

Assessment of Colorado Springs Police Department Use of Force

REPORT SUBMITTED TO: THE COLORADO SPRINGS POLICE DEPARTMENT, OFFICE OF THE CHIEF



APRIL 25, 2022

PREPARED BY:

LT. COLONEL (RET.) JOHN R. "RICK" BROWN, PRESIDENT TMLLC ROBIN S. ENGEL, PH.D., UNIVERSITY OF CINCINNATI JENNIFER CHERKAUSKAS, PH.D., UNIVERSITY OF CINCINNATI NICHOLAS CORSARO, PH.D., UNIVERSITY OF CINCINNATI LT. COLONEL (RET.) JON D. KURTZ, SENIOR CONSULTANT TMLLC

Table of Contents

Executive Summary i		
1. Introduction		
1.1 Background and Overview of Research Study	1	
1.2 Report Organization		
2. Review of CSPD Policies and Practices	5	
2.1 CSPD Use of Force Policies		
2.1.1 CSPD General Order 500 (Use of Force)		
2.1.2 CSPD General Order 510 (Reporting Use of Force)	0	
2.2 CSPD Use of Force Committee		
2.3 CSPD Use of Force Training	9	
2.3.1 Academy Training	9	
2.3.2 In-Service Training		
2.3.3 Supervisory Training		
2.3.4 Recent Training		
2.4 Comparisons to Peer Agencies		
3. CSPD Data and Research Methodology		
3.1 CSPD Use of Force Dataset Description		
3.2 Unit of Analysis		
3.3 Data Sample		
3.4 Definitions		
3.5 Description of Statistical Analyses		
3.5.1. Benchmark Analyses		
3.5.2 Multivariate Statistical Analyses		
4. Physical Force and Weapons Used		
4.1 Use of Force Patterns and Trends		
4.1.1. Interrupted Time Series Analyses		

4.2 Characteristics of Individuals that Had Force Used Against Them: Descriptive and Bivaria Analyses	
4.2.1 Individuals' Race/Ethnicity and Gender	2
4.2.2 Individuals' Impairment (Alcohol/Drugs and Mental Health)	
4.2.3 Individuals with Repeat Uses of Force	7
4.2.4 Individuals' Reported Resistance	3
4.3 Reason for Force	l
4.4 Arrestees vs. Non-Arrestees	1
4.5 Racial/Ethnic Disparity (Benchmark) Analyses 45	5
4.5.1 Disparity Ratio Findings—CSPD Overall	7
4.5.2 Disparity Ratios by CSPD Divisions)
4.6 Predicting Force During Arrests	1
4.6.1 Arrest Trends	1
4.6.2 Use of Force during Arrests	5
4.6.3 Multivariate Analyses	l
4.7 Section Summary	3
4.7.1 Use of Force Trends	3
4.7.2 Force Descriptives	3
4.7.3 Racial/Ethnic Disparity (Benchmark) Analyses 69)
4.7.4 Arrest Trends)
4.7.5 Use of Force during Arrests	l
4.7.6 Predicting Use of Force during Arrest Incidents (Multivariate Statistical Analyses). 71	Ĺ
5. Types of Force, Force Effectiveness, and Injuries72	2
5.1 Force Actions and Weapon Use	2
5.1.1 Reported Effectiveness by Type of Force	1
5.1.2 Types of Force by Race/Ethnicity	5
5.2 Canine Use of Force	5
5.3 Individual (Subject) Injuries	7
5.3.1 Predicting Subject Injuries	Ĺ
5.4 Officer Injuries	1

5.4.1 Injury by Force Type	
5.4.2 Predicting Officer Injury	
5.4.3 Further Examination of Officer Gender Differences in Injuries	
5.5 Section Summary	
5.5.1 Types/Effectiveness of Force	
5.5.2 Canines	
5.5.3 Individual (Subject) Injuries	
5.5.4 Officer Injuries	
6. Pointing of Firearms	
6.1 Quantitative Analysis of Pointing of Firearms, February 3, 2017 – December	er 31, 2020 97
6.1.1 Trends in Pointing of Firearms	
6.1.2 Characteristics of Individuals Who Had Firearms Pointed at Them	
6.1.3 Characteristics of Officers Who Pointed Firearms	
6.2 Pointing of Firearm Benchmark Analyses	
6.2.1 Disparity Ratio Findings—CSPD Overall	
6.2.2 Disparity Ratios by CSPD Divisions	
6.3 Review of CSPD Pointing of Firearm Incidents	
6.3.1 Methodology	
6.3.2 Qualitative Review Findings	
6.4 Section Summary	
6.4.1 Descriptive and Bivariate Analyses	
6.4.2 Benchmark Analyses	
6.4.3 Qualitative Review	
7. Community Perspectives	
7.1 Previous Research	120
7.2 Community Survey Methodology	
7.2.1 Survