17)	1.25
Other race driver	0.37 (0.23)	1.45
Type of Stop		
Vehicle code violation[b]	2.35 (0.26)	10.44***
Penal code violation	-0.47 (0.42)	0.62
Municipal code violation	0.76 (0.36)	2.13*
Watch bulletin	0.26 (0.42)	1.30
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.03 (0.34)	1.03
Hispanic officer	0.08 (0.15)	1.08
Asian officer	0.02 (0.17)	1.02
Other race officer	-0.27 (0.19)	0.76

Officer gender (male)	0.48 (0.24)	1.62*
Length of SJPD service (years)	-0.01 (0.01)	0.99
District Characteristics[d]		
Violent crime rate	-0.11 (0.17)	0.90
% Population below poverty line	0.02 (0.02)	1.02
% Youth (age 15-24 years old)	-0.01 (0.02)	0.99
% differences in likelihood of "traffic citation" among Black drivers related to officers		22.4%
% of these differences across officers related to known officer characteristics		24.8%
% differences in likelihood of "traffic citation" among Black drivers related to districts		1.0%
% of these differences across districts related to known district characteristics		6.0%

161 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are predictors of variation of the likelihood that Black drivers experienced "traffic citation" stop outcomes (compared to White drivers). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was statistically significant, $\chi^2(4) = 21.14$, $p < 0.001$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 232.20$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 2.86$, $p > 0.50$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 2.40$, $p > 0.50$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Table 6-19 reports the final model regarding criminal citations. This outcome occurred in 8.9% of all vehicle stops. Results from the final model indicate several statistical differences between citizen racial/ethnic groups and the likelihood of a *criminal* citation being issued. Specifically, Black and Hispanic citizens were 2.1 and 2.3 times more likely to be issued a criminal citation compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Asian citizens were less likely to receive a criminal citation compared to White citizens, net of the same controls. A criminal citation was more likely to occur when the vehicle stop was initiated due to a vehicle code violation (2.1 times more likely), a penal code violation (4.0 times more likely), or a municipal code violation (2.0 times more likely) compared to a consensual stop.

Further assessment of the relationship between Hispanic citizens and receipt of a criminal citation revealed that this relationship was not further explained by any of the officer or district characteristics in the model. For Black citizens, however, their risk of criminal citation was slightly enhanced when the vehicle stop involved an officer with more years of service. Overall, 39.6% of the variance in the relationship between Black citizens and criminal citations was associated with officer characteristics, with the cumulative officer variables in this model explaining 18.8% of that

difference. Only 5.5% of the difference in the relationship between Black citizens and traffic citations was related to the context (or district) where the vehicle stop occurred.

Table 6-19: Cross-classified multilevel model predicting "criminal citation" outcome

Variables (N = 49,678)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-3.57 (0.28)	0.03***
Driver Characteristics		
Black (non-Hispanic) driver[a]	0.76 (0.34)	2.13*
Hispanic driver	0.82 (0.24)	2.27***
Asian driver	-0.65 (0.36)	0.52†
Other race driver	-0.74 (0.55)	0.48
Type of Stop		
Vehicle code violation[b]	0.72 (0.17)	2.05***
Penal code violation	1.38 (0.21)	3.96***
Municipal code violation	0.71 (0.25)	2.02**
Watch bulletin	-0.06 (0.33)	0.94
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.37 (0.46)	0.69
Hispanic officer	0.11 (0.20)	1.11
Asian officer	-0.05 (0.26)	0.95
Other race officer	0.11 (0.28)	1.12
Officer gender (male)	0.02 (0.33)	1.02
Length of SJPD service (years)	0.03 (0.01)	1.03*
District Characteristics[d]		
Violent crime rate	-0.17 (0.32)	0.84
% Population below poverty line	0.03 (0.03)	1.03
% Youth (age 15-24 years old)	-0.02 (0.04)	0.98
% differences in likelihood of "criminal citation" among Black drivers related to officers		39.6%
% of these differences across officers related to known officer characteristics		18.8%
% differences in likelihood of "criminal citation" among Black drivers related to districts		5.5%
% of these differences across districts related to known district characteristics		13.0%

161 stops were excluded from these analyses because the type of stop was unknown.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are predictors of variation of the likelihood that Black drivers experienced "criminal citation" stop outcomes (compared to White drivers). The officer characteristics and district characteristics varied across Hispanic drivers in similar ways (i.e., effects generally in the same direction), but none were statistically significant. The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was

statistically significant, $\chi^2(4) = 35.75$, $p < 0.001$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 56.26$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 1.29$, $p > 0.50$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 2.10$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Resolution of a vehicle stop can also result in an arrest (analyses reported in Table 6-20) or arrest by warrant (analyses reported in Table 6-21). A warrantless arrest occurred in 2.4% of all vehicle stops. Results from the final model indicate no statistical differences between citizen racial/ethnic groups and the likelihood of an arrest. This outcome was more likely when the vehicle stop was initiated due to a penal code violation, but less likely if the encounter was precipitated by a vehicle code or municipal code violation (compared to a consensual stop).

Analyses of arrests by warrant reveal a similar pattern. This outcome occurred in 1.6% of all vehicle stops, and no statistical differences existed between citizen racial/ethnic groups in the likelihood of an arrest by warrant. Vehicle stops initiated due to a penal code violation increased the likelihood of an arrest by warrant, whereas traffic stops precipitated by a vehicle code violation reduced the risk of arrest by warrant.

Table 6-20: Cross-classified multilevel model predicting "arrest" outcome

Variables (N = 49,678)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.74 (0.45)	0.02***
Driver Characteristics		
Black (non-Hispanic) driver[a]	0.96 (0.61)	2.61
Hispanic driver	0.44 (0.43)	1.55
Asian driver	0.34 (0.58)	1.41
Other race driver	-0.38 (0.81)	0.69
Type of Stop		
Vehicle code violation[b]	-0.66 (0.15)	0.51***
Penal code violation	1.29 (0.18)	3.64***
Municipal code violation	-1.61 (0.47)	0.20***
Watch bulletin	0.36 (0.24)	1.43
Officer Characteristics		
Black (non-Hispanic) officer[c]	1.29 (1.10)	3.64
Hispanic officer	-0.54 (0.40)	0.58
Asian officer	-0.01 (0.54)	0.99
Other race officer	-0.37 (0.50)	0.69
Officer gender (male)	-0.84 (0.59)	0.43

Length of SJPD service (years)	-0.001 (0.02)	1.00
District Characteristics[d]		
Violent crime rate	0.16 (0.57)	1.17
% Population below poverty line	0.01 (0.05)	1.01
% Youth (age 15-24 years old)	-0.05 (0.07)	0.95

161 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are predictors of variation of the likelihood that Black drivers experienced "arrest" stop outcomes (compared to White drivers). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was not statistically significant, $\chi^2(4) = 3.57$, $p > 0.50$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 325.17$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 3.93$, $p > 0.50$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 2.33$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Table 6-21: Cross-classified multilevel model predicting "arrest by warrant" outcome

Variables (N = 49,678)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-4.17 (0.47)	0.02***
Driver Characteristics		
Black (non-Hispanic) driver[a]	0.38 (0.70)	1.47
Hispanic driver	0.31 (0.47)	1.36
Asian driver	-0.77 (0.76)	0.46
Other race driver	-24.47 (27,724.39)	0.00
Type of Stop		
Vehicle code violation[b]	-0.86 (0.15)	0.42***
Penal code violation	0.51 (0.21)	1.67*
Municipal code violation	-0.42 (0.29)	0.66
Watch bulletin	-0.15 (0.31)	0.86
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.54 (1.16)	1.72
Hispanic officer	-0.48 (0.36)	0.62
Asian officer	-1.18 (0.53)	0.31
Other race officer	-0.89 (0.55)	0.41
Officer gender (male)	0.49 (0.68)	1.63
Length of SJPD service (years)	-0.01 (0.02)	0.99

District Characteristics[d]		
Violent crime rate	0.05 (0.66)	1.05
% Population below poverty line	-0.05 (0.04)	0.95
% Youth (age 15-24 years old)	0.05 (0.06)	1.05

161 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Hispanic, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are predictors of variation of the likelihood that Black drivers experienced "arrest by warrant" stop outcomes (compared to White drivers). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was not statistically significant, $\chi^2(4) = 2.94$, $p > 0.50$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 116.28$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 7.54$, $p = 0.11$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 5.62$, $p = 0.13$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Finally, a model was estimated to explore whether there was a relationship between racial/ethnic groups and the likelihood of a search occurring. Related, analyses also were conducted to determine whether a relationship existed between the discovery of contraband (in those searches) and citizen race/ethnicity. A search was conducted in 20.3% of all vehicle stops that did not involve an arrest. Vehicle stops that involved an arrest and a search were removed because it was unclear which activity occurred first. This issue of temporal order is a critical assumption of multivariate analyses because a model that attempts to understand search activity and includes cases that ended with an arrest is predicated on the notion that this was the order of operations. The method of data collection did not allow clarity as to whether the search preceded the arrest or the arrest preceded the search. Only 1,941 vehicle stops involved both a search and an arrest. As a result, the remaining 47,737 vehicle stops were analyzed and results are reported in Table 6-22.

Black and Hispanic citizens were 2.0 and 1.7 times more likely to be searched compared to White citizens after considering all other available factors. Asian citizens were less likely to be searched than White citizens. Searches also were more likely to occur when the vehicle stop was precipitated by a penal code violation and less likely when a vehicle code violation was the reason for the stop (compared to a consensual stop). As with previous models, the relationship between minority citizens and the outcome of interest (i.e., a search) was further explored by examining whether officer and/or district characteristics assist in understanding these relationships.

As shown in Table 6-22, two important findings emerge for Hispanic citizens. The likelihood of a Hispanic citizen being searched was reduced when the vehicle stop involved a Hispanic officer rather than a White officer. Conversely, searches of Hispanic citizens were more likely to occur when the officer was White rather than Hispanic. In addition, the chance of a Hispanic search was

slightly enhanced as the officer's years of service increased. In short, more seasoned officers searched Hispanic citizens more often than officers with less experience, but the effect was small.

No officer or district characteristics statistically impacted the likelihood of a search of a Black citizen.

Table 6-22: Cross-classified multilevel model predicting "searches" during vehicle stops

Variables (N = 47,737)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-1.27 (0.21)	0.28***
Driver Characteristics		
Black (non-Hispanic) driver[a]	0.70 (0.23)	2.01**
Hispanic driver	0.55 (0.16)	1.74***
Asian driver	-0.78 (0.26)	0.46**
Other race driver	-0.38 (0.31)	0.68
Type of Stop		
Vehicle code violation[b]	-0.64 (0.09)	0.53***
Penal code violation	0.60 (0.13)	1.83***
Municipal code violation	0.08 (0.14)	1.08
Watch bulletin	0.20 (0.16)	1.23
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.09 (0.24)	1.09
Hispanic officer	-0.37 (0.10)	0.69***
Asian officer	0.04 (0.13)	1.04
Other race officer	-0.09 (0.14)	0.92
Officer gender (male)	0.21 (0.16)	1.24
Length of SJPD service (years)	0.01 (0.01)	1.01†
District Characteristics[d]		
Violent crime rate	0.14 (0.14)	1.15
% Population below poverty line	-0.01 (0.01)	0.99
% Youth (age 15-24 years old)	-0.01 (0.01)	0.99
% differences in likelihood of a search of a Hispanic driver related to officers		16.0%
% of these differences across officers related to known officer characteristics		23.2%
% differences in likelihood of a search of a Hispanic driver related to districts		1.0%
% of these differences across districts related to known district characteristics		57.8%

161 stops were excluded from these analyses because the type of stop was unknown.
1,941 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Black, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic drivers experienced a search (compared to White drivers). The officer characteristics and district characteristics varied across Black drivers in similar ways (i.e., effects in the same

direction), but none were statistically significant. The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model was statistically significant, $\chi^2(4) = 47.75$, $p < 0.001$.

[b]Reference is *Consensual stop*; an omnibus test of all stop types was statistically significant, $\chi^2(4) = 262.32$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was statistically significant, $\chi^2(4) = 16.15$, $p = 0.003$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.53$, $p > 0.50$.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Whether or not contraband was discovered during a search was also explored using a cross-classified, multilevel model (see Table 6-23). Note this model only examines vehicle stops involving a search (and no arrest) and explores whether that action resulted in the discovery of contraband. In the nearly 10,000 vehicle stops involving a search, contraband was discovered in 9.7% of the encounters. Hispanic and Asian citizens were less likely to be found carrying contraband compared to similarly-situated White citizens. Contraband was less likely to be found when the vehicle stop was initiated for a vehicle code violation (compared to a consensual stop). Contraband also was more likely to be found during searches conducted following stops made for penal or municipal code violations as compared to consensual stops.

In an attempt to further understand the factors associated with the lower likelihood of contraband discovery among Hispanic citizens, the model also included officer and district characteristics. Overall, more than two-thirds (69.7%) of the difference in the likelihood of contraband discovery was related to officers, while only 3.3% of this variance was attributable to district characteristics. Importantly, the likelihood of discovering contraband among Hispanic citizens was higher (and thus, closer to the rate of contraband found among White citizens) when the vehicle stop involved a male officer rather than a female officer.

Table 6-23: Cross-classified multilevel model predicting "evidence found" during vehicle stops

Variables (N = 9,697)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-0.84 (0.47)	0.43†
Driver Characteristics		
Black (non-Hispanic) driver[a]	-0.15 (0.56)	0.86
Hispanic driver	-1.04 (0.44)	0.35*
Asian driver	-1.48 (0.83)	0.23†
Other race driver	-0.82 (0.86)	0.44
Type of Stop		
Vehicle code violation[b]	-0.42 (0.18)	0.65**
Penal code violation	0.75 (0.24)	2.12**
Municipal code violation	0.47 (0.29)	1.60†
Watch bulletin	-0.46 (0.36)	0.63

Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.60 (0.69)	0.54
Hispanic officer	-0.54 (0.30)	0.58
Asian officer	-0.63 (0.39)	0.54
Other race officer	-0.17 (0.45)	0.84
Officer gender (male)	1.35 (0.43)	3.86**
Length of SJPD service (years)	-0.01 (0.02)	0.99
District Characteristics[d]		
Violent crime rate	0.07 (0.42)	1.07
% Population below poverty line	-0.04 (0.03)	0.96
% Youth (age 15-24 years old)	0.02 (0.04)	1.02
% differences in likelihood of evidence found among Hispanic driver related to officers		69.7%
% of these differences across officers related to known officer characteristics		25.2%
% differences in likelihood of evidence found among Hispanic driver related to districts		3.3%
% of these differences across districts related to known district characteristics		32.3%

35 stops were excluded from these analyses because the type of stop was unknown.
1,667 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the driver race dummy codes (i.e., Black, Asian, and Other race drivers). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that evidence was found within searches of Hispanic drivers (compared to White drivers). The officer characteristics and district characteristics varied across Asian drivers in similar ways (i.e., effects in the same direction), but none were statistically significant. The full versions of the models are available upon request.
[a]Reference is *White (non-Hispanic) driver*; an omnibus test for the contribution of all driver race variables to the model approached statistical significance, $\chi^2(4) = 8.24$, $p = 0.08$.
[b]Reference is *Consensual stop*; an omnibus test was statistically significant, $\chi^2(4) = 64.84$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 4.98$, $p = 0.29$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.74$, $p > 0.50$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$.

Summary of Results

Table 6-24 summarizes the results of the analyses comparing the rate of vehicle stops (by racial/ethnic group) to the benchmarks. The collision data benchmark indicates a pattern of disparity, whereas the veil of darkness benchmark suggests no statistical difference between racial/ethnic groups in the likelihood of being stopped.

Table 6-24: Summary of Stop Activities

	Black	Hispanic	Asian
Not-at-fault collisions			
City wide	Higher rate of stops	Higher rate of stops	Lower rate of stops
Districts	Higher rate of stops in 9 of 17 districts	Higher rate of stops in 14 of 17 districts	Lower rate of stops in 14 of 17 districts
At-fault Collisions			
City wide	Higher rate of stops	Higher rate of stops	Lower rate of stops
Districts	Higher rate of stops in 9 of 17 districts	Higher rate of stops in 11 of 17 districts	Lower rate of stops in 9 of 17 districts
Veil of Darkness	NS	NS	NS

NS – Not statistically significant

- "Not-at-fault" collision benchmark
  - Overall, the percent of Black citizens stopped (8.1%) exceeded both the city street and all roads "not-at-fault" collision data benchmarks (4.6% and 5.3%, respectively). Black citizens were between 1.9 and 1.6 times more likely to be stopped compared to their representation in the collision data. At the district level, nine of the seventeen districts demonstrated a similar pattern.
  - Hispanic citizens comprise 57.5% of all vehicle stops compared to 34.4% and 42.8% of "not-at-fault" collisions occurring on all roads or city streets only, respectively. This pattern also appeared in 14 of the 17 districts. In sum, Hispanic citizens were between 2.6 and 1.8 times more likely to be stopped compared to their representation in either collision benchmark.
  - Asian citizens were under-represented in 12.6% of all vehicle stops compared to 22.8% and 19.2% of "not-at-fault" collisions occurring on all roads or city streets only, respectively. This pattern also appeared in 15 of the 17 districts.
- "At-fault" collision benchmark
  - The percent of Black citizens stopped (8.1%) exceeded both of the all roads and city streets only collision data benchmarks (4.9% and 5.4%, respectively). In short, Black citizens were between 1.7 and 1.6 times more likely to be stopped compared to their representation in the "at-fault" collision data. At the district level, nine of the 17 districts demonstrated a similar pattern.
  - Hispanic citizens comprised 57.5% of all vehicle stops compared to 40.0% and 44.6% of "at-fault" collisions occurring on all roads or city streets only, respectively.

This pattern also appeared in 11 of the 17 districts. In sum, Hispanic citizens were between 2.0 and 1.7 times more likely to be stopped compared to their representation in either collision benchmark.

- Asian citizens were under-represented in 12.6% of all vehicle stops compared to 18.2% and 16.6% of "at-fault" collisions occurring on all roads or city streets only, respectively. This pattern also appeared in nine of the 17 districts.

- Veil of darkness benchmark
  - The overall rate of daylight (versus a nighttime) stops was 51.7%. The multivariate analysis found no statistical difference in the rate of vehicle stops for drivers of different races/ethnicities after controlling for a variety of situational, officer, and district characteristics.

Table 6-25 summarizes the findings by showing the increased (or decreased) likelihood of a specific racial/ethnic group receiving a specific vehicle stop action. Values (i.e., odds ratios) above 1.0 indicate a positive relationship while values below 1.0 indicate a negative relationship. In these cases, the officer and/or district characteristics that enhanced (or mitigated) this relationship are also reported. If no characteristics are listed, this indicates that no officer or district characteristic was related to this relationship. The narrative section below the table further summarizes the findings for traffic stops.

Table 6-25: Summary of Vehicle Stop Activities

	Black	Hispanic	Asian
Vehicle Stops			
Curb Sat	2.8	NS	NS
Handcuffing	NS	NS	0.09
Vehicle Sat	NS	NS	NS
No Report Required	NS	NS	NS
Field Interview	9.0 - Male Officer	3.4	NS
Traffic Citation	0.5 - Male Officer	NS	NS
Criminal Citation	2.1 + Length of Service	2.3	0.5
Arrest	NS	NS	NS
Arrest by Warrant	NS	NS	NS
Searches	2.0	1.7 - Hispanic Officer + Length of Service	0.5
Evidence	NS	0.4 + Male Officer	0.2

NS – Not statistically significant

- Detentions
    - Black citizens were 2.8 times more likely than White citizens to be curb sat after considering other potential factors including reason for the stop, officer characteristics, and district characteristics. Asian citizens were 91% *less likely* than White citizens to be handcuffed after controlling for all other available factors. Detention actions took place during only 4.5% (curb sitting), 4.1% (handcuffing), and 2.4% (sitting in vehicle) of vehicle stops, resulting in a limited impact on minority citizens.
- Outcomes
    - Citizen racial/ethnic groups did not differ in their likelihood of a vehicle stop concluding without *an official report* after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Importantly, this stop outcome was the most common resolution to a vehicle stop initiated by the SJPD, and these data indicate no statistical or substantive difference in the treatment of citizens from different racial/ethnic groups.
    - Black citizens were 9.0 times more likely to have a vehicle stop concluded with *a field interview*, and Hispanic citizens were 3.4 times more likely to experience this outcome compared to White citizens. Moreover, the likelihood of a Black citizen being field interviewed was weakened when a male officer was involved and strengthened when a female officer was involved. Two caveats are in order. First, although the majority of the difference in the likelihood of a Black citizen being field interviewed was associated with officer characteristics (63.7%), the cumulative effect of all officer variables explained only 10.3% of that variance. Second, field interviews only occurred in 1.6% of all vehicle stops resulting in a limited substantive impact on minority citizens.
    - Black citizens were less likely to be issued a *traffic citation* compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Further assessment of the relationship between Black citizens and receipt of a traffic citation revealed that Black citizens were less likely to receive a citation when the officer was male and more likely to receive a citation when the officer was female. Overall, the substantive impact of these findings is important to consider as slightly less than a quarter of all vehicle stops resulted in a traffic citation, and Black citizens were less likely than similarly situated White citizens to receive that outcome.
    - Black and Hispanic citizens were 2.1 and 2.3 times more likely to be issued a *criminal citation* compared to White citizens after considering other potential factors including the reason for the stop, officer characteristics, and district characteristics. Further assessment of the relationship between Hispanic citizens and receipt of a criminal citation revealed that this relationship was not further explained by any of the officer or district characteristics in the model. For Black citizens, however, their risk of criminal citation was slightly enhanced when the vehicle stop involved an officer with more years of service.

- Results indicate no statistical differences between citizen racial/ethnic groups and the likelihood of an *arrest* or *arrest by warrant*.
- Black and Hispanic citizens were 2.0 and 1.7 times more likely to be *searched* compared to White citizens after considering all other available factors. Asian citizens were less likely to be searched than White citizens. The likelihood of a Hispanic citizen being searched was less likely to occur when the officer involved also was Hispanic. The chance of a Hispanic search was enhanced, however, as the officer's years of service increased.
- Hispanic and Asian citizens were less likely to be found *carrying contraband* compared to similarly-situated White citizens. The likelihood of discovering contraband among Hispanic citizens was significantly higher when the vehicle stop involved a male officer rather than a female officer.

7. PEDESTRIAN STOPS

Chapter 7 summarizes the analyses undertaken to examine pedestrian stops initiated by the San Jose Police Department during the study period. Pedestrian stops are initially summarized followed by benchmark comparisons to assess whether or not there was disproportionality in the racial/ethnic composition of pedestrian stops. A multivariate model was also estimated to assess this relationship. Activities undertaken during the stop, such as detentions, citations, arrests, and searches were also explored. These results progress from descriptive statistics through bivariate analyses and conclude with multilevel models to identify characteristics that correlate with the likelihood of a specific outcome occurring.

Table 7-1 reports the distribution of pedestrian stops by citizen race/ethnicity. Hispanic citizens comprised the largest portion of pedestrians stopped (57.5%), while White (21.7%) and Black (14.4%) citizens represented a smaller portion of all pedestrian stops.

Table 7-1: Distribution of Pedestrian Stops by Driver Race/Ethnicity

Driver race/ethnicity (N=22,953)	Number of stops	Percent of stops
White (non-Hispanic)	4,989	21.7
Black (non-Hispanic)	3,303	14.4
Hispanic*	13,209	57.5
Asian	951	4.1
Other	501	2.2

* Includes Hispanics of any race.
575 cases were excluded due to unknown race/ethnicity information.
1,505 cases were excluded because they were initiated by the VCET unit.

The distribution of citizen race/ethnicity and pedestrian stops varied across districts as demonstrated in Table 7-2. Hispanic citizens were the most frequently stopped group in 14 of 17 districts and ranged from a high of 79.8% of all pedestrian stops in District C to a low of 31.5% in District T. White citizens were most frequently stopped at the airport and in districts A and T, while stops of Black citizens ranged from a high of 27.6% (District S) to a low of 6.8% (District C) across all districts.

Table 7-2: Distribution of Pedestrian Stops by Driver Race/Ethnicity by SJPD District

District (N=22,953)	Percent of White Ped Stops	Percent of Black Ped Stops	Percent of Hispanic* Ped Stops	Percent of Asian Ped Stops	Percent of Other Ped Stops
Central					
D District (Airport) (N =8)	50.0	12.5	37.5	0.0	0.0
E District (N = 2,249)	29.7	20.9	43.8	3.1	2.4
K District (N = 1,915)	15.2	13.2	67.4	2.6	1.6
R District (N = 941)	28.6	21.1	40.3	6.9	3.1
V District (N = 1,039)	20.8	10.0	65.6	2.1	1.4
Foothill					
C District (N = 2,177)	6.9	6.8	79.8	4.7	1.7
M District (N = 2,132)	10.4	8.9	74.0	4.4	2.3
P District (N = 738)	12.1	13.1	59.1	11.2	4.5
W District (N = 596)	20.1	11.2	61.6	4.9	2.2
Southern					
A District (N = 652)	48.9	10.9	33.6	2.5	4.1
T District (N=476)	55.3	8.6	31.5	2.1	2.5
X District (N=1,645)	19.3	10.2	65.4	3.4	1.7
Y District (N=825)	35.0	12.1	47.6	2.4	2.8
Western					
F District (N=882)	37.6	10.5	48.0	1.5	2.4
L District (N=2,865)	22.3	13.8	53.8	8.8	1.3
N District (N=761)	23.8	8.0	62.8	2.4	3.0
S District (N=3,052)	20.3	27.6	48.1	1.6	2.3

* Includes Hispanics of any race.

Benchmarking

Descriptive statistics offer an initial overview of how pedestrian stops were spread across racial/ethnic groups; however, they are limited in their ability to answer the key research questions. For example, the fact that Hispanic citizens represent 57.5% of all pedestrian stops during the study period is not particularly meaningful unless compared against the percent of Hispanic citizens expected to be stopped during that time period. As previously outlined (see Chapter 4), the current study employs two benchmarks to use as comparisons for the pedestrian stop data: crime suspects

and calls for service data.[22]

Crime Suspects Benchmark

The following tables summarize the comparison between the percent of pedestrian stops for each racial/ethnic group compared to the percentage of violent crime suspects in each group. Table 7-3 indicates that, city-wide, Black citizens represent a higher percentage of violent crime suspects (18.3%) compared to the percentage of pedestrian stops involving Black citizens (14.4%). This difference is statistically significant and represents a substantive difference. Across the districts, ten of the 17 districts demonstrated a similar pattern. One district (District S) demonstrated the inverse relationship in which Black citizens comprised a higher percentage of the pedestrian stops compared to the percentage of that group in the crime suspect data.

Table 7-3: Comparison of Pedestrian Stops to Violent Crime Suspects (Black)

District (N=22,953)	Percent of Ped Stops of Black Citizens	Percent of Suspects who were Black	*t*	*p*-value	Odds ratio
City-Wide	14.4	18.3	-8.55	0.00	0.75
Central					
D District (Airport)	12.5	66.7	-1.80	0.12	--
E District	20.9	34.2	-6.96	0.00	0.51
K District	13.2	19.6	-3.60	0.00	0.62
R District	21.1	27.7	-2.72	0.01	0.70
V District	10.0	8.7	0.64	0.52	--
Foothill					
C District	6.8	10.7	-3.45	0.00	0.61
M District	8.9	14.5	-4.23	0.00	0.58
P District	13.1	16.7	-1.90	0.06	--
W District	11.2	19.1	-3.51	0.00	0.54
Southern					
A District	10.9	17.4	-2.92	0.00	0.58
T District	8.6	10.4	-0.77	0.44	--
X District	10.2	12.1	-1.29	0.20	--
Y District	12.1	24.8	-5.59	0.00	0.42
Western					

[22] Please refer to Chapter 3 for a full description of these two approaches including their use in previous studies.

F District	10.5	22.0	-5.39	0.00	0.42
L District	13.8	15.6	-1.36	0.18	--
N District	8.0	17.8	-4.94	0.00	0.40
S District	27.6	22.4	2.51	0.01	1.31

The representation of Hispanic citizens in pedestrian stops compared to violent crime suspects reveals a mixed pattern. City-wide, there was no statistical difference between the percentage of Hispanic citizens involved in pedestrian stops (57.5%) and their representation as suspects in violent crime (58.7%). At the district level, four districts showed higher rates of Hispanic involvement in pedestrian stops compared to the crime suspect benchmark, five districts demonstrated lower rates of Hispanic involvement in pedestrian stops compared to their representation as crime suspects, and the remaining eight districts revealed no statistical differences in rates (see Table 7-4).

Table 7-4: Comparison of Pedestrian Stops to Violent Crime Suspects (Hispanic)

District (N=22,953)	Percent of Ped Stops of Hispanic Citizens	Percent of Suspects who were Hispanic	*t*	*p*-value	Odds ratio
City-Wide	57.5	58.7	-1.91	0.06	--
Central					
D District (Airport)	37.5	0.0	1.24	0.25	--
E District	43.8	47.4	-1.64	0.10	--
K District	67.4	62.3	2.11	0.04	1.25
R District	40.3	39.8	0.16	0.87	--
V District	65.6	67.1	-0.47	0.64	--
Foothill					
C District	79.8	75.8	2.35	0.02	1.26
M District	74.0	68.2	3.05	0.00	1.33
P District	59.1	60.5	-0.54	0.59	--
W District	61.6	55.6	1.89	0.06	--
Southern					
A District	33.6	48.8	-4.75	0.00	0.53
T District	31.5	56.6	-6.55	0.00	0.35
X District	65.4	66.7	-0.55	0.58	--
Y District	47.6	48.3	-0.22	0.82	0.97
Western					

F District	48.0	48.6	-0.20	0.84	--
L District	53.8	59.0	-2.85	0.00	0.81
N District	62.8	55.9	2.26	0.02	1.33
S District	48.1	59.4	-4.87	0.00	0.64

Results from the bivariate comparison of Asian citizens' involvement in pedestrian stops compared to their representation as crime suspects reveals that across the city their involvement in pedestrian stops is less frequent (4.1%) compared to their representation among violent crime suspects (6.4%). At the district level, six of the 17 districts also had statistically significantly lower rates of pedestrian stop involvement compared to the crime suspect benchmark (see Table 7-5).

Table 7-5: Comparison of Pedestrian Stops to Crime Suspects (Asian)

District (N=22,953)	Percent of Ped Stops of Asian Citizens	Percent of Suspects who were Asian	*t*	*p*-value	Odds ratio
City-Wide	4.1	6.4	-8.42	0.00	0.63
Central					
D District (Airport)	0.0	0.0	--	--	--
E District	3.1	3.7	-0.78	0.42	--
K District	2.6	3.7	-1.27	0.20	--
R District	6.9	11.9	-3.09	0.00	0.55
V District	2.1	4.9	-2.56	0.01	0.42
Foothill					
C District	4.7	5.4	-0.76	0.45	--
M District	4.4	5.4	-9.42	0.00	0.73
P District	11.2	11.5	-0.21	0.84	--
W District	4.9	11.8	-4.08	0.00	0.38
Southern					
A District	2.5	3.3	-0.79	0.43	--
T District	2.1	2.8	-0.58	0.56	--
X District	3.4	5.6	-2.30	0.02	0.60
Y District	2.4	2.8	-0.43	0.67	--
Western					
F District	1.5	2.6	-1.69	0.17	--

L District	8.8	11.5	-2.49	0.01	0.74
N District	2.4	4.4	-1.88	0.06	--
S District	1.6	2.2	-0.93	0.35	--

Calls for Service Benchmarking

A comparison of pedestrian stops involving Black citizens to calls for service (for the selected call types in selected beats based on hot spot analyses) identifying Black citizens as suspects revealed that the rate of pedestrian stop involvement for Blacks was statistically lower than expected in 13 of the 18 beats (see Table 7-6) analyzed. Importantly, caution should be used when examining these comparisons as some of the percentages are based on a small number of cases. In the downtown beats (E2, E3, K1, K2) and in the beats along the Monterey Road corridor (L1, S5, S6), Black citizens were significantly underrepresented in pedestrian stops compared to the citizen calls for service benchmarks.

Table 7-6: Comparison of Pedestrian Stops to Calls for Service (Black)

Beats (N=10,264)	Ped Stops of Black Citizens		Calls for Service of Black Citizens		*t*	*p*-value	Odds ratio
	N	%	N	%			
Prostitution							
L District, Beat 1	466	5.6	49	75.5	-14.21	0.00	0.02
S District, Beat 5	1,147	35.7	138	72.5	-8.33	0.00	0.21
S District, Beat 6	1,025	40.0	275	74.2	-10.08	0.00	0.23
Narcotics							
E District, Beat 2	849	22.5	82	39.0	-3.35	0.00	0.45
E District, Beat 3	754	23.6	108	34.3	-2.39	0.02	0.59
K District, Beat 1	304	25.7	60	48.3	-3.52	0.00	0.37
K District, Beat 2	223	26.5	29	45.8	-2.86	0.00	0.43
C District, Beat 2	421	5.7	46	6.5	-0.23	0.82	--
C District, Beat 3	443	5.2	162	4.3	0.44	0.66	--
P District, Beat 1	372	12.9	33	15.2	-0.38	0.71	--
Suspicious Persons							
E District, Beat 2	849	22.5	589	32.6	-4.26	0.00	0.60
E District, Beat 3	754	23.6	525	34.5	-4.26	0.00	0.59
K District, Beat 1	304	25.7	286	26.9	-0.35	0.73	--
K District, Beat 2	223	26.5	284	39.1	-2.99	0.00	0.56

Disturbances							
E District, Beat 2	849	22.5	2,752	29.3	-3.89	0.00	0.70
E District, Beat 3	754	23.6	2,820	32.1	-4.52	0.00	0.65
K District, Beat 1	304	25.7	1,172	29.3	-1.24	0.22	--
K District, Beat 2	223	26.5	1,146	34.0	-2.20	0.03	0.70

Table 7-7 reveals a very different picture, as Hispanic citizens were involved in pedestrian stops at rates that statistically exceed their representation among suspects in calls for service in 15 of 18 beats. Again, it is important to add that these comparisons were restricted to selected beats (based on hot spot analyses) and specific call types, and in some cases, were based on a limited number of calls.

Table 7-7: Comparison of Pedestrian Stops to Calls for Service (Hispanic)

Beats (N=10,264)	**Ped Stops of Hispanic Citizens**		**Calls for Service of Hispanic Citizens**		***t***	***p*-value**	**Odds ratio**
	N	**%**	**N**	**%**			
Prostitution							
L District, Beat 1	466	66.1	49	6.1	8.16	0.00	29.89
S District, Beat 5	1,147	50.6	138	7.2	9.65	0.00	13.09
S District, Beat 6	1,025	39.7	275	6.2	10.53	0.00	9.99
Narcotics							
E District, Beat 2	849	41.8	82	20.7	3.72	0.00	2.75
E District, Beat 3	754	42.7	108	23.1	3.88	0.00	2.47
K District, Beat 1	304	50.0	60	13.3	5.23	0.00	6.50
K District, Beat 2	223	44.4	29	11.9	4.59	0.00	5.93
C District, Beat 2	421	78.9	46	67.4	1.78	0.08	--
C District, Beat 3	443	82.4	162	86.4	-1.18	0.24	--
P District, Beat 1	372	59.4	33	54.5	0.54	0.59	--
Suspicious Persons							
E District, Beat 2	849	41.8	589	25.0	6.59	0.00	2.16
E District, Beat 3	754	42.7	525	28.8	5.08	0.00	1.85
K District, Beat 1	304	50.0	286	36.7	3.25	0.00	1.72
K District, Beat 2	223	44.4	284	28.2	3.79	0.00	2.04
Disturbances							
E District, Beat 2	849	41.8	2,752	28.4	7.36	0.00	1.81

E District, Beat 3	754	42.7	2,820	27.3	8.13	0.00	1.98
K District, Beat 1	304	50.0	1,172	34.4	5.01	0.00	1.91
K District, Beat 2	223	44.4	1,146	29.5	4.37	0.00	1.91

For Asian citizens, Table 7-8 reveals very little difference between their involvement in pedestrian stops and as suspects in calls for service. Only one beat indicated a higher rate of involvement in pedestrian stops for Asian citizens compared to their representation as suspects in calls for service related to prostitution (Beat 1, District L). Similarly, a single beat had a lower rate of Asian involvement in pedestrian stops compared to their involvement in calls for service related to suspicious persons (Beat 2, District K).

Table 7-8: Comparison of Pedestrian Stops to Calls for Service (Asian)

Beats (N=10,264)	Ped Stops of Asian Citizens		Calls for Service of Asian Citizens		*t*	*p*-value	Odds ratio
	N	%	N	%			
Prostitution							
L District, Beat 1	466	9.2	49	2.0	1.71	0.09	4.88
S District, Beat 5	1,147	1.5	138	0.00	1.44	0.15	--
S District, Beat 6	1,025	1.8	275	1.1	0.78	0.44	--
Narcotics							
E District, Beat 2	849	4.5	82	0.00	1.96	0.05	--
E District, Beat 3	754	3.2	108	0.1	1.31	0.19	--
K District, Beat 1	304	4.3	60	5.0	-0.25	0.80	--
K District, Beat 2	223	1.8	29	1.7	0.05	0.96	--
C District, Beat 2	421	8.1	46	13.0	-1.14	0.25	--
C District, Beat 3	443	5.0	162	2.5	1.34	0.18	--
P District, Beat 1	372	13.7	33	21.2	-1.18	0.24	--
Suspicious Persons							
E District, Beat 2	849	4.5	589	3.2	1.19	0.23	--
E District, Beat 3	754	3.2	525	2.7	0.54	0.59	--
K District, Beat 1	304	4.3	286	3.8	0.26	0.79	--
K District, Beat 2	223	1.8	284	6.3	-2.49	0.01	0.27
Disturbances							
E District, Beat 2	849	4.5	2,752	3.9	0.71	0.48	--
E District, Beat 3	754	3.2	2,820	4.4	-1.49	0.14	--

K District, Beat 1	304	4.3	1,172	3.0	1.13	0.26	--
K District, Beat 2	223	1.8	1,146	4.0	-1.62	0.11	--

The following four models (Tables 7-9 through 12) explore the decision to initiate a pedestrian stop by specifically examining each minority group against White citizens. These models include other potentially relevant factors including the reason for the stop, officer characteristics, and district characteristics. In each of these models, the Intercept represents the increased or reduced likelihood of a minority citizen being stopped compared to a White citizen while simultaneously considering all these other factors.

As reported in Table 7-9, Black citizens were less likely to be stopped compared to White citizens while simultaneously considering the impact of the reason for the stop, officer characteristics, and district characteristics (see the Intercept). Pedestrian stops of Black citizens were more likely when a penal code violation was observed or a watch bulletin was in effect. Officer and district characteristics had no statistically significant impact on the likelihood of a stop of a Black citizen.

Table 7-9: Cross-classified multilevel model predicting Black (compared to White) pedestrian stops

Variables (N = 8,262)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-0.84 (0.19)	0.43***
Type of Stop		
Vehicle code violation[a]	-0.02 (0.06)	0.98
Penal code violation	0.50 (0.08)	1.64***
Municipal code violation	0.04 (0.08)	1.04
Watch bulletin	0.62 (0.16)	1.86***
Officer Characteristics		
Black (non-Hispanic) officer[b]	0.42 (0.20)	1.53
Hispanic officer	0.09 (0.08)	1.10
Asian officer	0.02 (0.11)	1.02
Other race officer	0.19 (0.11)	1.21
Officer gender (male)	0.07 (0.15)	1.07
Length of SJPD service (years)	-0.005 (0.005)	0.99
District Characteristics[c]		
Violent crime rate	-0.07 (0.36)	0.93
% Population below poverty line	0.05 (0.03)	1.05
% Youth (age 15-24 years old)	-0.01 (0.04)	0.99

[a]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 67.77$, $p < 0.001$.

[b]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 7.25$, $p = 0.12$.

[c]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian,

and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 5.87$, $p = 0.12$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

In contrast to Black citizens, Hispanic citizens were more likely to be stopped compared to White citizens after considering all other available factors (Table 7-10). This likelihood was strengthened when the stop was initiated due to a vehicle code violation or a watch bulletin. Further assessment of the relationship revealed that this likelihood was also enhanced in areas with a higher percentage of the population below the poverty line. Overall, characteristics of the districts where stops occurred were associated with roughly one-third (32.4%) of the difference in the likelihood of a Hispanic pedestrian stop. Importantly, Hispanic pedestrian stops were quite common and represented the majority of pedestrian stops. Thus, this increased likelihood also possesses a substantive effect.

Table 7-10: Cross-classified multilevel model predicting Hispanic (compared to White) pedestrian stops

Variables (N = 18,131)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	0.70 (0.19)	2.01***
Type of Stop		
Vehicle code violation[a]	0.22 (0.05)	1.25***
Penal code violation	0.03 (0.06)	1.03
Municipal code violation	0.06 (0.06)	1.06
Watch bulletin	0.26 (0.14)	1.29†
Officer Characteristics		
Black (non-Hispanic) officer[b]	0.12 (0.17)	1.12
Hispanic officer	0.17 (0.07)	1.19
Asian officer	0.03 (0.09)	1.03
Other race officer	0.04 (0.10)	1.04
Officer gender (male)	-0.02 (0.12)	0.98
Length of SJPD service (years)	-0.001 (0.004)	0.99
District Characteristics[c]		
Violent crime rate	-0.72 (0.46)	0.48
% Population below poverty line	0.08 (0.04)	1.08†
% Youth (age 15-24 years old)	0.01 (0.05)	1.01
Overall rate of Hispanic pedestrian stops (across all race groups)		57.5%
% of differences in likelihood of Hispanic pedestrian stops related to differences across officers		10.3%
% of differences in likelihood of Hispanic pedestrian stops related to differences across districts		32.4%

[a]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 31.07$, $p < 0.001$.

[b]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 6.88$, $p = 0.14$.
[c]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 0.23$, $p > 0.50$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Finally, Asian citizens were less likely to be stopped compared to White citizens. This effect was consistent regardless of the reason for the stop and was not further influenced by officer or district characteristics (see Table 7-11).

Table 7-11: Cross-classified multilevel model predicting Asian (compared to White) pedestrian stops

Variables (N = 5,915)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-2.12 (0.30)	0.12***
Type of Stop		
Vehicle code violation[a]	-0.04 (0.09)	0.96
Penal code violation	0.09 (0.13)	1.10
Municipal code violation	-0.08 (0.12)	0.92
Watch bulletin	0.0003 (0.30)	1.00
Officer Characteristics		
Black (non-Hispanic) officer[b]	-0.02 (0.29)	0.98
Hispanic officer	-0.06 (0.11)	0.94
Asian officer	0.04 (0.13)	1.04
Other race officer	0.13 (0.14)	1.13
Officer gender (male)	0.26 (0.20)	1.30
Length of SJPD service (years)	-0.002 (0.01)	0.99
District Characteristics[c]		
Violent crime rate	-0.46 (0.70)	0.63
% Population below poverty line	0.06 (0.06)	1.06
% Youth (age 15-24 years old)	0.003 (0.07)	1.00

[a]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was not statistically significant, $\chi^2(4) = 1.98$, $p > 0.50$.
[b]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 1.64$, $p > 0.50$.
[c]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.28$, $p > 0.50$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Pedestrian Stop Activities and Outcomes

This section explores the use of limited detention actions and stop outcomes. Descriptive statistics are initially presented followed by bivariate comparisons between these activities and citizen race/ethnicity. Thereafter, multivariate, multilevel models were estimated to assess whether any relationship existed between stop activities and outcomes and citizen race/ethnicity net of other relevant factors, including type of stop, officer characteristics, and/or district characteristics.

Stop activities include three sub-types: detentions, stop outcomes, and searches (including discovery of contraband). The large majority of pedestrian stops did not result in a detention (77.0%), while the most common type of detention was to handcuff a citizen (11.0%) followed by curb sitting a citizen (9.6%). Table 7-12 also indicates that "no report required" was the most common conclusion of a stop (70.5%), while issuing a criminal citation (7.8%) and conducting a field interview (7.2%) were the next most frequent resolutions to a pedestrian stop. Searches were conducted in 51.4% of all pedestrian stops, and contraband was discovered in 15.4% of those incidents.

Table 7-12: Description of pedestrian stop activities

Variables (*N* = 22,797)	Percent	Range
Detention Type		
No curb sat, handcuff, or vehicle sat	77.0	0 – 1
Curb sat	9.6	0 – 1
Handcuff	11.0	0 – 1
Sat in police vehicle	2.4	0 – 1
Stop Outcome		
No report required	70.5	0 – 1
Field interview	7.2	0 – 1
Traffic citation	3.7	0 – 1
Criminal citation	7.8	0 – 1
Arrest	5.4	0 – 1
Arrest made by warrant	4.7	0 – 1
Other / unknown	0.7	0 – 1
Search Activity		
No search conducted	48.6	0 – 1
Search conducted	51.4	0 – 1
No contraband found	84.6% searches / 43.5% stops	0
Contraband found	15.4% searches / 7.9% stops	1

156 stops were excluded from these analyses because the type of detention was unknown.

Pedestrian Stop Activities Results - Bivariate

Table 7-13 reports on the bivariate relationship between stop activities and outcomes and citizen race/ethnicity. Results indicate that Hispanic citizens experienced a higher rate of curb sitting handcuffing, and being sat in a police vehicle compared to White citizens. Similarly, Black citizens

were handcuffed and sat in a police vehicle at higher rates than White citizens, but they were curb sat at lower rates compared to Whites or any other racial/ethnic group.

Results from the stop outcomes indicate that Black and Hispanic citizens had elevated rates of being field interviewed compared to White citizens, and Black citizens also possessed the highest rate of receiving a criminal citation. There were no obvious substantive differences in the rate of arrest or arrest by warrant across the different racial/ethnic groups.

Finally, searches were more frequently conducted on Hispanic citizens compared to White citizens and other groups. White and Black citizens were most commonly found to be carrying contraband, while Hispanic citizens possessed a rate of contraband discovery below Whites and the overall rate.

Importantly, these initial results only represent bivariate relationships without consideration of any other potentially relevant factors. As a result, it is critical to estimate multivariate models to assess whether the observed relationships remain after considering other factors.

Table 7-12: Citizen race/ethnicity in pedestrian stop activities

	Overall (N=22,797)	White (N=4,964)	Black (N=3,294)	Hispanic (N=13,159)	Asian (N=948)	Other (N=432)
Detention Type						
No detention	77.0	79.3	79.1	75.5	78.9	76.9
Curb sat	9.6	9.1	7.6	10.3	9.3	8.6
Handcuff	11.0	9.5	10.4	11.7	9.4	12.7
Sat in police vehicle	2.4	2.1	2.9	2.5	2.3	1.9
Stop Outcome						
No Report Required	70.5	72.0	66.7	70.8	72.8	70.1
Field Interview	7.2	4.4	8.1	8.3	4.4	3.7
Traffic Citation	3.7	4.1	3.8	3.4	5.2	7.2
Criminal Citation	7.8	8.1	10.2	7.1	6.9	6.7
Arrest	5.4	5.6	5.4	5.3	4.7	6.7
Arrest by Warrant	4.7	4.9	5.2	4.4	5.2	5.1
Other / Unknown	0.7	0.8	0.6	0.7	0.8	0.5
Search Activity						
No search	48.6	52.1	56.1	44.6	56.0	56.9
Search conducted	51.4	47.9	43.9	55.4	44.0	43.1
No contraband	84.6	82.8	82.6	85.5	87.3	83.3
Contraband found	15.4	17.2	17.4	14.5	12.7	16.7

156 pedestrian stops were excluded from these analyses because the type of detention was unknown.

Pedestrian Stop Activities Results - Multivariate

As outlined in the Vehicle Stop chapter, multivariate models are appropriate and critical to properly identify a potential relationship between actions undertaken by SJPD officers and minority citizens.

The process to estimate such models is complicated, but important to broadly explain in order to ensure that the results of the models are clear. Due to the fact that stops are "nested" within officers which are nested within districts, cross-classified, multilevel, multivariate models are estimated for all pedestrian stop activities.[23]

The subsequent tables report the final and appropriate models for simplicity of interpretation. Importantly, in all stop activity models, the relationship between citizen race/ethnicity and the stop activity differed across officers and districts thus requiring and justifying the more complicated models. As a result, the tables presented below report on the final models that explore not only whether a relationship existed between the stop outcome and citizen race/ethnicity but also what specific factors assist in understanding the reasons why such a relationship existed. The exploration of each outcome is provided below with this goal in mind.

Pedestrian stops may involve several types of detentions including curb sitting, which occurred in 9.6% of all pedestrian stops. Table 7-14 presents the results of a cross-classified, multilevel model indicating that minority citizens were not more likely to be curb sat compared to White citizens after considering all other available factors. Curb sitting was more likely to occur when the contact was based on any reason other than a consensual stop. Officer and district-level factors did not influence the likelihood of a citizen being curb sat in any statistically significant way.

Table 7-14: Cross-classified multilevel model predicting "curb sat" outcome

Variables (N = 20,511)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.29 (0.37)	0.04***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.29 (0.49)	1.34
Hispanic pedestrian	0.54 (0.38)	1.72
Asian pedestrian	-0.39 (1.02)	0.67
Other race pedestrian	1.00 (0.74)	2.73
Type of Stop		
Vehicle code violation[b]	0.44 (0.06)	1.55***
Penal code violation	0.44 (0.09)	1.55***
Municipal code violation	0.30 (0.08)	1.34***
Watch bulletin	0.56 (0.18)	1.75**
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.03 (0.50)	0.97
Hispanic officer	-0.04 (0.17)	0.96
Asian officer	-0.07 (0.23)	0.94

[23] Multivariate models were not examined for "vehicle sat" activities among pedestrians because the rate of this stop activity was too low within the sample to draw meaningful conclusions.

Other race officer	0.02 (0.24)	1.02
Officer gender (male)	-0.40 (0.37)	0.67
Length of SJPD service (years)	-0.002 (0.01)	0.99
District Characteristics[d]		
Violent crime rate	-0.28 (0.22)	0.75
% Population below poverty line	0.005 (0.02)	1.00
% Youth (age 15-24 years old)	0.0001 (0.03)	1.00

145 stops were excluded from these analyses because the type of stop was unknown.
2,297 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Black, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic citizens experienced "curb sat" stop outcomes (compared to White citizens). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model was not statistically significant, $\chi^2(4) = 3.64$, $p > 0.50$.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 53.07$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 0.14$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 0.05$, $p > 0.50$.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Table 7-15 summarizes the final model exploring the use of handcuffs as a type of detention. Hispanic citizens were more than twice as likely as White citizens to experience this type of detention. Handcuffing was more likely when a pedestrian stop was initiated due to a vehicle code violation, penal code violation, or a watch bulletin compared to a consensual stop. Also, of note, the likelihood of a Hispanic citizen being handcuffed was slightly dependent on the context of the pedestrian stop. Hispanic citizens were slightly more likely to be handcuffed in areas with a larger young population (15-24 year of age) and slightly less likely to be handcuffed in areas with a higher poverty rate.

Table 7-15: Cross-classified multilevel model predicting "handcuff" outcome

Variables (N = 20,511)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.38 (0.37)	0.03***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.64 (0.52)	1.89
Hispanic pedestrian	0.86 (0.40)	2.36*
Asian pedestrian	0.65 (0.69)	1.91
Other race pedestrian	0.50 (0.90)	1.65

Type of Stop		
Vehicle code violation[b]	0.29 (0.07)	1.33***
Penal code violation	0.63 (0.09)	1.87***
Municipal code violation	0.03 (0.09)	1.03
Watch bulletin	1.21 (0.16)	3.35***
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.43 (0.45)	0.65
Hispanic officer	0.03 (0.20)	1.03
Asian officer	0.17 (0.27)	1.19
Other race officer	0.04 (0.26)	1.04
Officer gender (male)	-0.42 (0.40)	0.65
Length of SJPD service (years)	0.01 (0.01)	1.01
District Characteristics[d]		
Violent crime rate	0.15 (0.19)	1.17
% Population below poverty line	-0.04 (0.02)	0.96†
% Youth (age 15-24 years old)	0.05 (0.03)	1.06†
% differences in likelihood of a Hispanic citizen-"handcuff" outcome related to officers		52.6%
% of these differences across officers related to known officer characteristics		44.6%
% differences in likelihood of a Hispanic citizen-"handcuff" outcome related to districts		3.1%
% of these differences across districts related to known district characteristics		91.1%

145 stops were excluded from these analyses because the type of stop was unknown.
2,297 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Black, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic citizens experienced "handcuff" stop outcomes (compared to White citizens). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model was not statistically significant, $\chi^2(4) = 4.77$, $p = 0.31$.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 104.36$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 1.45$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.06$, $p > 0.50$.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

With regard to the resolution of a pedestrian stop, several outcomes were possible including not writing an official report, conducting a field interview, issuing a traffic or criminal citation, or arresting the citizen either for commission of a crime or based on a warrant. Table 7-16 reports the final model for no report required and reveals that Hispanic and Asian citizens were less likely to receive this outcome compared to White citizens after controlling for all available other factors. Not writing an official report was the most common outcome (70.5%), and therefore, the reduced

likelihood of receiving this outcome by Hispanic and Asian citizens also has a substantive impact. This outcome also was less likely to occur based on all reasons recorded for pedestrian stops when compared to consensual stops. Approximately 17% (16.7%) of the difference in likelihood of receiving this outcome for Hispanic citizens was related to officers, and the likelihood of a "no report required" outcome was enhanced when the encounter involved a male officer. In other words, male officers were more likely than female officers to conclude a stop with "no report required" when a Hispanic citizen was involved, such that the "no report" rate among Hispanic citizens was closer to the rate among White citizens when the officer was male.

Table 7-16: Cross-classified multilevel model predicting "no report required" outcome

Variables (N = 22,808)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	1.43 (0.21)	4.17***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	-0.33 (0.27)	0.72
Hispanic pedestrian	-0.60 (0.21)	0.55**
Asian pedestrian	-0.99 (0.42)	0.37*
Other race pedestrian	-0.40 (0.46)	0.67
Type of Stop		
Vehicle code violation[b]	-0.09 (0.04)	0.92*
Penal code violation	-0.69 (0.05)	0.50***
Municipal code violation	-0.32 (0.05)	0.73***
Watch bulletin	-0.83 (0.10)	0.43***
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.01 (0.32)	0.99
Hispanic officer	0.13 (0.12)	1.14
Asian officer	-0.17 (0.15)	0.84
Other race officer	-0.08 (0.15)	0.92
Officer gender (male)	0.44 (0.21)	1.55*
Length of SJPD service (years)	-0.001 (0.001)	0.99
District Characteristics[d]		
Violent crime rate	0.11 (0.11)	1.12
% Population below poverty line	0.004 (0.01)	1.00
% Youth (age 15-24 years old)	-0.01 (0.01)	0.99
% differences in likelihood of "no report" among Hispanic citizens related to officers		16.7%
% of these differences across officers related to known officer characteristics		< 1.0%
% differences in likelihood of "no report" among Hispanic citizens related to districts		1.0%
% of these differences across districts related to known district characteristics		49.4%

145 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates

accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Black, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic citizens experienced a "no report required" outcome (compared to White citizens). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model was statistically significant, $\chi^2(4) = 10.37$, $p = 0.03$.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 244.79$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 3.76$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 3.09$, $p = 0.38$.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

For field interviews, Hispanic and Asian citizens were more likely to receive this outcome compared to White citizens after considering all other available factors (see Table 7-17). Slightly more than 7% of all pedestrian stops resulted in this outcome, which represents a substantive impact on these citizen groups. This outcome was less likely to occur when the pedestrian stop was initiated due to a vehicle, penal, or municipal code violation compared to a consensual stop. Despite the fact that 60.3% of the variation in the relationship between Hispanic citizens and being field interviewed was linked to officer characteristics, none of the available variables were statistically associated with this relationship.

Table 7-17: Cross-classified multilevel model predicting "field interview" outcome

Variables (N = 22,808)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-3.55 (0.50)	0.03***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.49 (0.62)	1.63
Hispanic pedestrian	1.07 (0.50)	2.92*
Asian pedestrian	1.29 (0.76)	3.64†
Other race pedestrian	-0.86 (1.38)	0.42
Type of Stop		
Vehicle code violation[b]	-0.50 (0.06)	0.61***
Penal code violation	-0.18 (0.08)	0.83*
Municipal code violation	-0.73 (0.08)	0.48***
Watch bulletin	-0.26 (0.17)	0.77
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.02 (0.60)	1.02
Hispanic officer	-0.16 (0.24)	0.86
Asian officer	-0.21 (0.29)	0.81
Other race officer	0.14 (0.32)	1.15

Officer gender (male)	-0.08 (0.48)	0.92
Length of SJPD service (years)	0.01 (0.01)	1.01
District Characteristics[d]		
Violent crime rate	0.51 (0.42)	1.66
% Population below poverty line	-0.06 (0.04)	0.94
% Youth (age 15-24 years old)	0.07 (0.05)	1.08
% differences in likelihood of "field interview" among Hispanic citizens related to officers		60.3%
% of these differences across officers related to known officer characteristics		32.1%
% differences in likelihood of "field interview" among Hispanic citizens related to districts		12.7%
% of these differences across districts related to known district characteristics		32.4%

145 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Black, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic citizens experienced a "field interview" outcome (compared to White citizens). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model approached statistical significance, $\chi^2(4) = 7.81$, $p = 0.10$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 112.44$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 1.29$, $p > 0.50$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 0.95$, $p > 0.50$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Analyses of traffic citations reveals no statistical differences across citizen racial/ethnic groups in the likelihood of receiving this outcome after controlling for all other available factors. While only occurring in 3.7% of all pedestrian stops, traffic citations were overwhelmingly more likely when the stop was initiated for a vehicle code violation. Penal and municipal code violations also increased the likelihood of this outcome (see Table 7-18).

Table 7-18: Cross-classified multilevel model predicting "traffic citation" outcome

Variables (N = 22,808)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-6.11 (0.50)	0.002***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.02 (0.61)	1.02
Hispanic pedestrian	0.45 (0.45)	1.56
Asian pedestrian	0.08 (1.02)	1.08
Other race pedestrian	-0.67 (1.00)	0.51
Type of Stop		

Vehicle code violation[b]	3.63 (0.25)	37.68***
Penal code violation	0.66 (0.32)	1.94*
Municipal code violation	2.07 (0.27)	7.93***
Watch bulletin	-0.05 (0.84)	0.95
Officer Characteristics		
Black (non-Hispanic) officer[c]	1.10 (1.02)	3.00
Hispanic officer	-0.37 (0.27)	0.69
Asian officer	-0.10 (0.33)	0.91
Other race officer	0.31 (0.37)	1.36
Officer gender (male)	-0.39 (0.44)	0.68
Length of SJPD service (years)	-0.004 (0.01)	0.99
District Characteristics[d]		
Violent crime rate	0.13 (0.33)	1.14
% Population below poverty line	-0.02 (0.03)	0.98
% Youth (age 15-24 years old)	0.01 (0.04)	1.01

145 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Black, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic citizens experienced a "traffic citation" outcome (compared to White citizens). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model was not statistically significant, $\chi^2(4) = 2.13$, $p > 0.50$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 583.28$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 4.64$, $p = 0.33$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 2.82$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Table 7-19 summarizes the analyses of criminal citations and indicates no statistical differences in the likelihood that minority citizens received a criminal citation compared to White citizens after considering all other available factors. Criminal citations were issued in 7.8% of all pedestrian stops, and this outcome was more likely when the pedestrian stop was predicated on a non-consensual reason.

Table 7-19: Cross-classified multilevel model predicting "criminal citation" outcome

Variables (N = 22,808)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.47 (0.29)	0.03***
Pedestrian Characteristics		

Black (non-Hispanic) pedestrian[a]	0.45 (0.38)	1.56
Hispanic pedestrian	0.36 (0.31)	1.43
Asian pedestrian	-0.74 (1.05)	0.48
Other race pedestrian	-0.03 (0.73)	0.97
Type of Stop		
Vehicle code violation[b]	0.25 (0.08)	1.28**
Penal code violation	1.23 (0.09)	3.44***
Municipal code violation	1.65 (0.08)	5.23***
Watch bulletin	0.59 (0.18)	1.80***
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.33 (0.55)	0.72
Hispanic officer	-0.22 (0.22)	0.80
Asian officer	-0.42 (0.31)	0.65
Other race officer	-0.16 (0.27)	0.86
Officer gender (male)	-0.31 (0.37)	0.73
Length of SJPD service (years)	0.01 (0.01)	1.01
District Characteristics[d]		
Violent crime rate	0.18 (0.21)	1.19
% Population below poverty line	-0.004 (0.03)	0.99
% Youth (age 15-24 years old)	-0.04 (0.03)	0.96

145 stops were excluded from these analyses because the type of stop was unknown.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Hispanic, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Black citizens experienced a "criminal citation" outcome (compared to White citizens). The full versions of the models are available from the authors, upon request.

[a]Reference is *White citizen*; an omnibus test of all citizen race variables was not statistically significant, $\chi^2(4) = 3.07$, $p > 0.50$.

[b]Reference is *Consensual stop*; an omnibus test of all stop types was statistically significant, $\chi^2(4) = 682.52$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 2.59$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.49$, $p > 0.50$.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Arrests were examined using the cross-classified, multilevel models with the results reported in Table 7-20. The final model showed no statistical differences in the likelihood of arrest for minority citizens compared to White citizens after considering all other available factors. Arrests were more likely to occur when the pedestrian stop was initiated as a result of a penal code violation or a watch bulletin as compared to a consensual stop. Conversely, municipal code violations reduced the likelihood of an arrest.

Table 7-20: Cross-classified multilevel model predicting "arrest" outcome

Variables (N = 22,808)	*B* (*SE*)	Odds ratio
Stop Characteristics		
Intercept	-3.84 (0.48)	0.02***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.24 (0.66)	1.27
Hispanic pedestrian	0.80 (0.51)	2.23
Asian pedestrian	1.22 (0.80)	3.38
Other race pedestrian	0.45 (0.97)	1.56
Type of Stop		
Vehicle code violation[b]	-0.12 (0.07)	0.89
Penal code violation	1.07 (0.08)	2.90***
Municipal code violation	-0.51 (0.10)	0.60***
Watch bulletin	0.94 (0.15)	2.55***
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.42 (0.75)	1.53
Hispanic officer	0.38 (0.31)	1.46
Asian officer	0.53 (0.43)	1.69
Other race officer	0.21 (0.44)	1.23
Officer gender (male)	-0.54 (0.64)	0.58
Length of SJPD service (years)	-0.02 (0.02)	0.98
District Characteristics[d]		
Violent crime rate	-0.42 (0.49)	0.66
% Population below poverty line	0.04 (0.05)	1.04
% Youth (age 15-24 years old)	-0.01 (0.06)	0.99

145 stops were excluded from these analyses because the type of stop was unknown.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Hispanic, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Black citizens experienced an "arrest" outcome (compared to White citizens). The full versions of the models are available from the authors, upon request.

[a]Reference is *White citizen*; an omnibus test of all citizen race variables was not statistically significant, $\chi^2(4) = 4.08$, $p = 0.40$.

[b]Reference is *Consensual stop*; an omnibus test of all stop types was statistically significant, $\chi^2(4) = 408.65$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 2.55$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.41$, $p >$

0.50.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

The likelihood of an arrest by warrant were also examined, and the final model showed no statistical differences in the likelihood of arrest by warrant for minority citizens compared to White citizens after considering all other available factors. Compared to a consensual stop, arrests were more likely to occur when the pedestrian stop was initiated as a result of a watch bulletin and less likely when the pedestrian stop was predicated on a vehicle code or municipal code violation (see Table 7-21).

Table 7-21: Cross-classified multilevel model predicting "arrest by warrant" outcome

Variables (N = 22,808)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-3.35 (0.41)	0.04***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.63 (0.52)	1.87
Hispanic pedestrian	0.35 (0.45)	1.42
Asian pedestrian	0.77 (0.75)	2.15
Other race pedestrian	0.70 (0.80)	2.01
Type of Stop		
Vehicle code violation[b]	-0.39 (0.07)	0.68***
Penal code violation	0.15 (0.09)	1.16
Municipal code violation	-0.22 (0.09)	0.80*
Watch bulletin	1.18 (0.13)	3.25***
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.81 (0.61)	2.24
Hispanic officer	0.19 (0.25)	1.21
Asian officer	-0.51 (0.34)	0.60
Other race officer	-0.07 (0.34)	0.94
Officer gender (male)	-0.53 (0.51)	0.59
Length of SJPD service (years)	0.01 (0.02)	1.01
District Characteristics[d]		
Violent crime rate	-0.12 (0.23)	0.88
% Population below poverty line	0.03 (0.03)	1.03
% Youth (age 15-24 years old)	-0.03 (0.03)	0.97

145 stops were excluded from these analyses because the type of stop was unknown.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Hispanic, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Black citizens experienced an "arrest by warrant" outcome (compared to White citizens). The full versions of the models are available from the authors, upon request.
[a]Reference is *White citizen*; an omnibus test of all citizen race variables was not statistically significant, $\chi^2(4) = 2.14$, $p >$

0.50.
[b]Reference is *Consensual stop*; an omnibus test of all stop types was statistically significant, $\chi^2(4) = 161.39$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 5.47$, $p = 0.24$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 4.59$, $p = 0.20$.
†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Pedestrian stops also were analyzed to assess whether minority citizens had a disproportionate experience with being searched. Nearly 50% (46.9%) of all pedestrian stops involved a search. Table 7-22 reports that no statistical relationship was discovered between citizen racial/ethnic groups and the likelihood of a search during a pedestrian stop. The likelihood of a search was elevated when the pedestrian stop was initiated due to a vehicle or penal code violation and reduced when a municipal code violation was the reason for the contact as compared to a consensual stop.

Table 7-22: Cross-classified multilevel model predicting "searches" during pedestrian stops

Variables (N = 20,511)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-0.94 (0.21)	0.39***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.19 (0.28)	1.21
Hispanic pedestrian	0.52 (0.20)	1.67
Asian pedestrian	0.41 (0.46)	1.50
Other race pedestrian	0.37 (0.48)	1.44
Type of Stop		
Vehicle code violation[b]	0.22 (0.04)	1.25***
Penal code violation	0.24 (0.06)	1.27***
Municipal code violation	-0.11 (0.05)	0.89*
Watch bulletin	0.11 (0.12)	1.12
Officer Characteristics		
Black (non-Hispanic) officer[c]	-0.47 (0.27)	0.63
Hispanic officer	-0.13 (0.10)	0.88
Asian officer	-0.09 (0.13)	0.92
Other race officer	-0.07 (0.14)	0.93
Officer gender (male)	-0.16 (0.20)	0.85
Length of SJPD service (years)	0.01 (0.01)	1.01
District Characteristics[d]		
Violent crime rate	0.07 (0.15)	1.08
% Population below poverty line	-0.02 (0.02)	0.98
% Youth (age 15-24 years old)	0.02 (0.02)	1.02

145 stops were excluded from these analyses because the type of stop was unknown.

2,297 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.
Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Black, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that Hispanic citizens experienced a search (compared to White citizens). The full versions of the models are available from the authors, upon request.
[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model was not statistically significant, $\chi^2(4) = 6.86$, $p = 0.14$.
[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 81.85$, $p < 0.001$.
[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 4.04$, $p = 0.40$.
[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 2.39$, $p > 0.50$.
$^{\dagger}p \leq .10$, $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Table 7-23 reports the findings from a model examining the discovery of contraband during a search of a pedestrian. Overall, contraband was discovered in 9.8% of searches of pedestrians. No relationship was discovered between citizen racial/ethnic groups and the likelihood of contraband discovery. Pedestrian stops involving a search did result in a higher likelihood of contraband discovery when they were initiated due to a penal or municipal code violation as compared to a consensual stop.

Table 7-23: Cross-classified multilevel model predicting "evidence found" during pedestrian stops

Variables (N = 9,625)	***B* (*SE*)**	**Odds ratio**
Stop Characteristics		
Intercept	-2.06 (0.39)	0.13***
Pedestrian Characteristics		
Black (non-Hispanic) pedestrian[a]	0.27 (0.55)	1.31
Hispanic pedestrian	-0.08 (0.41)	0.92
Asian pedestrian	-0.51 (1.21)	0.60
Other race pedestrian	0.78 (1.14)	2.18
Type of Stop		
Vehicle code violation[b]	0.10 (0.09)	1.10
Penal code violation	0.93 (0.11)	2.54***
Municipal code violation	0.36 (0.11)	1.44***
Watch bulletin	0.37 (0.26)	1.45
Officer Characteristics		
Black (non-Hispanic) officer[c]	0.65 (1.19)	1.91
Hispanic officer	0.25 (0.30)	1.28
Asian officer	-0.27 (0.47)	0.77
Other race officer	0.19 (0.39)	1.21

Officer gender (male)	-0.10 (0.54)	0.91
Length of SJPD service (years)	0.02 (0.02)	1.02
District Characteristics[d]		
Violent crime rate	0.13 (0.30)	1.14
% Population below poverty line	-0.05 (0.04)	0.95
% Youth (age 15-24 years old)	0.04 (0.04)	1.04

2,057 stops were excluded from these analyses because the stop outcome was *arrest* or *arrest by warrant*.

Note. This table presents truncated versions of the full statistical models described. To attain accurate estimates of the parameters shown in this table, officer and district characteristics were entered in the full model as covariates accounting for significant variation in the intercept, and each of the citizen race dummy codes (i.e., Hispanic, Asian, and Other race citizens). The officer characteristics and district characteristics shown in this table are variables tested for their association with variation in the likelihood that evidence was found within searches of Black citizens (compared to White citizens). The full versions of the models are available from the authors, upon request.

[a]Reference is *White (non-Hispanic) citizen*; an omnibus test for the contribution of all citizen race variables to the model was not statistically significant, $\chi^2(4) = 1.32$, $p > 0.50$.

[b]Reference is *Consensual stop*; an omnibus test for the contribution of all stop types to the model was statistically significant, $\chi^2(4) = 95.54$, $p < 0.001$.

[c]Reference is *White (non-Hispanic) officer*; an omnibus test for the contribution of officer race characteristics to the model was not statistically significant, $\chi^2(4) = 1.61$, $p > 0.50$.

[d]An omnibus test for the contribution of district racial contribution variables (i.e., % Population White, Black, Asian, and Other race) showed that district race characteristics did not significantly contribute to the model, $\chi^2(3) = 1.17$, $p > 0.50$.

†$p \leq .10$, *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Summary of Results

Table 7-24 summarizes the results of the analyses comparing the rate of pedestrian stops (by racial/ethnic group) to the violent crime and calls for service suspect benchmarks. Compared to their representation among reported violent crime suspects, Black and Asian citizens were less likely to be stopped across the city and in most districts. The calls for service benchmark also revealed that Black citizens were stopped less frequently in the majority of beats analyzed compared to their representation among suspects in calls for service. Conversely, Hispanic citizens were stopped more frequently compared to their representation among suspects in selected calls for service in the majority of beats. These findings were confirmed in the multivariate models. The narrative section below the table further summarizes the findings for pedestrian stops.

Table 7-24: Summary of Stop Activities

	Black	Hispanic	Asian
Violent crime suspects			
City-wide	Lower rate of stops	NS	Lower rate of stops
Districts	Lower rate of stops in 10 of 17 districts	Variable	Lower rate of stops in 6 of 17 districts
Calls for service			
Beats	Lower rate of stops in 13 of 18 beats	Higher rate of stops in 15 of 18 beats	NS

Multivariate model	Less likely	More likely	Less likely

NS – Not statistically significant

- Reported crime suspects benchmark
  - City-wide, Black citizens represented a higher percentage of violent crime suspects (18.3%) compared to the percentage of pedestrian stops involving Black citizens (14.4%). This difference was statistically significant and represents a substantive difference. Across the districts, ten of the 17 districts demonstrated a similar pattern. City-wide, Black citizens were stopped *less frequently* than would be expected given their representation among reported violent crime suspects.
  - Across the city, there was no statistical difference between the percentage of Hispanic citizens involved in pedestrian stops (57.5%) and their representation as suspects in violent crime (58.7%). This overall finding masks variation at the district level where Hispanic citizens were stopped either more or less frequently than would be expected given their representation among reported violent crime suspects.
  - Asian citizens' involvement in pedestrian stops was lower (4.1%) than their representation as violent crime suspects (6.4%). At the district level, six of the 17 districts also had statistically significantly lower rates of pedestrian stop involvement compared to Asian representation among crime suspects.
- Calls for service benchmark
  - Restricted to specific types of calls for service: prostitution, narcotics, suspicious persons, and disturbances.
  - Only selected beats were analyzed based on a hot spots analyses.
  - Caution should be used in interpreting the findings as some of the comparisons involve a small number of calls for service.
  - Results indicate:
    - The rate of Black citizens involved in pedestrian stops was lower than their involvement as suspects in calls for service in 13 of the 18 beats analyzed. In some beats, Black citizens were stopped at *significantly lower* rates than would be expected given their representation among suspects reported by citizen callers for selected types of calls.
    - Hispanic citizens were involved in pedestrian stops at rates that statistically exceeded their representation among suspects in selected calls for service in 15 of 18 beats analyzed.
    - Asian citizens were involved in pedestrian stops at rates that were statistically indistinguishable from their involvement as suspects in selected calls for service.
- Multivariate analyses of pedestrian stops
  - Black citizens were less likely to be stopped compared to White citizens while simultaneously considering the impact of the reason for the stop, officer characteristics, and district characteristics.
  - Hispanic citizens were more likely to be stopped compared to White citizens after

considering all other available factors. This relationship was enhanced in areas with a higher percentage of the population below the poverty line.
- Asian citizens were less likely to be stopped compared to White citizens after considering all other available factors.

Table 7-25 summarizes the findings by showing the increased (or decreased) likelihood of a specific racial/ethnic group receiving a specific pedestrian stop outcome. Values (i.e., odds ratios) above 1.0 indicate a positive relationship while values below 1.0 indicate a negative relationship. In these cases, the officer and/or district characteristic that enhanced (or mitigated) this relationship also are reported. If no characteristics are listed, this indicates that no officer or district characteristic was related to this relationship. The narrative section below the table further summarizes the findings for pedestrian stop outcomes.

Table 7-25: Summary of Pedestrian Stop Activities

	Black	Hispanic	Asian
Pedestrian Stops			
Curb Sat	NS	NS	NS
Handcuffing	NS	2.4 - Poverty + Youthful pop.	NS
No Report Required	NS	0.7 + Male Officer	0.6
Field Interview	NS	2.9	3.6
Traffic Citation	NS	NS	NS
Criminal Citation	NS	NS	NS
Arrest	NS	NS	NS
Arrest by Warrant	NS	NS	NS
Searches	NS	NS	NS
Evidence	NS	NS	NS

NS – Not statistically significant

- Stop activities
  - Hispanic citizens were 2.4 times more likely than White citizens to be handcuffed during a pedestrian stop. This increased likelihood of handcuffing for Hispanics was slightly greater in districts with larger youthful populations and slightly lower in districts with higher poverty rates. No other statistically significant differences emerged regarding detention actions received by minority citizens.
  - Hispanic and Asian citizens were less likely to receive a *no report required* outcome compared to White citizens after controlling for all available other factors.
  - For *field interviews*, Hispanic and Asian citizens were more likely to receive this

outcome compared to White citizens after considering all other available factors.

- Analyses of *traffic citations* reveals no statistical differences across citizen racial/ethnic groups in the likelihood of receiving this outcome after controlling for all other available factors.
- No statistical differences in the likelihood that minority citizens received a *criminal citation* compared to White citizens were discovered after considering all other available factors.
- Minority citizens were statistically indistinguishable from White citizens with regard to their likelihood of an *arrest* after considering all other available factors.
- No statistical differences in the likelihood of *arrest by warrant* for minority citizens compared to White citizens were discovered after considering all other available factors.
- No statistical relationship was discovered between citizen racial/ethnic groups and the likelihood of a *search* during a pedestrian stop.
- No relationship was discovered between citizen racial/ethnic groups and the likelihood of *contraband discovery*.

8. FOCUS GROUPS AND RIDE-ALONGS

One of the goals of this study is to understand the relationship between the traffic and pedestrian stop activity of SJPD officers, crime in the community, and citizens' requests for service as reflected in 911 calls for police assistance. This can be partially explored through the analysis of reported crimes and calls for service, particularly the geographic distribution of this activity compared to locations where officers conduct traffic and pedestrian stops. The question that follows such analysis is whether officers perceive patterns of crime and citizen requests for service in a manner that is consistent with official data. Specifically, what are the mental maps officers form that link geography, crime and disorder, and the individuals they perceive as responsible for this activity that guide their stop activity? Are these perceptions consistent with department data? This perceptual understanding is examined in the present study through focus group interviews of department officers and ride-a-longs with officers in the field. The added value of these interviews and observations is the ability to capture police "working knowledge" about crime and disorder in San Jose and to provide context to reported crime and calls for service data, as well as insight on officer responsibilities and department practices that shape the patterns of police stop activity.

Six focus group interviews composed of six to ten officers each were conducted with two groups of patrol officers, the Traffic Enforcement Unit (TEU), the Violent Crimes Enforcement Team (VCET), Downtown Services Unit (DSU), and Metro Unit. Ride-a-longs were then conducted with four different patrol officers, VCET officers, and DSU officers. The interviews and ride-a-longs were conducted with patrol officers as they represent the majority of officers in the department, and prior research on traffic stops analysis finds patrol officers generally account for the largest portion of stops (Rojek, Decker, & Rosenfeld, 2012). TEU was selected for the interviews since its primary responsibility is traffic enforcement activity through traffic stops. Three remaining units were selected because they represent targeted enforcement units that typically engage in proactive stop activity. The primary responsibility of VCET is street-level gang enforcement and the gathering of gang intelligence, which in large part is accomplished through traffic stops, pedestrian stops, and consensual encounters. The primary responsibility of the Metro Unit is drug enforcement efforts, which include surveillance of drug activity, buy-bust operations, and developing cases through informants. It also has the primary responsibility for prostitution enforcement activity, and often plays a role in supporting targeted enforcement efforts related to gang activity and other crime problems that emerge. The DSU is responsible for the enforcement of quality of life violations (i.e. smoking in parks, urinating in public, being drunk in public), which is accomplished primarily through foot patrol of the downtown area, conducting pedestrian stops, and issuing citations.

The officers were asked during the focus groups to identify parts of the city that have concentrations of crime and disorder, and in some cases they provided factors they believe contribute to these issues. They were then asked if there were any patterns with regard to the race or ethnicity of individuals engaged in this crime and disorder activity. The purpose of asking the first question on concentrations of crime and disorder is to examine whether these perceptions are consistent with department crime and calls for service data, and subsequently where officers disproportionately engage in traffic and pedestrian stops as reflected in the limited detention data. The second question

is intended to capture whether officer perceptions of the racial and ethnic representation of individuals involved in this activity are reflected in citizen reports of crime and calls for service and whether officer perceptions are consistent with the racial and ethnic representation of stops. The focus groups also explored officer motivations for conducting stops and their insight on the current procedures for recording their stops under SJPD limited detention data collection protocols. The ride-a-longs allowed the research team members to observe officers engaging in stops and responding to citizen requests and provided an additional opportunity to discuss the above questions with the officers.

In addition to the officer focus groups and ride-a-longs, the research team also met with three citizen groups. The first group represented a collection of community members selected by the department's Citizen Advisory Board (CAB) to discuss issues and concerns regarding officer activity, particularly traffic and pedestrian stops. The second and third groups were identified based on the analyses of reported crimes, calls for service, and officer traffic and pedestrian stops. Specifically, two areas were identified as having high concentrations of calls for services and officer stop activity - the downtown business district and Monterey Road south of downtown in Districts L and S. The research team met with a group of business owners from the downtown business district and a group of community members who live near the Monterey Road area. The goal of meeting with these latter two groups was to gain a community perspective on crime and disorder in two areas where such activity is concentrated. The remainder of this chapter presents the perspectives of the officers gained from the focus groups and ride-a-longs, followed by a review of the perspectives of the three community groups

Officer Perspectives

Patterns of Crime and Disorder in San Jose

Each of the officers that participated in the focus groups and ride-a-longs were asked where crime and disorder problems occur in San Jose and particularly where this activity is concentrated. While each of the patrol officers currently have a specific patrol assignment that captures only a small portion of the city, they were from different patrol areas, and each has experience in working in a number of other patrol areas beyond their current assignment. The specialized unit participants (TEU, VCET, DSU and Metro) have specific enforcement functions that often narrow their work activity to specific areas of the city. However, the department's rotation policy in and out of specialized units also means the specialized unit officers have prior experience working patrol assignments across various parts of the city. Thus, collectively, the group of officers that participated in the focus groups offer considerable experience in working throughout the city of San Jose.

A number of officers noted that crime occurs across the city and there are pockets of criminal activity in each of the city's police districts. Beyond this assertion, the officers also provided more detail on patterns of crime and disorder. For example, the officers discussed concentrations of crime and disorder at the police district level, identifying those districts with the most activity. In particular, the officers consistently identified the Lincoln (L) district as having the highest levels of

crime and disorder in the city. As one officer noted, "I think every district pretty much has its hot spot areas as well, but for the most part, as a general area that [L district] is a very busy, busy area." Another officer responded when asked about areas of high crime, "Pretty much anything with an 'L' on it" in referring to a map on the table. Officers asserted there is high demand for police services in this district due to drug activity, drinking, and quality of life issues presented by the homeless population, traffic congestion and various crimes. When one of the research team members asked where officers go to engage in proactive stop activity, they unanimously responded "L." As one of the patrol officers noted, "That's where our, Lincoln and Sam, are our two training districts where the FTOs, the field training officers, take the recruits. Those are the two districts that they're in because they're probably the busiest, so they get everything done there." A number of officers also identified X district as having high levels of crime and disorder, though to a lesser extent than L.

The officers gave considerable attention to identifying patterns of specific crimes and related issues in particular areas, specifically drug activity, gang activity, quality of life issues, and prostitution. Similar to the assertions about general crime and disorder patterns, a number of officers stated that drug activity occurs throughout the city in houses, motels, and various other settings. Officers from the Metro Unit noted that methamphetamine ("meth") is found across the city, though they noted specifically that they come across it in the homeless community. When the officers were asked where public, street-level drug sales occur in the city, the officers across the focus groups unanimously stated Fountain Alley and the nearby area in the downtown Edward police district. As one patrol officer noted, "That's the hand-to-hand zone," referring to street level sale of drugs. A Metro officer responsible for drug operations similarly asserted, "So a lot of this street hand-to-hand stuff is, we find a large amount in First and Fountain Alley," which was followed up by a fellow Metro officer stating "Downtown, if you want to buy crack, you go to Fountain Alley." The officers across the groups asserted that the Fountain Alley area is the primary street-level illegal drug location with consistent activity. They did not identify any other similar locations and activity in the city. They attributed the illegal drug sale activity in Fountain Alley to the public transportation that allowed for easy access for sellers and buyers that do not live in the area. The officers also noted that pedestrian and vehicle traffic, easy positioning of lookouts, and accessible places to hide drugs facilitated drug sales and thwarted the ability of routine drug enforcement.

The issue that received the most attention from the officers was gang activity. The officers attributed a good portion of the violence in the city to gangs. When asked what portion of violent crime, such as shootings and armed robberies, could be attributed to gangs, one of the officers responded: "Like, percentage-wise, it's probably pretty high. Like 70 to 80% [multiple officers interjected agreement that it's high]." The officers across the different focus groups consistently identified the "eastside" of the city or Foothill Division as capturing a large portion of the gang activity in the city. As one officer noted, "If you want gangs you're going to go to the eastside. Eastside of San Jose, which is District Charles, District Paul, and District Mary." Officers from VCET and others also noted that there is some gang activity in Districts X-Ray, Lincoln, Sam, and Nora. Some of the officers also made the point that the activity of gangs in the city, notably their involvement in criminal activity, often takes place outside their territory and thereby impacts areas outside these districts.

Other common problems that the officers noted requires their response are what they termed quality of life issues. A variety of minor offenses and other minor disorder-related issues were articulated under this title to include drinking in public, smoking in parks, urinating in public, vagrancy and individuals experiencing mental health problems. The officers largely attributed this activity to the homeless population in the city, noting that these issues garner the most attention in the downtown area around Fountain Alley, St. James Park, Cesar Chavez Park, and along the Guadalupe River. The officers, particularly from the DSU and Metro Unit, noted that their stop activity related to these problems and the homeless population is largely driven by citizen demand to address these issues and enforce violations.

The final issue that received specific attention from the officers was prostitution. They identified 1st Street through its transition to Monterey Road as the concentration of street level prostitution, noting patrol areas L1, S5 and S6 as most problematic. A few of the officers attributed this activity to the low-cost motels in the area that facilitated some of this activity. One of the Metro officers who has engaged in prostitution enforcement efforts noted this activity occurs around the clock and that law enforcement activity is driven by citizen demand to address the problem. During one of the ride-a-longs around 9 p.m., an officer pointed out the women that appeared to be engaged in this activity walking along the street in this area, as well as a group of women loitering one block off 1st Street in front of an elementary school.

Patterns of Race and Ethnicity in Crime and Disorder

The underlying assertion of racial bias in policing is that officers make faulty assumptions about the connection between race/ethnicity and crime and disorder that then prompt them to make stops of one group more than another and more than is warranted by the suspect group's involvement in crime or other behaviors. Critical to the effort in examining the potential for bias in a police department is to capture any beliefs officers may have about connections between race/ethnicity, crime, and disorder and then to examine the extent to which those beliefs align with other data such as descriptions of suspects in citizen reports of crime or citizen calls for service. Officers across the groups mentioned that San Jose is a racially and ethnically diverse city, though they noted that neighborhoods varied in one group's involvement in crime relative to others. Officers from the TEU noted they observed no pattern with regard to race and ethnicity in relation to vehicle moving violations, suggesting that the racial and ethnic composition of such stops should represent the compositions of the driving population where they are making the stops. However, officers across the focus groups did draw connections between race and ethnicity and the crime and disorder problems mentioned above.

In line with the belief among the officers that they find meth activity across the city, one of the officers followed up by noting that those individuals he came into contact with for this drug are from all racial groups. As noted above, the officers asserted the downtown area around Fountain Alley is the primary open-air drug market in the city. When asked about the racial and ethnic composition of the buyers and sellers of illicit drugs in this area, one of the officers who regularly conducts operations in the area said the buyers cross all racial and ethnic groups. However, when

asked if any group is disproportionately involved in the selling of illicit drugs in that area, the officers unanimously agreed across the focus groups that this activity almost exclusively involved African American individuals. One of the officers noted he had performed undercover buy-bust operations in the area, and some of the suspects that sold to the undercover officers were Hispanic. With regard to African American suspects, the officers repeatedly noted these individuals were not residents of San Jose, but were from Oakland, Richmond, Hayward, and East Palo Alto. Some of the officers suggested these individuals came to this area to sell drugs because there was less conflict and violence over drug territory and the perception that law enforcement is less aggressive in San Jose. It was also suggested that the light rail transportation facilitates this movement of out- of-town sellers from these other cities to the Fountain Alley area.

One of the VCET officers noted street gangs in San Jose are largely racially/ethnically homogenous, dominated by Hispanic gangs with a lesser involvement by Asian gangs. As one VCET officer noted, "We have 114 validated identified gangs in this city. That's from every ethnicity, but out of that 114, and this is a rough guess, I haven't looked at the hard numbers, you're talking probably 85, maybe even a little bit higher, percent are Hispanic gangs." Other officers from VECT, as well as Metro Unit and patrol officers, offered a similar assessment. The Hispanic gang population is composed of a number of individual gangs that align under the Nortenos and Surenos gang affiliation, which spurs violence between gangs across these affiliations. VCET officers also noted these gangs are involved in drug activity, burglaries and vehicle theft. One VCET officer noted that Hispanic gangs account for more than 90% of their gang-related problems and crime. Asian gangs represent the other racial/ethnic-based street gang activity in San Jose, though this population is much smaller compared to the size of the Hispanic gang population. VCET and patrol officers asserted Asian gangs in the city were involved in gambling, drug activity and extortion. However, no clear geographic territory for their activities was mentioned for these groups as was the case for Hispanic gangs. A few of the VCET officers mentioned that Asian gang members in the city are not as readily identifiable by way of distinguishable dress and appearance as Hispanic gang members. A few officers mentioned there was gang affiliation among the African American males selling drugs in Fountain Alley, but there was little further elaboration on this link.

The officers noted the homeless population in the city is diverse, representing every racial and ethnic group. One of the DSU officers also noted this population varied in age, asserting that "we have kids from 17 to 60 that we deal with regularly." However, officers asserted that prostitution, specifically streetwalker prostitution, was primarily composed of African American females. Similar to the discussion on individuals selling drugs in Fountain Alley, some of the officers asserted these females were from outside of the city. Their assertion was that they came to San Jose because it was safer to operate, and they had less concern about getting robbed. One of the Metro officers noted that his unit had contact with a few White females and women of other racial/ethnic backgrounds engaged in prostitution and also suggested that they come in from outside the city.

Factors related to Conducting Traffic Stops

A critical component in evaluating the potential for racial and ethnic bias in traffic and pedestrian stops is understanding the motives of officers when engaging in these efforts. This improves insight

on the fit of the comparison data used to identify the presence of disparities in officers stops and factors that influence the presence of disparities. For example, if officers disproportionately conduct pedestrian stops in specific neighborhoods in the city, then there will likely be some disparities between the racial/ethnic composition of the stops and the overall racial/ethnic composition of the city. The stops are more likely to reflect the racial/ethnic composition of the neighborhoods where they are occurring as opposed to the composition of the city generally. Similarly, if one racial/ethnic population is perceived as having a higher representation among those individuals engaging in specific crimes and disorder activities, then proactive pedestrian stops intended to increase contacts will likely result in this racial/ethnic population having a higher representation in the stops.

The statements of the officers suggest such considerations are relevant in the analysis of SJPD stops, particularly for specialized units. For example, the TEU uses a data-driven approach to guide their traffic stop and enforcement activity. Department analysts working with the Department of Transportation identify locations in the city with concentrations of traffic collisions, and the TEU officers focus their stop activity in those locations. Similarly, the VCET officers noted that in the recent past the department leadership selected "zones" they should be patrolling to address gang activity, which was determined through crime analysis. More recently, they have been given more freedom to select their patrol activity and where they conduct stops, which results in spending time in known gang territories that were identified as predominantly being on the eastside of the city and just south of downtown.

The Metro unit did not discuss any specific data-driven process that guides the location of their operations, but noted their task is to focus on drug activity, gangs, and prostitution. Thus, their areas of operations, including stop activity, are narrowed to those locations they identified as having these activities. DSU has a focused operational area that largely encompasses the downtown business area and nearby parks. These data-driven and operational considerations illustrate that stops by the department's specialized units are not randomly distributed across the city but are isolated to specific geographical locations. As a result, the racial and ethnic representation of their stops are more likely to reflect racial composition of the specific area where they operate and those they perceive to be engaged in the crime and disorder activities of interest. The patrol officers represent the only group that has general enforcement responsibilities across the city, though they are restricted to primarily work their assigned geographic districts and beats.

The motivation for stop activity can also have an important influence on the racial and ethnic composition of traffic and pedestrian stops. The TEU was the only group of officers that asserted that its primary motivation for stops was to enforce traffic laws. Its stops are almost exclusively vehicles stops, and as one officer noted: "We are typically looking for some egregious moving violation act where we have no idea who we are stopping until we're at the window." Alternatively, the other specialized units have a more investigative motivation for traffic and pedestrian stops. The officers noted their stops are based on traffic violations, municipal code violations, or reasonable suspicion of criminal activity. The VCET and Metro Unit officers specifically noted that they proactively engage in traffic and pedestrian stops with an interest in uncovering criminal activity. It

was also expressed that some portion of patrol officers have a similar investigative focus rather than a traffic safety interest. One TEU officer responded when asked how different their motivations were for stops and searches compared to patrol officers, "100 percent different. Our focus is just, strictly, for violations and citations. I'm not out here doing investigative car stops." A patrol officer similarly asserted that traffic stops conducted by patrol officers are less focused on traffic control and more on investigative interests. The officers did not offer any perspective on what percent of patrol officer stops are investigative in nature compared to traffic control-oriented. However, the responses by officers suggest that patrol officer stops will not be randomly distributed across the city but instead will cluster around areas where patrol officers believe there are patterns of crime and disorder as noted above. By extension, the racial and ethnic composition of their stops are more likely to reflect the driving population of the neighborhoods where their stops are concentrated and who the officers identify as possibly engaged in criminal activity, as opposed to a reflection of the city as a whole.

Perspectives on the Recording of Stops

During the focus groups, as well as during the ride-a-longs, the research team asked officers about the collection of data on traffic and pedestrian stops, and the technical process of recording their stops. A couple of officers felt the requirement to collect data implied they were biased, and the officers found this to be an unfair accusation. A couple of other officers questioned whether the collection of data and analysis does much to help the police department. However, only one officer suggested that the recording of data created a disincentive to engage in stops. While the officers universally asserted that traffic and pedestrian stops had declined over time, they largely attributed this to the significant decline in department personnel over the past few years. The general argument was the department is spread too thin, where officers feel there are just enough of them to handle the volume of citizen requests on a daily basis and little free time for proactive stop activity.

In relation to the technical process of actually recording the data, officers noted that it took time to get used to reporting the seven required codes but that the process was not overly time-consuming or cumbersome otherwise. Research team members observed on the ride-a-longs that the clearing of stops only took a few seconds on the mobile data computer. A couple officers commented that it is possible to clear a call without using all seven required codes. One officer noted that the dispatchers typically remind them to clear with all seven codes if they report them over the radio, but sometimes they forget or get confused. However, this officer suggested that cases are limited where officers clear stops without using all codes, and the dispatchers are generally good about reminding them to clear with all codes.

The focus group discussion also identified some potential data collection issues related to TEU and DSU officers. When both units conduct a typical stand-alone traffic or pedestrian stop, they will notify dispatch they are on a stop and clear the stop with the seven codes for the limited detention data collection. However, when TEU officers put themselves out at a specific location for selective enforcement (e.g. radar), they may not report all stops or complete the seven limited disposition codes for individual stops. Selective enforcement means the officers are working a specific location for the enforcement of traffic violations, which will result in a number of individuals being flagged

down or stopped at that location. The majority of the individuals they stop receive citations, 80-90% as one officer noted. However, given the officers have not put themselves out on individual traffic stops, they do not clear each stop with the seven limited detention codes. Instead, they clear all of the stops at once when they are done with their selective enforcement, or at some point during this activity after they have made a number of stops. One of the TEU officers noted it is common in this collective clearing of stops that those individuals who were given a warning instead of a citation are not included in the reporting of stops. In addition, when clearing all the stops at once, the officers will commonly not report all seven disposition codes. Rather, the race or ethnicity of the individuals cited may be reported, but it may miss the gender information or the post stop actions (i.e. arrest, curb sat). It is important to note that the TEU officers asserted they rarely conduct searches or curb sit individuals. Instead, their focus is primarily on citations for moving violations. A few of the officers noted that their citation data (rather than their limited detention data) would more accurately reflect the number of stops they conduct and the racial/ethnic identity of those individuals stopped.

The enforcement activity of the DSU has similar reporting issues. A good portion of the enforcement activity of the DSU officers occurs when they are on foot patrol. Similar to selective enforcement by TEU officers, the DSU officers put themselves out on foot patrol in a specific area. While on foot patrol they will stop and cite individuals for a violation, often a municipal code violation. However, they do not clear each person cited or in a group as the TEU officers do during selective enforcement. Thus, these stops are not recorded in the limited detention database. The DSU officers noted they cite almost every person they stop, and their citations are the best record of their stop activity. As a result, the discussions with the TEU and DSU officers reveal that some portion of the traffic or pedestrian stops are not recorded or the information is incomplete in the limited detention database.

Citizen Perspectives

As noted above, the research team met with community members that are either on the department's CAB or were selected as representatives of the community by the CAB. The team also held separate meetings with community members in areas with high concentrations of calls for service and officer stops. These meetings provided the opportunity for the research team to present this project to the community and provided community members the opportunity to discuss related issues that were important to them. Given the different foci of these meetings, they are discussed below separately.

Community Advisory Board Representative Meeting

The research team provided a brief on the current study to the CAB representatives, which prompted some initial questions from the group on the scope of the project. Some of the representatives asked about what types of data were collected, such as whether data is captured on age, gender, and sexual orientation. There were also questions about whether the project was examining potential bias across the criminal justice system or the impact of other factors such as the "housing crisis." The research team and SJPD Captain Michael Kihmm told the group that the current project only examines the department's limited detention data and possible racial disparities

associated with police stops.

The remainder of the discussion focused on perceived biases in police activity. For example, when the research team asked the representatives whether crime was concentrated in specific parts of the city, some of the representatives mentioned the "eastside of San Jose" and "downtown." However, one of the members expressed that crime occurs in a number of areas that we would not expect, particularly more affluent neighborhoods. This individual asserted that criminals who dress in a more affluent way are not profiled because of their residence and appearance. Other representatives discussed how they felt they or other individuals they knew were frequently stopped by officers, which they felt was primarily the result of being African American or Hispanic. One representative also asked questions about individuals being stopped who "fit the profile," or someone who fits the description of a Be on the Lookout (BOLO) suspect. Her concern was that officers frequently stop individuals on the basis of such information, and the individuals stopped often do not fit the description and that this disproportionately impacts minorities. The only other primary issue raised by a few of the representatives was they felt the department often does not respond quickly enough to their calls for assistance.

Area Community Member Meetings

The first meeting with community members was with residents who live along the Monterey Road corridor, capturing police districts Lincoln and Sam. Following initial discussion about the limited detention study, the research team asked the residents to describe their community and any issues with crime and disorder they experience. The number one issue discussed was prostitution activity on Monterey Road and on the neighborhood streets just off Monterey Road. They described constant prostitution activity, with prostitutes walking up and down Monterey Road and the side streets flagging down cars, being loud, discarding condoms on the ground in the area (including around a local elementary school), and seeing prostitutes and their clients having sex in cars. One resident expressed concern that this activity occurs all day and night, including when children from the local school are released in the afternoon. Another resident described incidents where prostitutes and their clients where having sex in her neighbor's and her own front yard. One resident expressed that she would not take her daughter to restaurants in this area for fear of someone approaching her as a prostitute. Another resident followed-up by noting that you would never see local families walking on Monterey because of this fear. One community member described an experience where two men approached her at night when she was leaving a community center and asked how much she charged for sex. When the residents were asked who was engaged in the prostitution activity, they all stated it was predominantly African American females. One resident noted that if there are 20 prostitutes working, 18 or 19 would be African American and the remaining ones would be White or Hispanic. Similar to the officers, the residents stated that these women are not from the area. The clients were described as mainly Hispanic and White.

Another problem described in this area was gang activity, including related violence. One resident stated she had been a witness to a gang shooting and expressed frustration that the District Attorney's office did not offer her protection, as she was concerned because she lived in the neighborhood. She noted that because she had children and grandchildren, and did not want to be

labeled a "snitch," she would not report something like this again. Another resident discussed the issue of gang members consistently being on the local elementary school grounds after school hours. The concern expressed with this gang presence was related to loitering and drug activity but not much in the way of violence, although it was noted that these gang- affiliated individuals were creating confrontations with school officials and police at times. Gangs in the area were described as primarily being composed of Hispanic and White youth, but the residents noted that other gangs come into the area to provoke problems.

Beyond the prostitution and gang issues, there was limited discussion of drug activity. A couple of residents described the presence of "drug houses." Those engaged in drug activity were identified as Hispanic, White and African American. However, there was not much discussion on the impact of this activity or any forms of violence related to it. A couple of the residents acknowledged there have been complaints about police officers in the city treating minorities differently, but in the same statement expressed that there are problems in the community that need to be addressed.

The second community meeting was conducted with business owners from the downtown area. After a brief presentation of the limited detention analysis project and responding to questions from the business owners, the research team members asked the participants about crime and disorder issues in their area. One owner responded that he is at "ground zero" of the problems at the corner of Fountain Alley, and no other area is worse. The business owners primarily focused on the drug dealing in and around Fountain Alley, which they noted was a constant problem. A few of the owners asserted that the individuals dealing drugs came to the area by the train or bus. They stated the dealers were generally African American, mostly male, and under 25 years. A couple of the owners also said these individuals were from the "East Bay," which they knew through contact with them. One owner noted that sometimes there are different groups of dealers in the area, each African American, and occasionally violence erupts between these groups. The individuals who bought drugs from these sellers were stated to be more racially/ethnically diverse.

One of the owners stated there is some gang activity in the area, primarily involving Hispanic gangs. Illustrative of this, the research team observed graffiti identifying the "Nortenos" Hispanic gang affiliation near the building where this meeting occurred. According to the business owner, this gang activity reportedly has resulted in some violence, such as a shooting and stabbings, but this activity was not consistent. The business owners also noted their other primary problem was the homeless population in the area. Consistent with the observations of the SJPD officers with whom the research team spoke, the business owners stated that this population was racially/ethnically diverse. Some of the problems noted with the homeless population were property damage, loud yelling, and other disruptive behavior. However, one of the business owners stated that some of the homeless individuals in the area are violent, which reflected behavior such as assaulting people and harassing the employees that work for this owner.

Summary

The focus group interview and ride-a-longs with the officers, along with the meetings with citizen groups, highlight important considerations for the analysis of the limited detention data and

presentation of the analysis. The officers asserted that crime and other problems that demand their response are not evenly distributed across the city, but are concentrated in specific areas. These areas vary with respect to the specific types of crime (i.e. drug sales, gangs, prostitution) associated with them, and the officers asserted that some of this activity reflects an over-representation of one racial/ethnic group or another. For example, in the case of the Monterey Road area and downtown, the officer descriptions by race and ethnicity of who is engaged in criminal activity in these areas was largely consistent with statements of the residents. These findings suggest it is important to examine the distribution of reported crimes and calls for service in the city to see if they are concentrated in specific areas and if officers' traffic and pedestrian stops similarly are concentrated in these areas. If these two patterns occur, then it is critical for the analysis of officer stop activity to examine the potential for racial and ethnic disparities in small geographic areas to capture more localized characteristics of the population than the city as a whole. In addition, given that some of the SJPD units conducting stops have specialized responsibilities that bring the officers into contact with one racial or ethnic group more than others, it may be important to examine the stops of those officers independently. For example, the VCET has primary responsibility over gang activity in the city, and the formally identified gang population in the city is largely Hispanic, which suggests that VCET stops likely will reflect a higher percentage of Hispanic pedestrians and drivers than patrol officers. Finally, the questions of the CAB representatives on stop activity and concerns over bias highlight the importance of transparency by the SJPD in discussing with the community the results from this study, how the analyses were conducted, recommendations, and any related changes made by the department.

9. RECOMMENDATIONS

This section of the report outlines recommendations for future data collection and analysis, training, and community engagement to reduce actual or perceived racial and/or ethnic bias by the San Jose Police Department. As part of the project to analyze the SJPD's limited detention data, the UTEP research team met several times with the SJPD command staff, including Chief Eddie Garcia, his deputy chiefs, and several captains. The team also conducted focus groups with almost three dozen line-level officers representing the primary street-level enforcement units (e.g. Patrol, Traffic, VCET, Downtown Services Unit) in the agency. Focus groups also were conducted with more than 20 community members to discuss police operations, crime, and related community concerns in San Jose. The research team's interactions with the SJPD were uniformly positive and revealed an agency that is professional, self-reflective, open to criticism, and willing to change. The recommendations below are offered in that same spirit of openness and are designed to provide the City of San Jose, its police department, and its community stakeholders with suggestions for how to reduce actual or perceived racial and/or ethnic bias in police decision-making and provide fair and constitutional policing to San Jose residents and visitors.

Data Collection and Analysis

The SJPD currently collects a limited amount of information on most self-initiated traffic and pedestrian stops conducted by its officers. The SJPD Duty Manual (L 5108) requires officers to report certain citizen demographic (race/ethnicity, gender) information, the reason for the stop, and the outcome of the stop using seven disposition codes reported either through a mobile data computer (MDC) in a police vehicle or to the dispatcher in a series of codes spoken over the radio. Appendix B of this report provides detailed recommendations for improving the quantity and quality of the data collected as part of the L 5108 requirements, and those recommendations will not be repeated here. Instead, the focus of this section is on providing specific recommendations for ongoing data analysis, including identifying potentially disparate stop patterns by individual officers and responding to those patterns constructively as part of a comprehensive early warning system for possible officer misconduct.

Recommendation 1

The SJPD should consider implementing the data collection recommendations found in Appendix B and contracting with an outside analysis team on an annual or semi-annual basis to analyze the data for aggregate patterns of racial/ethnic disparity. The analyses and findings reported in the sections above provide a snapshot of police stop activity from September 2013 through March 2016. Once these findings are read and understood by the SJPD, the Independent Auditor, and the community at large, ongoing efforts to collect and analyze stop data are recommended. Such efforts demonstrate an agency-wide commitment to fair and unbiased policing, which has the potential for increasing transparency and community trust. Ongoing data analysis also has the potential for showing reductions over time in the disparities identified in this report. While it is unlikely that SJPD stop patterns and post-stop outcomes will ever reflect perfect racial/ethnic parity, regular data analysis and reporting can demonstrate reductions in racial/ethnic disparities over a period of years and provide evidence that the agency's training and monitoring efforts regarding racial bias have had their intended effect.

Recommendation 2

The SJPD should consider developing the capacity, either internally or through a contracted analysis team, to identify racially or ethnically disparate stop patterns by individual officers and to proactively address such patterns if they emerge through early intervention and training. Aggregate findings of racial and/or ethnic disparities in stops and stop outcomes are ubiquitous in the reported literature on racial profiling. The disparities identified in San Jose are similar to those found in almost every reported study on racial profiling (see the Literature Review section above). While large-scale analyses of agency-wide stop practices are useful for tracking agency performance and change over time, they cannot identify officers who may be disproportionately contributing to stop disparities.

Researchers have long known that a relatively small number of officers who disproportionately stop minority citizens can skew the results from a department-wide stop or post-stop outcome analysis. Identifying those officers and further investigating why their stop practices differ from their peer officers can be a valuable tool in an agency's efforts to reduce racial disparities in its overall stops (Fridell, 2004; Smith, 2005; Walker, 2001; Walker, 2003). The UTEP research team recommends that the SJPD invest in building the capacity, as part of a comprehensive early warning system, to identify officers whose stop patterns are significantly different from their peers. Officers who stop, arrest, or search minority citizens significantly more often than their peers may be justified in doing so for a variety of legitimate reasons, including special details or geographic assignments. Thus, a peer-to-peer analysis is the beginning, and should not be the end, of the inquiry. However, if an officer repeatedly stands as an outlier compared to his or her peers and further inquiry reveals no legitimate reason for the racial/ethnic stop patterns observed, then the agency is well-positioned to positively intervene with that officer through training, mentorship, or further monitoring. Such an effort, when done appropriately, can reduce overall disparities in the agency and potentially avert problems (such as citizen complaints or lawsuits) in the future.

Training

The SJPD has engaged in a number of steps to provide anti-bias and procedural justice training to its officers. In 2015, all sworn SJPD personnel at the rank of lieutenant and above attended 8 hours of training in Fair and Impartial Policing put on by Dr. Lorie Fridell, which is designed to raise awareness about implicit biases and their potential effect on decision-making. At the time this report was being writing, SJPD sergeants and line officers also had begun to receive Fair and Impartial Policing training. In addition, most captains have attended "Museum of Tolerance" (Los Angeles, CA) training dedicated to challenging visitors to the facility to understand the Holocaust in both historic and contemporary contexts and to confront all forms of prejudice and discrimination. Recruit officers attending the SJPD academy are subject to the California *Peace Officer Standards and Training (POST)* requirements, including 16 hours designated for the Cultural Diversity Learning Domain (LD-42), for which police recruits are required to successfully pass a written exam. The Department also provides police recruits with 24 hours of instruction in the area of cultural diversity, and department instructors are required to have completed the specialized instructor-training course at the Museum of Tolerance. Efforts also are underway to create an additional training program based on the Procedural Justice and Police Legitimacy Curriculum used by the

Oakland Police Department. Finally, all officers are required to complete a two-hour California POST-mandated training course on Biased-Based Policing every five years.

Such efforts are to be commended and certainly hold the promise of raising awareness of potential biases held by officers that may influence their decision-making. The hope is that training on implicit bias also will change officer behavior and thereby reduce racial/ethnic disparities in stops and stop outcomes. Social psychologists have long demonstrated the existence of implicit bias in laboratory settings (Blair, 2002; Dovidio et al., 2002; Greenwald, McGhee, & Schwartz, 1998; Rudman, 2004), and they have even had some success in reducing the influence of such biases in laboratory tests (Implicit Association Test), at least in the short term (Lai et al., 2014). Research on the effect of race on shooting decisions made by research subjects (police and non-police) during laboratory simulations has shown both a bias against minority suspects (Correll et al., 2002; Correll et al. 2007), and recently, *in favor* of minority suspects (James, Vila, & Daratha, 2013; James, Klinger, & Vila, 2014). At least one research study showed the potential to reduce racial bias in deadly force decision-making in the laboratory through repeated exposure to scenarios where suspect race was unrelated to the presence of a weapon (Plant & Peruche, 2005). Importantly, almost all of the studies to date on implicit bias, its effect on decision-making, and efforts to reduce its influence have taken place in the laboratory rather than in real-world settings. Furthermore, there is no evidence that exposure to short-term classroom training can reduce implicit bias in the laboratory let alone in the actual working environment of police officers.

Recognizing that there is little empirical evidence to date that implicit bias training alone reduces racially disparate outcomes between police and citizens does not mean that such training efforts are not valuable. Certainly, raising awareness of unconscious biases in the police workforce is an important first step in changing officer behavior and demonstrates an agency's commitment to treating all citizens fairly and equally. Our recommendation, however, is for the SJPD to adopt evidence-based training programs and practices to reduce racial/ethnic disparities in police contacts with citizens if and when those become programs become available.

Recommendation 3

The SJPD should evaluate and adopt evidence-based training for improving police-citizen interactions and reducing the influence of discriminatory factors, such as race and ethnicity, in contacts with citizens. The National Institute of Justice (NIJ) recently funded an evaluation of a social interaction and conflict de-escalation training program for police officers called Tact, Tactics, and Trust (T3)[24]. T3 emerged from a DARPA-funded project to develop evidence-based methods for training police and military personnel to build trust and reduce conflict during social interactions, even in situations characterized by vast differences in language, culture, values, and ethnicities. T3 was recently adopted by the Bureau of Justice Assistance (BJA) as its preferred national model for training civilian law enforcement on decision-making and conflict de-escalation.

[24] T3 is a proprietary training program offered by Polis Solutions and is derived from the DARPA Good Stranger program developed for military personnel involved in stability operations in Iraq, Afghanistan, and other conflict areas. Members of the UTEP research team are involved in evaluating the effectiveness of T3 for NIJ.

The NIJ project to evaluate T3 will use a randomized, controlled trial experiment to evaluate the effectiveness of the T3 training on reducing use of force and citizen complaints among a randomly selected group of officers who receive the training compared to those who do not. This type of rigorous, scientific evaluation of police training is rare, and yet it is vital for ensuring that scarce police resources are spent on training programs and approaches that have been shown to actually influence police behavior in real world settings. The NIJ-funded evaluation of T3 is scheduled to begin in March 2017 and will take at least two years to complete. The results of the evaluation will help inform law enforcement agencies nationwide about the effectiveness of one of many training programs designed to improve police decision-making, reduce bias, and lessen conflict. As part of a comprehensive approach to reducing racial/ethnic disparities in stops of citizens, the SJPD should identify and adopt evidence-based training methodologies that further this goal over time.

Community Engagement

The San Jose Police Department is clearly committed to the ideals of community-oriented policing and maintaining the trust of the citizens that it serves. Members of the UTEP research team saw evidence of this commitment in meetings with Chief Garcia and his staff, discussions with the chief's Community Advisory Board, attendance at community meetings, and observations of SJPD officers during ride-alongs. As an agency, the SJPD prohibits discrimination and/or the biased exercise of police authority based on characteristics such as race, color, religion, age, marital status, national origin, ancestry, sex, sexual orientation, actual or perceived gender identity, medical condition, or disability (SJPD Duty Manual C 1306). The agency is diverse with 53% White officers, 23% Hispanic officers, 11% Asian officers, and 4% Black officers. The racial makeup of the SJPD approximates that of the city, which is 43% White, 33% Hispanic, 32% Asian, and 3.2% Black. The department's division captains are highly engaged with the communities they serve and meet regularly with community groups, business owners, faith-based organizations, and other community stakeholders.

Nonetheless, the research team heard complaints from certain community members about biased treatment by the SJPD. Some community members expressed the belief that the SJPD targets African-Americans and Hispanics or other persons of color who "fit the profile." At least one San Jose resident with whom the researchers met believed that officers discriminate against members of the transgender community. The City of San Jose's decision to voluntarily engage an outside research group to analyze the SJPD limited detention data for patterns of racial/ethnic disparity suggests that the City and the police department take these concerns seriously and are committed to identifying and reducing racial and ethnic disparities where they exist.

Now that the data analysis is complete and disparities have been identified, it is important that the SJPD redouble its efforts to engage the community in an ongoing dialogue about its practices and priorities and its efforts to reduce or eliminate racial and ethnic disparities in police activities. Likewise, it is important for the SJPD to provide accurate and relevant information to its stakeholders about crime patterns and trends in the city and how those patterns intersect with race and ethnicity.

Recommendation 4
The SJPD should disseminate the executive summary from this report widely and post the entire report on its website. SJPD leaders should meet with community groups and other stakeholders to review the key findings and answer questions from community members. Such efforts at transparency will help build community trust and assure San Jose residents that the SJPD is committed to the unbiased treatment of all citizens and to reducing the disparities identified in the report.

Recommendation 5
The SJPD should develop and disseminate better and more relevant information about crime patterns and trends in the city, including citizen calls for service, and how those patterns intersect with race and ethnicity. While it was clear from our discussions with community groups that some citizens are concerned about racial/ethnic bias by the SJPD, it was equally clear that crime and those suspected of perpetrating it are not equally distributed across the city. The geographic analysis of crime and calls for service revealed that most Part I violent crimes, as well as calls for service that are likely to generate police stops (suspicious persons, disturbances, drug-related complaints), are concentrated in the downtown. Similarly, prostitution-related calls are highly concentrated along Monterey Road just south of downtown and almost nowhere else. Moreover, the calls for service analysis showed that persons being reported as suspects in certain areas of the city and for certain types of offenses do not mirror the racial composition of the city itself. In the downtown, Black citizens make up almost half of all reported drug suspects even though they comprise only about 3% of the population of San Jose. This same pattern holds true for prostitution suspects along the Monterey Road corridor, although the difference is even more extreme – 75% of reported prostitution suspects in the Monterey area are Black according to 911 callers. These data-driven analyses were confirmed by community members with whom the UTEP research team spoke who reported that most suspected drug dealers downtown and most suspected prostitutes along Monterey Road were Black.

These crime and race/ethnicity patterns may not be well-understood by some community stakeholders in San Jose, yet they are highly relevant to who the police stop and arrest for certain crimes in certain areas of the city. The SJPD should develop the capacity to produce analyses of race/ethnicity, crime, and calls for service data for distribution and discussion with community members. Such data should never be used to justify racial bias or discrimination, but they can help the police department bridge the gap between perceptions of bias by some community members and the reality of the crime problems the police are being asked to address in some areas of the city.

Recommendation 6
Assuming the SJPD continues to collect and analyze stop data, it should produce an annual or bi-annual report that outlines the findings from its yearly analyses and discusses its ongoing efforts (training, policy-approaches, accountability efforts) to reduce racial and ethnic disparities in its contacts with citizens. Again, such efforts demonstrate the department's commitment to fair and constitutional policing, help build community trust, and provide transparency and accountability to the citizens of San Jose.

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11. APPENDIX A: DATA AUDIT

Data Overview

This document provides an assessment of the limited detention data collected by the San Jose Police Department (SJPD) and provided to the research team from the University of Texas at El Paso (UTEP). Given the intention to link the limited detention data with SJPD officer characteristics, a dataset containing officer information was also received from the SJPD and analyzed in this report. The goal of this report is to provide a data audit of the limited detention data and associated officer information.

A data audit is a critical initial step prior to data analyses. The data audit offers an assessment of the strengths, weaknesses, and logical inconsistencies within the data that may impact the subsequent analyses. A data audit can be undertaken at various levels of intensity.

4. Level 1: This is an initial assessment of how much information is *missing* or represented by *incorrect information* on fields of interest[25]/variables. For example, a Level 1 analysis would indicate how many stops[26] in the limited detention data were missing information on a citizen's gender. This assessment would also include an identification of responses that do not conform to acceptable responses based on the codebook provided by the SJPD. For example, a case that contains a 'Z' to reflect a citizen's race/ethnicity would be categorized as incorrect information because that code does not correspond with any pre-identified racial/ethnic group as defined by the SJPD.
5. Level 2: A more advanced data audit includes an assessment of whether there is *missing* information *across* variables (i.e., fields of interest). For example, there are three variables that record information on detentions. By logic and policy, any one case should have information recorded on the reason for the detention, the detention type, and the detention disposition. This is important because cases cannot be comprehensively analyzed when there is missing information on fields of interest. A level 2 data audit would identify cases that possess missing information across variables.
6. Level 3: The highest level of data audit involves examining the *logical inconsistencies* across variables. In other words, this assessment considers the substance of each variable in relation to other variables in the same case. Using the detention variables as an example, it would be logically inconsistent for the detention reason variable to indicate "No Curb, Handcuff, or Police Vehicle", but the detention type variable to indicate "Curb Sat". If a citizen was "curb sat", there should be a reason provided for why this action was undertaken by the officer. Again, this is important to ensure that the subsequent analyses are performed on the most robust and accurate data available.

The current data audit applies a Level 1 & 2 assessment on the limited detention data and associated officer information. A level 3 assessment will be undertaken once the SJPD provides a new limited

[25] Fields of interest are also referred to as variables.

[26] Each case is also referred to as a case in the data. Thus, stops and cases are used interchangeably.

detention data set to UTEP and prior to the final analyses.

Level 1: Missing Data Assessment

Limited Detention Data: Overview

Table 11-1 provides an overview of all limited detention data variables that were assessed for accuracy and completeness. The limited detention data file provided to UTEP contained 97,714 cases and spanned the time period from September 1, 2013 to February 29, 2016. Altogether, 11.3% of cases were missing data in one or more fields. Detention Reason had the highest percentage of missing data (8.7% missing) followed by Detention Type (7.2% missing). Several fields had no missing data, e.g. Date & Time, BBB, Call Type, Event Disposition, and X/Y Coordinates.

The following variables were not addressed in this section: Address, Commonplace, XStreet1, YStreet1, and Comm. Address, Commonplace, XStreet1, and YStreet1 are geographic locators, but were not assessed due to the existence of X/Y coordinates. Assessment of the X/Y coordinates revealed a high mapability rate (see below) which nullified any further assessment of these fields. The Comm variable is a text field and was not analyzed.

Table 11-1: Limited Detention Data: Missing Data

	Total Cases	Missing		Available for Analysis
	N	N	%	N
Date & Time	97,714	0	0.0	97,714
Organizational Unit				
Divisions	97,714	2,586	2.6	95,128
Districts	97,714	1,612	1.6	96,102
Beats	97,714	1,391	1.4	96,323
BBB	97,714	0	0.0	97,714
Reason for the Stop	97,714	4,940	5.1	92,774
Call Type	97,714	0	0.0	97,714
Number of Stops*	97,714	5,734	5.9	91,980
Citizen Race/Ethnicity	97,714	5,521	5.7	92,193
Search	97,714	5,561	5.7	92,153
Detention				
Reason	97,714	8,486	8.7	89,228
Type	97,714	7,039	7.2	90,675
Disposition	97,714	4,722	4.8	92,992

Event Disposition*	97,714	0	0.0	97,714
Badge Number	97,714	138	0.1	97,576
X/Y coordinates (Geographic Locator)	97,714	0	0.0	97,714
Valid for Analysis	**97,714**	**11,087**	**11.3**	**86,627**

Note: The "Valid for Analysis" total reflects the total number of cases available for analysis based on a cumulative assessment of missing information on all variables. A single case may have missing information on multiple variables, thus, the total missing is less than the sum of all individual variables.
* These variables were not included in the calculation of cases available for analysis; see below for more details.

Limited Detention Data: Specific Variables

The following tables report on the specific variables provided in the limited detention data. For each variable, the responses are listed in terms of number of cases (i.e., frequency), the percent of cases in this category out of the entire data set, and the percent of cases in this category out of the entire data set once the missing information is removed. For variables that have no missing data, the Percent and Valid Percent will be identical.

Date & Time

There were no missing data in the Date and Time fields. Table 11-2 reports on the year of the stop, Table 11-3 summarizes the distribution of stops across months, and Table 11-4 categorizes the stops by hour of the day.

Table 11-2: Year

	Frequency	Percent	Valid Percent
2013	19,506	20.0	20.0
2014	39,407	40.3	40.3
2015	33,322	34.1	34.1
2016	5,479	5.6	5.6
Missing	0	0.0	
Grand Total	97,714	100.0	100.0

Note: 2013 begins in September; 2016 ends in February.

Table 11-3: Month

	Frequency	Percent	Valid Percent
January	9,674	9.9	9.9
February	7,457	7.6	7.6
March	5,882	6.0	6.0
April	6,258	6.4	6.4
May	6,977	7.1	7.1

June	6,209	6.4	6.4
July	5,950	6.1	6.1
August	6,045	6.2	6.2
September	9,788	10.0	10.0
October	13,021	13.3	13.3
November	11,154	11.4	11.4
December	9,299	9.5	9.5
Missing	0	0.0	
Grand Total	97,714	100.0	100.0

Note: September-February are based on 3 years of data, whereas March-August are based on 2 years of data.

Table 11-4: Hour

	Frequency	Percent	Valid Percent
1200AM-100AM	6,615	6.8	6.8
100AM-200AM	5,147	5.3	5.3
200AM-300AM	3,674	3.8	3.8
300AM-400AM	2,296	2.3	2.3
400AM-500AM	1,182	1.2	1.2
500AM-600AM	534	0.5	0.5
600AM-700AM	673	0.7	0.7
700AM-800AM	1,960	2.0	2.0
800AM-900AM	2,306	2.4	2.4
900AM-1000AM	4,074	4.2	4.2
1000AM-1100AM	4,233	4.3	4.3
1100AM-1200PM	3,578	3.7	3.7
1200PM-100PM	2,845	2.9	2.9
100PM-200PM	2,618	2.7	2.7
200PM-300PM	2,040	2.1	2.1
300PM-400PM	2,066	2.1	2.1
400PM-500PM	4,781	4.9	4.9
500PM-600PM	6,618	6.8	6.8
600PM-700PM	6,660	6.8	6.8
700PM-800PM	5,932	6.1	6.1

800PM-900PM	4,822	4.9	4.9
900PM-1000PM	4,905	5.0	5.0
1000PM-1100PM	8,987	9.2	9.2
1100PM-1200AM	9,168	9.4	9.4
Missing	0	0.0	
Grand Total	97,714	100.0	100.0

Organizational Unit

Assessment of the organizational unit variables revealed that approximately 2.6% of cases were missing data for the Division field (Table 11-5), 1.6% of cases were missing information for the District field (Table 11-6), and beat information was missing from 1.4% of cases (Table 11-7). There were an additional 0.1% of cases (n=61) which contained Beat codes that did not match the codebook provided by the SJPD. BBB information was also present in these data; however, no codes were provided for this organizational level. The variable includes codes that range from -1 to 9999. No data was missing for the Block Beat (BBB) field (Table 11-8).

Table 11-5: Divisions

	Frequency	Percent	Valid Percent
Central	20,322	20.8	21.4
Foothill	30,078	30.8	31.6
Southern	17,550	18.0	18.4
West	27,178	27.8	28.6
Missing	2,586	2.6	
Grand Total	97,714	100.0	100.0

Table 11-6: Districts

	Frequency	Percent	Valid Percent
D District (Airport), Central	72	0.1	0.1
E District, Central	5,986	6.1	6.2
K District, Central	5,175	5.3	5.4
R District, Central	4,659	4.8	4.8
V District, Central	4,754	4.9	4.9
C District, Foothill	11,710	12.0	12.2
M District, Foothill	9,932	10.2	10.3
P District, Foothill	5,060	5.2	5.3
W District, Foothill	3,659	3.7	3.8

A District, Southern	3,358	3.4	3.5
T District, Southern	2,787	2.9	2.9
X District, Southern	7,170	7.3	7.5
Y District, Southern	4,400	4.5	4.6
F District, Western	3,763	3.9	3.9
L District, Western	11,745	12.0	12.2
N District, Western	2,938	3.0	3.1
S District, Western	8,934	9.1	9.3
Missing	1,612	1.6	
Grand Total	97,714	100.0	100.0

Table 11-7: Beats

	Frequency	Percent	Valid Percent
Beat 1, D District, Central	1	0.0	0.0
Beat 2, D District, Central	11	0.0	0.0
Beat 3, D District, Central	2	0.0	0.0
Beat 4, D District, Central	63	0.1	0.1
Beat 5, D District, Central	14	0.0	0.0
Beat 1, E District, Central	788	0.8	0.8
Beat 2, E District, Central	2,513	2.6	2.6
Beat 3, E District, Central	1,853	1.9	1.9
Beat 4, E District, Central	898	0.9	0.9
Beat 1, K District, Central	818	0.8	0.8
Beat 2, K District, Central	621	0.6	0.6
Beat 3, K District, Central	355	0.4	0.4
Beat 4, K District, Central	1,856	1.9	1.9
Beat 5, K District, Central	957	1.0	1.0
Beat 6, K District, Central	602	0.6	0.6
Beat 1, R District, Central	425	0.4	0.4
Beat 2, R District, Central	777	0.8	0.8
Beat 3, R District, Central	1,764	1.8	1.8
Beat 4, R District, Central	1,197	1.2	1.2
Beat 5, R District, Central	504	0.5	0.5

Beat 1, V District, Central	1,352	1.4	1.4
Beat 2, V District, Central	1,291	1.3	1.3
Beat 3, V District, Central	828	0.8	0.9
Beat 4, V District, Central	1,049	1.1	1.1
Beat 1, C District, Foothill	3,318	3.4	3.4
Beat 2, C District, Foothill	2,279	2.3	2.4
Beat 3, C District, Foothill	2,305	2.4	2.4
Beat 4, C District, Foothill	1,586	1.6	1.6
Beat 5, C District, Foothill	1,382	1.4	1.4
Beat 6, C District, Foothill	838	0.9	0.9
Beat 1, L District, Foothill	2,583	2.6	2.7
Beat 2, L District, Foothill	1,318	1.3	1.4
Beat 3, L District, Foothill	2,022	2.1	2.1
Beat 4, L District, Foothill	1,673	1.7	1.7
Beat 5, L District, Foothill	2,324	2.4	2.4
Beat 1, P District, Foothill	1,516	1.6	1.6
Beat 2, P District, Foothill	1,045	1.1	1.1
Beat 3, P District, Foothill	993	1.0	1.0
Beat 4, P District, Foothill	845	0.9	0.9
Beat 5, P District, Foothill	564	0.6	0.6
Beat 6, P District, Foothill	132	0.1	0.1
Beat 1, W District, Foothill	628	0.6	0.7
Beat 2, W District, Foothill	937	1.0	1.0
Beat 3, W District, Foothill	522	0.5	0.5
Beat 4, W District, Foothill	1,585	1.6	1.6
Beat 1, A District, Southern	290	0.3	0.3
Beat 2, A District, Southern	950	1.0	1.0
Beat 3, A District, Southern	1,209	1.2	1.3
Beat 4, A District, Southern	587	0.6	0.6
Beat 5, A District, Southern	353	0.4	0.4
Beat 1, T District, Southern	230	0.2	0.2
Beat 2, T District, Southern	378	0.4	0.4

Beat 3, T District, Southern	653	0.7	0.7
Beat 4, T District, Southern	721	0.7	0.7
Beat 5, T District, Southern	829	0.8	0.9
Beat 1, X District, Southern	2,640	2.7	2.7
Beat 2, X District, Southern	1,234	1.3	1.3
Beat 3, X District, Southern	1,163	1.2	1.2
Beat 4, X District, Southern	1,469	1.5	1.5
Beat 5, X District, Southern	684	0.7	0.7
Beat 1, Y District, Southern	497	0.5	0.5
Beat 2, Y District, Southern	1,457	1.5	1.5
Beat 3, Y District, Southern	1,129	1.2	1.2
Beat 4, Y District, Southern	668	0.7	0.7
Beat 5, Y District, Southern	681	0.7	0.7
Beat 1, F District, Western	457	0.5	0.5
Beat 2, F District, Western	736	0.8	0.8
Beat 3, F District, Western	707	0.7	0.7
Beat 4, F District, Western	826	0.8	0.9
Beat 5, F District, Western	1,144	1.2	1.2
Beat 1, L District, Western	2,288	2.3	2.4
Beat 2, L District, Western	2,093	2.1	2.2
Beat 3, L District, Western	1,998	2.0	2.1
Beat 4, L District, Western	3,306	3.4	3.4
Beat 5, L District, Western	1,131	1.2	1.2
Beat 6, L District, Western	931	1.0	1.0
Beat 1, N District, Western	185	0.2	0.2
Beat 2, N District, Western	283	0.3	0.3
Beat 3, N District, Western	773	0.8	0.8
Beat 4, N District, Western	424	0.4	0.4
Beat 5, N District, Western	1,089	1.1	1.1
Beat 6, N District, Western	228	0.2	0.2
Beat 1, S District, Western	760	0.8	0.8
Beat 2, S District, Western	731	0.7	0.8

Beat 3, S District, Western	893	0.9	0.9
Beat 4, S District, Western	663	0.7	0.7
Beat 5, S District, Western	2,800	2.9	2.9
Beat 6, S District, Western	3,059	3.1	3.2
Unknown Codes	62	0.1	0.1
Missing	1,391	1.4	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: 01, 03, 04, 07, 10, 16, 18, 19, 23, 26, 27, DC, DE, DL, DN, DP DS, DV, DW, DX, G1, G5, G10, SVC1, TZ2.

Table 11-8: BBB

	Frequency	Percent	Valid Percent
-1	1,604	1.6	1.6
2 – 9999	96,110	98.4	98.4
Grand Total	97,714	100.0	100.0

Reason for the Stop

An entry for Reason for Stop was missing in 5.1% of cases (n=4,939) (Table 11-9).

Table 11-9: Reason for the Stop

	Frequency	Percent	Valid Percent
Consensual	7,137	7.3	7.7
Municipal Code Violation	5,105	5.2	5.5
Penal Code Violation	6,758	6.9	7.3
Vehicle Code Violation	69,856	71.5	75.3
Watch Bulletin	1,098	1.1	1.2
Unknown Codes	2,820	2.9	3.0
Missing	4,940	5.1	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: A, D, E, F, G, H, L, N, O, R, S, T, U, W, Z, 0, 1, 2, 3, \.

Call Type

All 97,714 cases included an entry for Call Type (Table 11-10). However, 21.7% of the cases included a Call Type that did not correspond to the seven category schema for this variable. These cases contained a wide variety of entries that appeared to correspond to final CAD call dispositions.

These entries ranged from abandoned vehicles to welfare checks. Initially, we assigned these 21,192 cases to an "Other" category. After discussions with SJPD personnel, we learned that the initial Call Type may change once an officer enters a final disposition for the call. We also learned that an "Initial Call Type" field is available that was not provided to UTEP in the original limited detention dataset. We anticipate receiving a new dataset with the Initial Call Type field included, which should allow us to identify the original call type (e.g., vehicle stop, pedestrian stop, etc.) before the call type was changed based on the final disposition of the call. Appendix A-1 presents a list of all descriptions contained within the "Other" category.

Table 11-10: Call Type

	Frequency	Percent	Valid Percent
Vehicle Stop	41,448	42.4	42.4
Vehicle Stop, Female	7,756	7.9	7.9
Vehicle Stop, Gang	442	0.5	0.5
Pedestrian Stop	20,853	21.3	21.3
Pedestrian Stop, Female	1,151	1.2	1.2
Pedestrian Stop, Gang	501	0.5	0.5
Selective Enforcement	4,371	4.5	4.5
Other	21,192	21.7	21.7
Grand Total	97,714	100.0	100.0

Number of Stops

There were no codes available for this variable (Table 11-11). As a result, the research team contacted SJPD for further information. The research team was informed that this variable was intended to indicate how many occupants (for vehicle stops) or individuals (for pedestrian stops) were involved in the encounter. Unfortunately, the collection of this variable is inconsistent across officers, and no clear training was provided to outline the specific requirements for data collection. Specifically, it was not clear that officers consistently indicated the number of occupants in the vehicle or pedestrian stop. Consequently, we do not anticipate using this variable in our analyses.

Table 11-11: Number of Stops

	Frequency	Percent	Valid Percent
1 Occupant	65,553	67.1	71.3
2 Occupants	15,042	15.4	16.4
3 Occupants	4,657	4.8	5.1
4 Occupants	2,055	2.1	2.2
5 Occupants	807	0.8	0.9
6 Occupants	279	0.3	0.3

7 Occupants	147	0.2	0.2
8 Occupants	89	0.1	0.1
9 Occupants	52	0.1	0.1
Unknown Codes	3,299	3.4	3.6
Missing	5,734	5.9	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: !, `, `1, 0, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1C, 1H, 1N, 1V, 2`, 23, 24, 25, 2N, 31, 36, 3N, 4D, 5D, 5N, 7N, A, B, C, D, F, H, I, N, N1, N3, N4, NN, O, P, Q, R, S, U, V, W, Z.

Citizen Race/Ethnicity

Approximately 5,500 cases (5.7%) were missing data on the race or ethnicity of the citizen who was stopped (Table 11-12). Another 3.4% of cases included race or ethnicity codes that did not correspond to the race codes provided to UTEP by the SJPD. These 3,347 cases were labeled as "Unknown Codes." Along with those that were missing race/ethnicity codes entirely, these Unknown Code cases will not be included in subsequent analyses. Altogether, 8,868 cases (9.1%) were missing useable race/ethnicity codes.

Table 11-12: Citizen Race/Ethnicity

	Frequency	Percent	Valid Percent
Asian	9,214	9.4	10.0
African American	8,707	8.9	9.4
Hispanic	50,613	51.8	54.9
Native American Indian	283	0.3	0.3
Other	1,864	1.9	2.0
Pacific Islander	615	0.6	0.7
Samoan	1,026	1.1	1.1
European American	16,359	16.7	17.7
Middle Eastern/Asian Indian	165	0.2	0.2
Unknown Codes	3,347	3.4	3.6
Missing	5,521	5.7	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: ., 0, 1, 2, 3, 5, 6, C, D, E, F, G, J, L, M, N, Q, R, U, V, X, Y.

Search

Data were missing on 5.7% of cases to indicate whether a search was or was not conducted, and another 2.9% of cases contained search entries that did not correspond to the search codes provided

to UTEP by the SJPD. Altogether, useable search information was missing from 8,407 cases (8.6%) (Table 11-13).

Table 11-13: Search

	Frequency	Percent	Valid Percent
No Search Conducted	60,204	61.6	65.3
Search Conducted, No Evidence Found	24,428	25.0	26.5
Search Conducted, Evidence Found	4,675	4.8	5.1
Unknown Codes	2,846	2.9	3.1
Missing	5,561	5.7	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, F, G, H, I, M, O, P, R, V, W, X, Y.

Detention - Reason

Information on the Reason for Detention was missing from 8.6% of cases (Table 11-14). Another 0.5% of cases contained unknown data entries that did not correspond to the codebook fields provided to UTEP by the SJPD. We note that Reason for Detention refers to the reason that a citizen was handcuffed or made to sit on a curb or in a police vehicle. It does not refer to the underlying reason for the stop itself.

Table 11-14: Reason for Detention

	Frequency	Percent	Valid Percent
No Curb, Handcuff, or Police Vehicle	73,813	75.5	82.7
Flight Risk	1,082	1.1	1.2
Medical Condition	152	0.2	0.2
Other	4,864	5.0	5.5
Safety Concerns during Prior Contact(s)	464	0.5	0.5
Officer Safety Concerns	8,220	8.4	9.2
Weapons/Violence Related Event	123	0.1	0.1
Unknown Codes	508	0.5	0.6
Missing	8,486	8.7	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: 16028, \N, 0, 1, 2, 22350, 3, 4, 5, 51P2, 5633, 7, 9201, A, B, C, CDS, CVC, D, E, F, S', F,P', FS, G, H, I, N 8150 CU, N:, N: 6s10, N:C, N:CDS, N.D, N", N"61W3, N"8515, N\, N', NN, NO, OTRANSPORT, P,S, P., R, S W, S, O, S:, S:C, S", S"8736, SECOND TES, SF, T, V, X, Z.

Detention - Type

An assessment of Detention Type revealed that 7.2% of cases were missing information on whether or not a citizen was handcuffed or made to sit on a curb or in a police vehicle (Table 11-15). Another 0.8% of cases contained invalid codes for this variable. Altogether, 8.0% of cases did not contain useable information on Detention Type.

Table 11-15: Detention Type

	Frequency	Percent	Valid Percent
No Curb, Handcuff, or Police Vehicle	75,016	76.9	82.8
Curb Sat	5,614	5.7	6.2
Handcuffed	6,048	6.2	6.7
Sat in Police Car	3,152	3.2	3.5
Unknown Codes	771	0.8	0.8
Missing	7,039	7.2	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: 11357(B)", 14601, 26710CVC", NO CITE", SALVADOR", WARNING", .N, ", 0, 1, 1N, 2, 22350", 3, 4, 5, 6, 8, A, B, C H, C, H, C,H, CH, CO, CS, CV, D, E, F, FN, G, H V, H, C, H, V, H,V, HC, HV, I, J, L, M, N:C, N.N, NM, NN, NN=, O, ON 12, P, S, T, V H C, V:C, VH, VHC, VO, W, Y, Z. It is possible that some of these codes are a product of the officer entering multiple legitimate codes (e.g., VHC).

Detention - Disposition

The Detention Disposition variable was missing entries in 4.8% of the 97,714 cases (Table 11-16). Another 2.6% of cases contained codes that did not correspond to the codebook provided to UTEP by the SJPD. Altogether, 7,218 cases (7.4%) contained unusable data for this variable.

Table 11-16: Detention Disposition

	Frequency	Percent	Valid Percent
No Report Required/Dispatch Record Only	54,678	56.0	58.8
Arrest Made	5,819	6.0	6.3
Arrest by Warrant	2,452	2.5	2.6
Criminal Citation	7,549	7.7	8.1
Traffic Citation – Hazardous	11,712	12.0	12.6
Traffic Citation – Non-Hazardous	4,864	5.0	5.2
Field Interview Completed	2,765	2.8	3.0
Gone on Arrival/Unable to Locate	14	0.0	0.0
Courtesy Service/Citizen Assist	258	0.3	0.3
Stranded Motorist	20	0.0	0.0

Report, Other than Primary	92	0.1	0.1
Prior Case Follow-Up	25	0.0	0.0
Primary Report Taken	200	0.2	0.2
Turned Over To	45	0.0	0.0
Unfounded Event	3	0.0	0.0
Unknown Codes	2,496	2.6	2.7
Missing	4,722	4.8	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: \, 1, 10, 11, 12, 13, 14, 15, 19, 2, 2V, 3, 3.N, 4, 5, 51A2, 5632, 5MS913, 5N, 5P81, 6, 61S2, 647B, 6UZS73, 7, 8, 9, 9303, A C B, A C H, A C N, A C W, A M H, A P A, A P B, A P H, A P P, A P W, A V A, A V B, A V H, A V P, A V W, AP, APA, APBN1N, APHN15, APHN1V, APWN1V, APWZ1V, AVHS, AVHS2V, AVHZ1C, B M H, B P B, B V A, B V H, B V W, B,C, B.C.Z., BCWN1N, BVHZ1H, C B Z, C C H, C H Z, C M A, C M B, C M H, C M W, C P H, C P W, C P Z, C V B, C V H, C V S, C V W, C VH N, CC, CM, CMHZ2N, CMWN1N, CU, CV, CVHN1N, CVHS1C, CVWN1N, D B W, D M W, D N, D V A, D V B, D V H, D V O, D V P, D V S, D V W, D X W, D.V, DQ, DV, DVAN1N, DVBNN1, DVHN1N, DVHN2N, DVV, DVWN1N, DVWN6N, E V A, E V B, E V H, E V O, E V W, EM A, EV, EVH, EVHN1N, EVHS1H, F C H, F M H, F P H, F V B, F V H, FPHZ4N, J, JN, N B A, N B H, N C A, N C B, N C H, N C P, N C W, N H N, N H V, N M A, N M B, N M H, N M S, N M W, N N, N P A, N P B, N P H, N P W, N V A, n v an, N V B, N V H, N V N, N V O, N V P, N V S, N V W, N.M.W., N.V, N`, NC, NC H N, NMHN1N, NMWN1N, NN, NP, NV, NVWN1N, O V B, P B Z, P W N, S, V, V H N, V H Z, VN, W, Y, Z.

Event Disposition

The Event (Final) Disposition variable contained no missing data and only 87 (0.1%) unknown codes (Table 11-17). After clarification from the SJPD regarding how this variable was recorded, we do not anticipate using this variable for future analyses, and instead, the Detention Disposition variable will be used to analyze the final outcome of the stop.

Table 11-17: Event Disposition

	Frequency	Percent	Valid Percent
No Report Required/Dispatch Record Only	59,282	60.7	60.7
Arrest Made	6,863	7.0	7.0
Arrest by Warrant	2,992	3.1	3.1
Criminal Citation	8,192	8.4	8.4
Traffic Citation – Hazardous	12,332	12.6	12.6
Traffic Citation – Non-Hazardous	4,845	5.0	5.0
Field Interview Completed	1,407	1.4	1.4
Gone on Arrival/Unable to Locate	188	0.2	0.2
Courtesy Service/Citizen Assist	312	0.3	0.3

Stranded Motorist	4	0.0	0.0
Report, Other than Primary	53	0.1	0.1
Prior Case Follow-Up	11	0.0	0.0
Primary Report Taken	1,119	1.1	1.1
Turned Over To	15	0.0	0.0
Unfounded Event	12	0.0	0.0
Unknown Codes	87	0.1	0.1
Missing	0	0.0	
Grand Total	97,714	100.0	100.0

Note: "Unknown Codes" category is comprised of codes that do not match the codebook provided by SJPD. These include the following: ADV, CAN, DUPNCAN, GD.

Geographic Indicators

A geographic indicator (X/Y coordinates) was recorded in 98.8% of cases to represent location where the stop occurred (Table 11-18). Approximately 1.2% of cases either mapped to a location outside San Jose city limits or were coded as zero.

Table 11-18: X/Y Coordinates

	Frequency	Percent	Valid Percent
Within Police Division	96,132	98.8	98.8
Outside Police Division/Non-Mapable	1,048	1.1	1.1
Coded as 0	534	0.1	0.1
Grand Total	97,714	100.0	100.0

Note: The 1,048 incidents either occurred outside a police district or were coded with X/Y coordinates that placed it outside the city boundary.

Officer Characteristics: Overview

Because many of our analyses will include variables associated with the officer who made a stop, we anticipate merging the officer data that we requested with the limited detention data. Consequently, we evaluated the officer-level data file for accuracy and completeness. The officer file provided to UTEP by the SJPD contains 1,021 records (officers). This file was provided with the title January 1, 2014, which is presumed to be the day the officer information was compiled. Of those records, 2.5% (n=27) are either missing a badge number (needed for merging with the limited detention data) or contain duplicate badge numbers (Table 11-19). UTEP anticipates receiving a new data file for officers that will be more current and which should reduce the number of cases for which valid officer characteristics are missing.

Table 11-19: Officer Characteristics: Missing Data

	Total	Missing	Available for

	Cases			Analysis
	N	N	%	N
Badge Number	1,021	5	0.5	1,016
Duplicates	1,016	22	2.0	994
Rank	1,021	0	0.0	1,021
Assignment	1,021	0	0.0	1,021
Years of Service	1,021	0	0.0	1,021
Gender	1,021	0	0.0	1,021
Race/Ethnicity	1,021	0	0.0	1,021
Age	1,021	0	0.0	1,021
Valid for Analysis	**1,021**	**27***	**2.5**	**994**

* includes missing and duplicates.

Officer Characteristics: Specific Variables

Officer Badge Number

Twenty-two records contain duplicate badge numbers, and five records are missing a badge number entirely. Altogether, 97.5% of the officer records contain a useable badge number (Table 11-20).

Table 11-20: Officer Badge Number

	Frequency	Percent	Valid Percent
Badge Numbers 2067 – 4315	994	97.5	98.0
Duplicates	22	2.0	2.0
Missing	5	0.5	
Grand Total	1,021	100.0	100.0

Officer Rank

The Officer Rank variable contains no missing or invalid information (Table 11-21).

Table 11-21: Officer Rank

	Frequency	Percent	Valid Percent
Police Officer	795	77.9	77.9
Police Sergeant	176	17.2	17.2
Police Lieutenant	38	3.7	3.7
Police Captain	8	0.8	0.8

Deputy Chief of Police	2	0.2	0.2
Assistant Police Chief	1	0.1	0.1
Chief of Police	1	0.1	0.1
Missing	0	0.0	
Grand Total	1,021	100.0	100.0

Officer Assignment

The Officer Assignment variable contains no missing or invalid information (Table 11-22). The "Other" category contains assignments not obviously related to vehicle or pedestrian stops; please see Appendix B for a list of assignments in this category.

Table 11-22: Officer Assignment

	Frequency	Percent	Valid Percent
Field Patrol	562	55.0	55.0
Metro Unit	30	3.0	3.0
Traffic Enforcement	26	2.5	2.5
Merge	16	1.6	1.6
Gang Suppression	13	1.3	1.3
Gang Investigations Unit	13	1.3	1.3
Other	361	35.3	35.3
Missing	0	0.0	
Grand Total	1,021	100.0	100.0

Years of Service

The Years of Service variable contains no missing or invalid information (Table 11-23).

Table 11-23: Years of Service

	Frequency	Percent	Valid Percent
1983-2013	1,021	100.0	100.0
Missing	0	0.0	
Grand Total	1,021	100.0	100.0

Officer Gender

The Officer Gender variable contains no missing or invalid information (Table 11-24).

Table 11-24: Officer Gender

	Frequency	Percent	Valid Percent

Male	928	90.9	90.9
Female	93	9.1	9.1
Missing	0	0.0	
Grand Total	1,021	100.0	100.0

Officer Race/Ethnicity

The Race/Ethnicity variable contains no missing or invalid information. However, 31 officers are not coded as belonging to one of the seven identified racial/ethnic groups (Table 11-25). Moreover, the 22 duplicate cases were identified as having different race/ethnic information. This table reports on all cases.

Table 11-25: Officer Race/Ethnicity

	Frequency	Percent	Valid Percent
White	549	53.8	53.8
Hispanic	239	23.4	23.4
Asian	113	11.1	11.1
Black	44	4.3	4.3
Filipino	33	3.2	3.2
American Indian	11	1.1	1.1
Pacific Islander	1	0.1	0.1
No Specific Group	31	3.0	3.0
Missing	0	0.0	
Grand Total	1,021	100.0	100.0

Officer Age

The Officer Age variable contains no missing or invalid information (Table 11-26).

Table 11-26: Officer Age

	Frequency	Percent	Valid Percent
1949-1991	1,021	100.0	100.0
Missing	0	0.0	
Grand Total	1,021	100.0	100.0

Level 2: Internal Consistency Assessment

In addition to independently evaluating each variable within the limited detention and officer information, we also conducted a level 2 data audit to identify any missing information across

variables. For example, if an officer reported "no curb, handcuff, or police vehicle" in the detention reason variable, then the detention type and detention disposition variables should also contain information. Similarly, if the detention disposition variable contains information, the detention reason and type variables should also contain information.

Detention: Reason, Type, Disposition

Table 11-27 summarizes the assessment of the three detention related variables: reason, type, and disposition. The No Missing column reports on the number of cases that possess no missing information without consideration of the substance of those fields. For example, there are 89,228 cases that contain a value on Detention Reason, 90,675 cases that possess a value on Detention Type, and 92,992 cases with a value on Detention Disposition. The Inconsistent columns report the number of missing cases across variables. For example, when considering Detention Reason, there are 18 cases missing a value for Detention Type, and 39 cases missing a value on Detention Disposition. Similarly, of the 90,675 cases with a value on Detention Type, 1,465 cases are missing a value on Detention Reason, and 40 cases are missing on Detention Disposition. Finally, of the 92,992 cases with a value on Detention Disposition, 3,803 are missing a value on Detention Reason, and 2,357 cases are missing a value on Detention Type. Overall, when considering all three Detention variables simultaneously, there are 89,173 cases without missing information.

Table 11-27: Detention Assessment

	No Missing	Inconsistent with		
		Reason	Type	Disposition
Detention Reason	89,228	--	18	39
Detention Type	90,675	1,465	--	40
Detention Disposition	92,992	3,803	2,357	--
Total Available for Analysis based on Detention variables ONLY			**89,173**	

Note: This assessment does not consider the substance of the information across the three variables. For example, if *detention reason* indicates no detention (i.e., curb sat, handcuff, or police vehicle) and *detention type* indicates the citizen was curb sat, handcuff, or police vehicle, this was not assessed in this table.

Limited Detention Data & Officer Information

The analyses in this section report the number and percentages of stops in the limited detention dataset that are missing or have unknown codes for one or more officer-related variables once the limited detention and officer characteristic datasets were merged.

Limited Detention Data & Officer Characteristics

Table 11-28 reports on the merging of the limited detention data with the officer information. Beginning with 97,714 cases from the limited detention data, 262 cases were removed because they were missing badge number or the badge number was a '0'. Once the officer information was linked

to the limited detention data, 22,858 cases (23.5%) were not assigned officer characteristics. The subsequent tables report on each officer characteristic and the amount of missing officer information in the limited detention data.

Table 11-28: Limited Detention Data (LDD) & Officer Characteristics

	Frequency	Percent	Valid Percent
Badge Numbers (in the LDD) with Officer Characteristics	74,594	76.5	76.5
Badge Numbers (in the LDD) without Officer Characteristics	22,858	23.5	23.5
Grand Total	97,452	100.0	100.0

Note: 262 stops were removed because they did not contain a badge number or contained a value of '0' on badge number in the limited detention data, which reduced the overall number of cases from 97,714 to 97,452.

Limited Detention Data & Officer Rank

Based on the stops that were linked with officer information, Table 11-29 indicates that the majority of stops were initiated by a Police Officer (96.4%).

Table 11-29: Limited Detention Data & Officer Rank

	Frequency	Percent	Valid Percent
Police Officer	71,941	73.8	96.4
Police Sergeant	2,417	2.5	3.2
Police Lieutenant	228	0.2	0.3
Police Captain	6	< 0	< 0
Assistant Police Chief	2	< 0	< 0
Missing	22,858	23.5	
Grand Total	97,452	100.0	100.0

Limited Detention Data & Officer Assignment

Merging of the limited detention data with officer information revealed that the majority of stops were initiated by Field patrol officers (62.6%) (Table 11-30).

Table 11-30: Limited Detention Data & Officer Assignment

	Frequency	Percent	Valid Percent
Field Patrol	46,690	47.9	62.6
Metro Unit	4,690	4.8	6.3
Traffic Enforcement	4,508	4.6	6.0
Merge	453	0.5	0.6

Gang Suppression	2,268	2.3	3.0
Gang Investigations Unit	431	0.4	0.6
Other	15,193	16.0	20.9
Missing	22,858	23.5	
Grand Total	97,452	100.0	100.0

Limited Detention Data & Officer Years of Service

There was no missing information on officer years of service. As a result, when linking these data with the limited detention data, only the cases without a badge match were left with a missing value (23.5%) (Table 11-31).

Table 11-31: Limited Detention Data & Officer Years of Service

	Frequency	Percent	Valid Percent
1983-2013	74,594	76.5	100.0
Missing	22,858	23.5	
Grand Total	97,452	100.0	100.0

Limited Detention Data & Officer Age

There was no missing information on officer age. As a result, when linking these data with the limited detention data, only the cases without a badge match were left with a missing value (23.5%) (Table 11-32).

Table 11-32: Limited Detention Data & Officer Age

	Frequency	Percent	Valid Percent
1949-1991	74,594	76.5	100.0
Missing	22,858	23.5	
Grand Total	97,452	100.0	100.0

Limited Detention Data & Officer Gender

Table 11-33 summarized the linkage between the limited detention data and officer gender. Only the 22,858 stops (23.5%) without a matching badge number were missing officer gender information (Table 11-33).

Table 11-33: Limited Detention Data & Officer Gender

	Frequency	Percent	Valid Percent
Male	70,582	72.4	94.6
Female	4,012	4.1	5.4

Missing	22,858	23.5	
Grand Total	97,452	100.0	100.0

Limited Detention Data & Officer Race/Ethnicity

Officer race/ethnicity was not evaluated in this data audit. As previously mentioned, there were 22 officer badge numbers that were duplicates. Upon further investigation, these badge numbers were duplicated due to different race/ethnicities indicated for the officer. For example, one officer may have been both White and Hispanic. For the purposes of the data audit, we did not make a decision about how to categorize this officer to link with the limited detention data. With the expectation that we will receive an updated officer file to address the high amount of discordance with the limited detention data, we will address this data limitation prior to the analyses. Of note, there was no missing information on officer race/ethnicity in the officer database (see Table 11-25).

Summary of Data Assessment

This data audit reported on the limited detention data and associated officer information. Table 11-34 summarizes the data available for analysis. Based on the Level 1 & 2 assessment, 88.7% of the data are available for further analyses. When the limited detention data are linked with officer characteristics, 66.3% of the data available for future analyses. We hope this percentage will improve once UTEP receives the updated officer data file.

Table 11-34: Summary of Data Assessment

	Total Cases	Missing		Available for Analysis
	N	N	%	N
Level 1	97,714	11,087	11.3	86,627
Level 2	97,714	8,541	8.7	89,173
TOTAL VALID for Limited Detention				**86,627**
Linkage with Officer Characteristics	97,452	22,858	23.5	74,594
TOTAL VALID with Officer Characteristics				**64,831**

NOTE: The cases identified as problematic in the Level 2 assessment were contained within the Level 1 assessment, which explains why the overall available for analysis is 86,627.

Data Audit Appendix A-1: Call Type Fields

	Frequency
1091AB - VICIOUS ANIMAL (COMBINED EVENT)	3
ABANDONED VEHICLE	2
ALARM	5
ALARM, AUDIBLE	37
ALARM, SILENT	43
ALARM, SVRN	2
ANIMAL COMPLAINT	1
ARMED ROBBERY	22
ARMED ROBBERY (COMBINED EVENT)	1
ARSON (447A)	2
ASSAULT	3
ASSAULT WITH DEADLY WEAPON	29
ASSAULT WITH DEADLY WEAPON (COMBINED EVENT)	2
ASSAULT WITH DEADLY WEAPON, GANG	3
ATTEMPT FELONY SEX CRIME	6
ATTEMPT TO CONTACT	29
ATTEMPT TO LOCATE	16
ATTEMPT TO LOCATE-FELONY WANT	3
ATTEMPTED SUICIDE	8
BAD CHECKS	2
BATTERY	44
BATTERY (COMBINED EVENT)	6
BATTERY ON A PEACE OFFICER	3
BATTERY ON AN OFFICER	5
BATTERY ON AN OFFICER, GANG RELATED	1
BATTERY, GANG RELATED	1
BOMB THREAT	1
BRANDISHING A WEAPON	20
BURGLARY REPORT (460)	50
BURGLARY (460)	67
BURGLARY (460), GANG RELATED	2
CALL REQUEST	6
CAR STOP	66
CARJACKING	10
CARJACKING (COMBINED EVENT)	3
CARRYING A CONCEALED WEAPON	34
CARRYING A CONCEALED WEAPON, GANG RELATED	33
CHILD ABUSE	7
CHILD NEGLECT	1
CITIZEN FLAGDOWN	94
CIVIL MATTER	15

CIVIL STANDBY	62
CJIC PROBATION REQUEST	2
COMMUNIT POLICING BIKE	25
COMMUNITY POLICING FOOT PATROL	782
COMMUNITY POLICING MEETING	11
COMMUNITY POLICING SCHOOL	3
CORONERS CASE	11
COUNTERFEIT CURRENCY	4
CRIMINAL THREATS	11
CROWD CONTROL	1
DEFRAUDING AN INKEEPER	1
DIABETIC, 2A/2A	1
DISTURBANCE	543
DISTURBANCE (COMBINED EVENT)	7
DISTURBANCE, FAMILY	278
DISTURBANCE, FAMILY (COMBINED EVENT)	7
DISTURBANCE, FIGHT	65
DISTURBANCE, FIGHT (COMBINED EVENT)	7
DISTURBANCE, FIRECRACKERS	2
DISTURBANCE, GANG	5
DISTURBANCE, JUVENILE	8
DISTURBANCE, MOTORCYCLE	1
DISTURBANCE, MUSIC	80
DISTURBANCE, NEIGHBOR	23
DISTURBANCE, UNKNOWN	25
DISTURBANCE, UNKNOWN (COMBINED EVENT)	5
DISTURBANCE, WEAPON	51
DISTURBANCE, WEAPON (COMBINED EVENT)	3
DOMESTIC VIOLENCE	40
DOMESTIC VIOLENCE (COMBINED EVENT)	1
DRIVING W/SUS LIC-VEH IMPOUNDED	44
DRIVING W/SUS LIC-VEH IMPOUNDED, GANG RELATED	4
DRIVING W/SUSPENDED LICENSE	1265
DRIVING W/SUSPENDED LICENSE, GANG RELATED	79
DROWNING	1
DRUNK IN PUBLIC	90
DRUNK IN PUBLIC, GANG RELATED	5
ELDER/DEPENDENT ADULT ABUSE	1
EMBEZZLEMENT	1
EMS DELTA RESPONSE, 3A/3A	1
ESCORT	5
EXPIRED REGISTRATION	192
EXPIRED REGISTRATION, GANG RELEATED	3

EXPLOSION	2
FAILURE TO YIELD	2
FALLS, 3A/2A	1
FALSE IMPRISONMENT	1
FALSE REGISTRATION	29
FELONY DUI	10
FELONY HIT AND RUN	23
FELONY WANT	662
FELONY WANT, GANG RELATED	160
FEMALE CALLING FOR HELP	1
FIRE (SPECIFY TYPE)	4
FIRE DEPARTMENT REQUEST FOR PD	17
FIRE DEPARTMENT REQUEST FOR PD - CODE 3	1
FIREARMS DISCHARGED	14
FOLLOW UP	69
FOOT PATROL	17
FOOT PURSUIT	3
FORGERY	17
FORGERY, GANG RELATED	1
FOUND PROPERTY	15
FOUND, MISSING PERSON	18
GAMING	1
GARBAGE COMPLAINT	2
GRAND THEFT	5
HANDICAPPED PARKING VIOLATION	3
HANDICAPPED PARKING VIOLATION, GANG RELATED	1
ILLEGAL INTERCOURSE	4
ILLEGAL WEAPONS	194
ILLEGAL WEAPONS, GANG RELATED	80
INDECENT EXPOSURE	5
INFORMATION ONLY EVENT	12
JOINT RESPONSE EVENT	1
JUVENILE VIOLATING COURT ORDER	4
JUVENILE VIOLATING COURT ORDER, GANG RELATED	4
KIDNAPPING	1
LOST OR STOLEN PLATE	1
MALICIOUS MISCHIEF	54
MALICIOUS MISCHIEF, GANG RELATED	7
MEET ANOTHER OFFICER	2
MEET THE CITIZEN	43
MENTALLY DISTURBED FEMALE	22
MENTALLY DISTURBED PERSON	65
MINOR IN POSSESSION OF ALCOHOL	12

MISC SERVICE REQUEST	1
MISDEMEANOR DOMESTIC VIOLENCE	18
MISDEMEANOR DUI	502
MISDEMEANOR DUI, GANG RELATED	5
MISDEMEANOR HIT AND RUN	68
MISDEMEANOR WANT	1477
MISDEMEANOR WANT, GANG RELATED	14
MISSING FEMALE	4
MISSING FEMALE JUVENILE	5
MISSING JUVENILE	11
MISSING PERSON	5
MISSING PERSON, MENTAL HANDICAP	4
MOLEST/ANNOY UNDER 18YRS	1
MUNICIPAL CODE VIOLATION	670
MURDER	10
NARCOTICS	522
NARCOTICS, GANG RELATED	92
NO PREFERENCE TOW	4
NOT BREATHING, 3A/3A	1
OPEN DOOR	6
PARKING VIOLATION	76
PARKING VIOLATION, GANG RELATED	1
PAROLE VIOLATION	57
PAROLE VIOLATION, GANG RELATED	28
PATROL CHECK	98
PERSON CALLING FOR HELP	1
PERSON DOWN	43
PERSON SHOT	4
PERSON STABBED	3
PETTY THEFT	4
PETTY THEFT PRIOR CONVICTION	7
PHONE YOUR OFFICE OR HOME	4
POSSESSION OF CONTROLLED SUBSTANCE	237
POSSESSION OF CONTROLLED SUBSTANCE, GANG RELATED	30
POSSESSION OF MARIJUANA	241
POSSESSION OF MARIJUANA, GANG RELATED	40
POSSESSION OF NARCOTICS	999
POSSESSION OF NARCOTICS, GANG RELATED	217
POSSIBLE DEAD BODY (COMBINED EVENT)	2
PREMISE CHECK	119
PROWLER	9
PUBLIC SAFETY ASSISTANCE	30
PURSE SNATCH ROBBERY	3

RAPE	9
RECEIVE/POSSESS STOLEN PROP	37
RECEIVE/POSSESS STOLEN PROP, GANG RELATED	6
RECKLESS DRIVING	125
RECKLESS DRIVING, GANG RELATED	2
RECOVERED STOLEN VEHICLE	275
REFUSAL TO LEAVE PROPERTY	1
REGISTRATION OF SEX OFFENDER	19
REQUEST FOR BLOOD TECH	1
REQUEST FOR C3 FILL	8
REQUEST WANTS/PROBATION ON JUV	2
RESISTING ARREST	173
RESISTING ARREST, GANG RELATED	32
RMS CHECK	1
ROBBERY	11
SALE OF TOBACCO TO MINOR	4
SEARCH WARRANT	17
SELF SURRENDER	3
SEX OFFENSES UNDER 14 YRS	2
SEXUAL BATTERY	2
SHOOTING INTO OCCP VEH OR DWELLING	6
SHOOTING INTO OCCP VEH OR DWELLING, GANG	1
SICK PERSON	4
SOLICITING FOR LEWD CONDUCT	1
SOLICITING FOR PROSTITUTION	310
SPECIAL ASSIGNMENT	47
SPEED CONTEST	90
SPEED CONTEST, GANG RELATED	1
SPEEDING	79
SPOT CHECK	2
STAKEOUT	39
STOLEN VEHICLE	83
STOLEN VEHICLE, GANG RELATED	5
STRANDED MOTORIST	11
STREETS & TRAFFIC, GENERAL	2
STRONG ARM ROBBERY	17
STRONG ARM ROBBERY (COMBINED EVENT)	1
SUICIDE	5
SUSPICIOUS CIRCUMSTANCES	147
SUSPICIOUS CIRCUMSTANCES (COMBINED EVENT)	10
SUSPICIOUS FEMALE	4
SUSPICIOUS PACKAGE	1
SUSPICIOUS PERSON	253

SUSPICIOUS PERSON (GANG)	1
SUSPICIOUS PERSON W/ WEAPON	40
SUSPICIOUS VEHICLE	2383
TAMPERING WITH A VEHICLE	1
TESTING CAD OR MDT SYSTEM	158
THEFT	45
THROWING SUBSTANCES AT VEHICLE	2
TRAFFIC CONTROL	3
TRAFFIC HAZARD	11
TRASH SMALL OUTSIDE FIRE	1
TRESPASSING	80
TRUANT (TABS)	2793
UNK TYPE 911 CALL	1
UNK TYPE 911 CALL FROM BUSN	13
UNK TYPE 911 CALL FROM CELL	10
UNK TYPE 911 CALL FROM PAYPHONE	9
UNK TYPE 911 CALL FROM RESD	9
UNK TYPE 911 CALL FROM VOIP TELEPHONE	7
UNKNOWN CIRCUMSTANCES	3
UNLICENSED DRIVER	952
UNLICENSED DRIVER, GANG RELATED	27
UNTRIAGED MEDICAL CALL, 3A/3A	13
USE OF CONTROLLED SUBSTANCE	281
USE OF CONTROLLED SUBSTANCE, GANG RELATED	30
VAGRANT	9
VEHICLE ACCIDENT-AMB DISPATCHED - CHP JURISDICTION	1
VEHICLE ACCIDENT, AMB DISPATCHED	44
VEHICLE ACCIDENT, MAJOR INJURIES	2
VEHICLE ACCIDENT, MINOR INJURIES	64
VEHICLE ACCIDENT, PROPERTY DAMAGE	102
VEHICLE ACCIDENT, UNKNOWN INJURIES	9
VEHICLE BURGLARY	11
VICIOUS ANIMAL	5
VIOLATION OF PROTECTIVE ORDER	27
W&I UNCONTROLLABLE JUVENILE	6
W&I-UNDER JURIS OF JUV COURT	2
WARRANT CONFIRMATION	2
WELFARE CHECK	267
WELFARE CHECK (COMBINED EVENT)	19

Data Audit Appendix A-2: Officer Assignment

	Frequency
2010 COPS HIRING PROGRAM	18
2011 COPS HIRING PROGRAM	3
ACADEMY TRAINING	3
ADMIN MGMT	2
ADVANCED TRAINING - RANGE	5
AFR/RMS PROJECT	3
AIR SUPPORT	5
AIRPORT CANINE	4
AIRPORT FACILITY	7
ASSAULT/JUVENILE	8
BACKGROUNDING	11
BOMB SQUAD	2
CANINE	9
COURT LIAISON	4
CRISIS MANAGEMENT UNIT	2
CRUISE MANAGEMENT DETAIL	6
DEPARTMENT MANAGEMENT	6
ELECTRONIC SURVEILLANCE	2
FAMILY VIOLENCE UNIT	13
FIELD SVC MGMT	8
FIELD TRAINING OFFICER PROGRAM	3
FINANCIAL CRIMES/BURGLARY	6
HOMICIDE/CRIME SCENE	19
INFORMATION DESK	12
INTERNAL AFFAIRS UNIT	18
INVEST. MGMT	3
JUVENILE/MISSING PERSONS	6
LITIGATION/POLICE	2
MEDICAL MARIJUANA ENFORCEMENT	1
NARCOTICS-COVERT INVESTIGATION	18
NCRIC - SUASI	1
NIGHT GENERAL	2
OFFICE OF GAMING CONTROL	2
OFFICER OVERSTRENGTHS/FTO	31
PAL	2
PERMITS	5
PRE-PROCESSING CENTER	1
R.E.A.C.T. TASK FORCE	1
RECRUITING	3
REGIONAL AUTO THEFT TSK FORCE	2
RESEARCH/DEV	5

RESERVES	4
ROBBERY	14
SCHOOL LIAISON	5
SECONDARY EMPOY. UNIT	2
SEXUAL ASSAULT	33
SIMULATOR TRAINING, POST REIMB	1
SPECIAL INVESTIGATIONS	9
SYSTEMS DEVELOPMENT UNIT	3
TECHNICAL SVCES MGMT	1
TRAINING	11
TRUANCY ABATEMNT/BURGLARY SUPP	1
VEHICULAR CRIMES	8
VICE	4
VIDEO UNIT	1

APPENDIX B: STOP DATA COLLECTION RECOMMENDATIONS[27]

Concerns of racially biased police behavior have become increasingly pertinent to law enforcement agencies within the last fifteen years, as allegations of racial bias have been directed toward numerous agencies. These claims have often been the foundation for criminal and civil litigation with the goal of eliminating perceived racial inequalities in police enforcement. As a result of this mounting public and legal pressure, law enforcement agencies have initiated the collection of data to investigate these claims. These data collection efforts generally stem from three sources: 1) a proactive department voluntarily collecting data, 2) state or other legislation requiring collection of traffic stop data, and/or 3) court mandates, consent decrees, or settlement agreements to collect such information. Regardless of the source, the nation-wide trend has been to expand the collection of data during traffic stops, and to a lesser extent pedestrian stops, in an effort to empirically assess the legitimacy of claims of racial bias by police.

In October 2015, the California State Legislature passed a bill that will require law enforcement agencies in California to begin collecting and reporting annually certain specified information on all stops of citizens (traffic or pedestrian) made by their officers. Specifically, AB 953 requires the annual reporting of information on:

- The date, time, and location of the stop
- The reason for the stop
- The result of the stop, e.g. no action taken, warning, citation, property seizure, arrest
- The nature of the warning or citation violation provided
- The offense charged if an arrest was made
- The perceived race, ethnicity, gender, and age of the person stopped
- Whether a consent search was requested and whether consent was granted
- Whether a search was conducted, the basis for the search, and the type of contraband or evidence recovered
- Whether property was seized and the basis for the seizure

In the sections below, we outline recommendations for stop data collection by the SJPD. If implemented, our recommendations will include the data elements mandated for collection by AB 953 but also will provide additional information that is useful and appropriate for identifying patterns and/or trends of racial disparity in police stops.

Current Stop Data Collection by the San Jose Police Department

Currently, the SJPD collects "limited detention data" on all vehicle or pedestrian stops conducted by

[27] This appendix is adapted from the following report recently issued by the United States Department of Justice (October 2016): *Collaborative Reform Initiative: An Assessment of the San Francisco Police Department.* Washington, D.C.: Office of Community Oriented Policing Services. Two of the UTEP team members on the SJPD project also worked on the USDOJ San Francisco P.D. collaborative reform project and drafted the section of the SFPD report on stop data collection recommendations from which this appendix is adapted.

its officers. The department requires officers to record the following information on all stops:

- Reason for the stop
  - BOL/APB/Watch Bulletin/Follow Up
  - Consent (Ped stops only)
  - Municipal code violation
  - Penal code violation, etc.
  - Vehicle code violation
- Disposition of the stop
  - Arrest made
  - Arrest made by warrant
  - Criminal citation
  - Traffic citation – hazardous violation
  - Traffic citation – non-hazardous violation
  - Field interview completed
  - Gone on arrival/unable to locate
  - Courtesy service/assist
  - Latent prints
  - Stranded motorist assist
  - No report
  - Report other than primary report filed
  - Prior case follow-up activity
  - Report taken
  - Turned over to another agency
  - Unfounded event
  - Agency assist
- Race/Ethnicity of the driver/pedestrian stopped
  - Asian
  - African-American
  - Hispanic
  - Native American
  - Other
  - Pacific Islander
  - Middle Eastern/East Indian
  - White/Caucasian
- Whether a search was conducted and whether contraband was found
- Number of subjects stopped
- Type of limited detention (if any)
  - Curb sat
  - Handcuffed
  - No limited detention
  - Sat in police vehicle
- Reason for limited detention

- Flight risk
- Medical condition
- No limited detention
- Other
- Prior contact safety concerns
- Officer safety concerns
- Weapons/violence related

The SJPD collects this data by requiring officers to either (1) enter a series of codes on a screen that the officer accesses on his or her mobile data computer (MDC), or (2) report the codes verbally over the police radio where a dispatcher "clears" the stop with the reported codes.

While the SJPD Duty Manual requires officers to clear *every* self-initiated stop with the appropriate codes, we learned during our focus group interviews that the Traffic Unit does not follow this practice when it is marked-out on a special enforcement detail. For example, when Traffic Unit officers are on a radar assignment where they stop many cars in rapid succession for speeding, they will "clear" these stops as a group, e.g. 5 Hispanics, 2 Asians, and 7 Whites. This practice does not allow for the individual assignment of dispositions, stop reasons, searches, limited detentions, etc. to each motorist stopped. It is also fraught with the possibility of reporting error because officers often rely on memory when reporting the races/ethnicities of a group of drivers who were stopped. We return to these and other data collection problems in the section below entitled "How Data Should be Collected and Analyzed."

What Data Should Be Collected?

Determining what data police agencies should collect is often based on balancing two competing interests: 1) collecting enough information for meaningful analyses, while 2) not overburdening officers or inadvertently encouraging officer disengagement (Fridell et al., 2001; Ramirez et al., 2000). Initially, the most important consideration for data collection is to determine the situations in which data should be gathered. Law enforcement personnel interact with citizens in a variety of situations and specifying the instances in which data is to be recorded is central to ensuring accurate and complete data collection. The first decision is whether to collect data on traffic stops, pedestrian stops, or both. The purpose of collecting information on stops is that these actions are often officer-initiated (i.e., not the result of citizens' request for service) and can result in the perception by citizens or other stakeholders that the stop was motivated by a citizen's race, ethnicity, or other immutable characteristic. Given the concern of possible officer bias, many agencies specify that data collection efforts be restricted to *officer-initiated* stops only. As a result, for example, encounters with citizens during traffic accidents would not be recorded. It is also important to note that data must be collected on *all stops* of interest, *regardless of the disposition* – that is, regardless of the resulting law enforcement action taken by officers. Finally, agencies must decide if information will be collected on any vehicle passengers or pedestrians' associates. Under AB 953, data on passengers must be collected if any search or seizure related to a passenger takes place.

Given community concerns of possible racial and/or ethnic bias by SJPD officers, we recommend that the SJPD continue to collect data on all self-initiated stops (both traffic and pedestrian) even though AB 953 does not require annual reporting of these data until April 2020 for agencies that employ 667-1,000 officers. For data clarity and analysis purposes, we also recommend that stops of persons riding non-motorized conveyances (bicycles, skateboards, scooters, etc.) be captured as pedestrian stops.

The following list of data fields is generally representative of the recommended items for collection (Davis, 2001; Davis et al., 2002; Fridell et al., 2001; Ramirez et al., 2000):

- Stop Characteristics
  - Time and date of stop
  - Location of stop
  - Duration of stop
  - Reason for stop
  - Outcome or disposition of stop
  - Whether a search was conducted
  - Who and what was searched
  - Reasons or authority for search
  - Whether and what type of property/evidence was seized

- Driver/Pedestrian Characteristics
  - Age
  - Gender
  - Race/ethnicity
  - Residency (or state of license)

- Vehicle Characteristics
  - License plate number and/or state of vehicle registration
  - Vehicle year/make/model
  - Vehicle condition

- Officer Characteristics
  - Badge number for linking with employee database containing officer age, race, gender, years of service, rank, and assignment

Traffic Stop Data

Below are recommendations for specific categories of information that should be collected on all traffic stops conducted by the SJPD, as well as the rationale for including these items.

Stop Characteristics

Time, date, and location of stop

- Provide basic contextual information for the stop
- May be necessary for data auditing purposes; depending on the methods of data monitoring chosen
- For all benchmarking methods, data should identify the police district and sector of the stop
- The address and XY coordinates of the stop also should be collected or provided for analysis purposes
- If an incident report is associated with the stop, the incident or case number from the incident report should be captured

Duration of stop

- Examines the possibility that racially biased stops might last for an extended period of time, beyond what is normally expected of a traffic stop (Fridell, 2004, 2005; Ramirez et al., 2000)
- Recommended that length of time be captured in exact minutes

Number of passengers

- Important for data validity and analysis purposes when cross-referenced with search and seizure data relating to passengers

Reason for the stop

- Assess officers' discretion in deciding to stop: High discretion stops (e.g., officer-initiated stops for minor offenses) vs. low discretion stops (i.e., reactive, mandated, or self-initiated stops for egregious or dangerous violations)
- Instrument must balance measure of discretion with an unwieldy instrument
- Recommended categories include
    - BOLO/Watch bulletin
    - Moving violation
    - Equipment violation
    - Non-moving violation (license, registration, etc.)
    - Investigatory stop
    - Other (Specify): _____

Limited Detention During a Stop (check all that apply)

- None
- Curb sat
- Handcuffed
- Sat in police vehicle

Reason for Limited Detention

- Flight risk
- Medical condition
- Prior contact safety concerns
- Other officer safety concerns
- Weapons/violence-related stop
- Other (Specify): _____

Disposition/outcome of the stop

- Assess potential disparities at the traffic stop outcome stage
- Recommended categories (Fridell et al., 2001; Ramirez et al., 2000):
    - No action taken
    - Courtesy service/citizen assist
    - Verbal warning
        - AB 953 requires capture of the type of warning provided
    - Written warning
        - AB 953 requires capture of the type of warning provided
    - Criminal citation
        - AB 953 requires capture of the violation cited
    - Traffic citation
        - AB 953 requires capture of the violation cited
    - Number of citations
    - Primary citation number (for cross-reference purposes)
    - Vehicle impounded
    - Search (see discussion below)
    - Arrest
        - Primary basis for arrest
            - Warrant
            - On-view probable cause
            - Pre-existing probable cause
            - Other
        - In addition, AB 953 requires capture of the offense(s) charged
- More than one disposition/outcome should be entered when applicable
- Outcomes may be assigned to drivers and passengers or just drivers, but search information on passengers must be captured under AB 953

Searches & Seizure

- Searches are inherently intrusive and may have a lasting impact on citizen perceptions of police; thus, their inclusion is crucial
- Search data fields are valuable because:

- They provide local jurisdictions with a sense of the quantity and quality of searches being conducted, the characteristics of those searches, and their productivity (i.e., frequency and amount of seizures) thus allowing departments to better allocate resources to support this activity (Fridell et al., 2001; Ramirez et al., 2000)
    - They also allow departments to assess whether certain groups are disproportionately targeted for searches
- Recommended categories:
    - Consent search requested? Yes / No
    - Consent given? Yes / No
    - Search conducted? Yes / No
    - Search target: Driver, Vehicle, or Passenger (specify all that apply)
    - Search reason: Canine Alert, Consent, Incident to arrest, Plain view, Probable cause, Vehicle inventory, Parole/Probation Condition, Warrant, Other
- Seizure resulting from search: Yes / No
    - Type of contraband/evidence seized: Alcohol, Currency, Drugs/Drug paraphernalia, Stolen property, Vehicle, Weapons, Other
- Frisk conducted?: Yes / No
    - Frisk target: Driver, Vehicle, or Passenger (specify all that apply)
    - Seizure resulting from frisk?: Yes/No
    - Type of contraband seized as result of frisk: Weapon, Drugs/Drug paraphernalia, Other
- Other seizure of property: Yes/No (required by AB 953)
    - Type of property seized: Currency, Vehicle, Weapon, Other
- Search types and contraband found should be assigned to drivers, passengers, and the vehicle itself

Driver Characteristics

Driver Age & Gender

- Important alternative explanations for disparate patterns because:
    - Age and gender strongly correlate with accusations of racial profiling (i.e. young black males presumed to be most frequent targets) (Fridell et al., 2001; Ramirez et al., 2000)
    - Both age and gender are also strongly correlated with risky/illegal driving behavior
- Recommended categories:
    - Age: Year of birth from driver's license
    - Gender: From driver's license

Driver Race and/or Ethnicity

- Determining the race/ethnicity must be based on the officer's perception and <u>not</u> by asking the person detained (AB 953)

- Charges of racial profiling and racially biased policing are predicated upon the officer's perception of an individual's race or ethnicity, so it is not necessary that the officer correctly identifies the person's race/ethnicity (Davis, 2001; Fridell et al., 2001; Ramirez et al., 2000)
- Recommended categories:
    - White
    - Black
    - Asian/Pacific Islander
    - Native American
    - Middle Eastern
    - Hispanic
    - Other

Driver Residency

- Important for geographic and multivariate analyses to determine local and non-local drivers (Fridell et al., 2001; McMahon, Garner, Davis, & Kraus, 2002). For example, tracking the confiscation of contraband might involve the identification of source states with this information.
- Recommended method: Drivers' zip code

Driver Demeanor

- Citizens' compliance and demeanor have demonstrated a consistent influence over officer behavior (Worden & Shepard, 1996; Engel, Sobol, & Worden, 2000).
- Measures may include (capture all that apply):
    - Cooperative
    - Noncompliant
    - Verbal abuse
    - Verbal resistance
    - Verbal threats
    - Physical resistance
- Infrequently used in traffic stop data collection, as can be seen as self-serving, though valuable information can be derived if included and audited for accuracy

Vehicle Characteristics

- Officers sometimes report that the decision to stop a vehicle is influenced by 1) type of vehicle, or 2) a combination of type of vehicle and driver characteristics (Ramirez et al., 2000). This type of information may provide additional insight into the reason officers make stops or select particular dispositions
- Recommended categories:
    - Type of vehicle: Commercial vehicle, Motorcycle, Motor Home, Sedan, SUV, Truck, Van

- Rental: Yes / No
- State of registration
- Condition of vehicle: Poor, Moderate, Good

Officer Characteristics

Officer/Employee Characteristics and Identity

- The rationale for including officer-related variables and identity is two-fold:
  - Enables departments to identify potential problem officers who may be disproportionately stopping minorities
  - Facilitates data analysis by assessing if officer characteristics are related to disparate patterns (further discussed below)
- Recommended data (can often be obtained by linking stop and badge/employee number to an employee records system)
  - Badge or organizational number
  - Assignment
  - Age
  - Race
  - Gender
  - Length of service
  - Rank

Pedestrian Stop Data

The literature on data elements that should be collected following a pedestrian stop is scant as the literature to date focuses almost entirely on traffic stop data collection. However, a starting point is the data collection requirements for all stops, including pedestrian detentions or consent searches, found in AB 953. Again, the new California stop data elements include:

- The date, time, and location of the stop
- The reason for the stop
- The result of the stop, e.g. no action taken, warning, citation, property seizure, arrest
- The nature of the warning or citation violation provided
- The offense charged if an arrest was made
- The perceived race, ethnicity, gender, and age of the person stopped
- Whether a consent search was requested and whether consent was granted
- Whether a search was conducted, the basis for the search, and the type of contraband or evidence recovered
- Whether property was seized and the basis for the seizure

One of the oldest and most robust data collection programs for pedestrian stops is the NYPD's UF-250 Stop, Question, and Frisk Worksheet. The worksheet's categories for "Reason for the Stop" are particularly useful and seemingly would comply with AB 953's requirements. Below are

recommendations for data elements that could be collected on all pedestrian stops and which, if implemented, should be compliant with AB 953. Under AB 953, data must be collected on *each person* detained. Where applicable, reference to the NYPD UF-250 is provided.

Stop Characteristics

Time, date, and location of stop

- Provide basic contextual information for the stop
- May be necessary for data auditing purposes; depending on the methods of data monitoring chosen
- For all benchmarking methods, data should identify the police district and sector of the stop
- The address and XY coordinates of the stop also should be collected or provided for analysis purposes
- If an incident report is associated with the stop, the incident or case number from the incident report should be captured

Duration of stop

- Examines the possibility that racially biased stops might last for an extended period of time, beyond what is normally expected of a traffic stop (Fridell, 2004, 2005; Ramirez et al., 2000)
- Recommended that length of time be captured in exact minutes

Reason for the stop

- Assess officers' discretion in deciding to stop: High discretion stops (e.g., officer-initiated stops for minor offenses) vs. low discretion stops (i.e., reactive, mandated, or self-initiated stops for egregious or dangerous violations)
- Instrument must balance measure of discretion with an unwieldy instrument
- Recommended categories (NYPD UF-250)
    - Carrying objects in plain view used in commission of crime
    - Fits suspect description
    - Actions indicative of casing victim or location
    - Actions indicative of acting as a lookout
    - Suspicious bulge/object
    - Actions indicative of engaging in drug transaction
    - Furtive movements
        - Describe
    - Actions indicative of engaging in violent crimes
    - Wearing clothes/disguises commonly used in commission of crime
    - Other reasonable suspicion
        - Describe

Limited Detention During Stop

- None

- Curb sat
- Handcuffed
- Sat in police vehicle

Reason for Limited Detention

- Flight risk
- Medical condition
- Prior contact safety concerns
- Other officer safety concerns
- Weapons/violence-related stop
- Other (Specify): _____

Disposition/outcome of the stop

- Assess potential disparities at the pedestrian stop outcome stage
- Recommended categories (based on Fridell et al., 2001; Ramirez et al., 2000):
    - No action taken
    - Courtesy service/citizen assist
    - Verbal warning
        - AB 953 requires capture of the type of warning provided
    - Written warning
        - AB 953 requires capture of the type of warning provided
    - Criminal citation
        - AB 953 requires capture of the violation cited
    - Pedestrian citation
        - AB 953 requires capture of the violation cited
    - Number of citations
    - Primary citation number (for cross-reference purposes)
    - Search (see discussion below)
    - Arrest
        - AB 953 requires capture of the offense charged
        - A separate indication of whether the arrest was made on a warrant is strongly recommended
- More than one disposition/outcome should be entered when applicable
- Outcomes should be assigned to all pedestrians detained

Searches & Seizures

- Searches are inherently intrusive and may have a lasting impact on citizen perceptions of police; thus, their inclusion is crucial
- Search data fields are valuable because:
    - They provide local jurisdictions with a sense of the quantity and quality of searches being conducted, the characteristics of those searches, and their productivity (i.e.,

frequency and amount of seizures) thus allowing departments to better allocate resources to support this activity (compare Fridell et al., 2001; Ramirez et al., 2000)
    - They also allow departments to assess whether certain groups are disproportionately targeted for searches
- Recommended categories:
    - Consent search requested? Yes / No
    - Consent given? Yes / No
    - Search conducted? Yes / No
    - Search target: Person, Purse/Backpack/Briefcase, Other (specify all that apply)
    - Search reason: Canine Alert, Consent, Incident to arrest, Plain view, Probable cause, Inventory, Warrant, Parole/Probation Condition, Other
- Seizure resulting from search: Yes / No
    - Type of contraband/evidence seized: Alcohol, Currency, Drugs/Drug paraphernalia, Stolen property, Vehicle, Weapons, Other
- Frisk conducted? Yes / No
    - Frisk target: Person, Purse/Backpack/Briefcase, Other (specify all that apply)
    - Frisk reason (UF-250):
        - Inappropriate attire/possibly concealing weapon
        - Verbal threats by suspect
        - Knowledge of suspect's prior criminal violent behavior/use of force/weapons
        - Furtive movements
            - Describe
        - Refusal to comply with officers' direction leading to reasonable fear for safety
        - Violent crime suspected
        - Suspicious bulge/object
            - Describe
    - Seizure resulting from frisk?: Yes/No
    - Type of contraband seized as result of frisk: Weapon, Drugs/Drug paraphernalia, Other
- Other seizure of property: Yes/No (required by AB 953)
    - Type of property seized: Currency, Vehicle, Weapon, Other
- Search types and contraband found should be assigned to each pedestrian subjected to a search or frisk

Pedestrian Characteristics

Pedestrian Age & Gender

- Important alternative explanations for disparate patterns because:

- Age and gender strongly correlate with accusations of racial profiling (i.e. young black males presumed to be most frequent targets) (Fagan, 2010, 2012; Ridgeway, 2007)
    - Both age and gender are also strongly correlated with risky/illegal behavior
- Recommended categories:
    - Age: Year of birth from driver's license
    - Gender: From driver's license

Pedestrian Race and/or Ethnicity

- Determining the race/ethnicity must be based on the officer's perception and not by asking the person detained (AB 953)
- Charges of racial profiling and racially biased policing are predicated upon the officer's perception of an individual's race or ethnicity, so it is not necessary that the officer correctly identifies the person's race/ethnicity (Davis, 2001; Fridell et al., 2001; Ramirez et al., 2000)
- Recommended categories:
    - White
    - Black
    - Asian/Pacific Islander
    - Native American
    - Middle Eastern
    - Hispanic
    - Other

Pedestrian Residency

- Important for geographic and multivariate analyses to determine local and non-local drivers (Fridell et al., 2001; McMahon, Garner, Davis, & Kraus, 2002). For example, tracking the confiscation of contraband might involve the identification of source states with this information.
- Recommended method: Drivers' zip code

Pedestrian Demeanor

- Citizens' compliance and demeanor have demonstrated a consistent influence over officer behavior (Worden & Shepard, 1996; Engel, Sobol, & Worden, 2000).
- Measures may include:
    - Cooperative
    - Noncompliant
    - Verbal abuse
    - Verbal resistance
    - Verbal threats
    - Physical resistance

- Infrequently used in stop data collection, as can be seen as self-serving, though valuable information can be derived if included and audited for accuracy

Other Circumstances Underlying the Stop

- Derived from the NYPD UF-250
- Recommended categories:
    - Report from victim/witness
    - Area has high incidence of offense under investigation
    - Time of day, day of week, or season corresponding to type of offense under investigation
    - Suspect associating with persons known for their criminal activity
    - Suspect is known or suspected gang member
    - Proximity to crime location
    - Evasive, false, or inconsistent responses to officer's questions
    - Changing direction/flight at sight of officer
    - Ongoing investigation of crime patterns/trends
    - Sight and/or sounds of criminal activity (gunshots, blood stains, alarm, etc.)

Officer Characteristics

Officer/Employee Characteristics and Identity

- The rationale for including officer-related variables and identity is two-fold:
    - Enables departments to identify potential problem officers who may be disproportionately stopping minorities
    - Facilitates data analysis by assessing if officer characteristics are related to disparate patterns (further discussed below)
- Recommended data (can often be obtained by linking stop and badge/employee number to an employee records system)
    - Badge or organizational number
    - Assignment
    - Age
    - Race
    - Gender
    - Length of service
    - Rank

How Data Should be Collected, Stored, & Analyzed

Currently, the SJPD collects limited detention data through the use of an MDC "mask" (or data entry screen) that officers complete at the conclusion of a traffic or pedestrian stop or by clearing a stop over the radio by reporting a series of codes to the dispatcher. Based on the expanded data collection recommendations above, it would no longer be feasible to report stop data verbally over

the police radio. Therefore, we recommend that officers continue to collect traffic and pedestrian stop data via an improved MDC mask whenever possible. Traffic and pedestrian stops should have separate MDC masks for each type of stop, and data on each type of stop should be captured and stored in separate databases – one for traffic stops and one for pedestrian stops.

Because officers assigned to specialty units such as the Traffic Unit or Downtown Services Unit may not have access to an MDC in a police vehicle, the SJPD should develop alternative data collection options for these situations. Alternative data collection options may include paper Scantron data collection sheets or a cell phone app for use when a vehicle MDC is not available or in proximity. Some departments have developed cell phone apps for collecting stop-related data on department-issued cell phones, and this may be a viable option for the SJPD to explore.

Regardless of how stop data are collected, and particularly if multiple systems are used, the data should be captured in databases where they can easily be exported as a flat file. That is, each database entry should reflect a single stop, and all data elements recorded by the officer should be associated with that stop. If the SJPD chooses to collect information on passengers and/or multiple pedestrians stopped at the same time (as part of a single stop), then those parties' information should be captured together as part of the record for that unique stop. Each stop should be assigned a unique ID or incident number, and all data fields associated with that stop should be exportable as a single line of data on a spreadsheet containing multiple columns (or fields) for each stop element recorded.

Independent Analysts

Fridell and her colleagues (2001) note that "data collection is both a social science and a political endeavor." That is, even methodologically sound, rigorous data analysis can be criticized in the political realm when it is conducted internally. External, independent analysts bring credibility and objectivity to the process of data collection and analysis that in-house research analysts cannot (Fridell, 2004). They also are likely to bring a degree of statistical expertise that supplements internal research capabilities (Fridell, 2004). Therefore, nearly all data collection guides recommend at least obtaining independent researchers' assistance for analyzing their traffic stop data. Most advocate a full police-analyst partnership that begins in the initial design and implementation stages and continues through analysis and interpretation of traffic stop data. (Davis, 2001; Davis et al., 2001; Fridell et al., 2001; Fridell, 2004, 2005; McMahon et al., 2002, Ramirez et al., 2000). Qualified analysts are likely to be associated with colleges/universities or research agencies, should be trained in social science methods and statistics, have general knowledge of law enforcement, and have experience analyzing and interpreting the complex issues associated with stop data.

Data Integrity

Maintaining data quality ensures reliable and valid results. It is essential for any data collection effort, but particularly important for data collected through official sources (i.e., the police). The purpose of data auditing is two-fold: 1) to determine whether officers are submitting data for all targeted stops, and 2) to determine whether forms are being completed fully and accurately (Fridell, 2004). In addition to resulting in quality data, a data monitoring system can also help ensure

officers' compliance with the data collection protocol because they are more likely to be diligent in their data collection if they know their efforts are being reviewed for comprehensiveness and quality (Fridell, 2004).

There are three general checks on data quality that researchers should explore (Fridell, 2004, 2005; Ramirez et al., 2000):

- Checking for submission of data on all self-initiated stops
- Checking for missing data or errors
- Checking for misstatement of facts (e.g. intentional or accidental errors)

Several methods of auditing are available for these potential data quality issues (Fridell, 2004, 2005; McMahon et al., 2002; Ramirez et al., 2000):

- To check for submission of all stops:
    - Compare stop data with a secondary data source that tracks some (e.g. citations) or all targeted stops (e.g. computer aided dispatch files)
    - Can compare aggregate numbers across data files
    - Correspondence between the two data sets of 90% or more is acceptable.
- To check for missing data or errors:
    - Conduct within first two months of data collection so remedial measures (i.e., additional training, closer supervision) can be implemented (Fridell, 2004, 2005; McMahon et al, 2002).
    - Run frequencies on all variables taking note of those that, if blank, might be "not applicable" (e.g., if no search occurs, search authority, seizure, etc. are not applicable) versus "missing" (Fridell, 2004, 2005)
    - The Police Executive Research Forum recommends that an error rate of less than 10% is acceptable (Fridell, 2004).
- To check for misstatement of facts:
    - Examine data collection elements that officers might be likely to intentionally misrepresent to make themselves look better (e.g., race of driver, length of stop, etc.)
    - Compare race data from DMV license information or photograph
    - Officer perceptions may be wrong without intention
    - Cannot know how much discrepancy between officer perceptions and actual information is legitimate, but can explore outliers if comparing similarly-situated officers to each other

As noted above, the Police Executive Research Forum recommends less than a 10% error rate for traffic stop data (Fridell, 2004). Experienced social scientists who work with police stop data often recommend a more stringent standard of under 5% missing/incorrect data. This low error can be achieved through timely feedback on errors, direct supervisory oversight, and emphasis that data collection is an important priority to the agency.

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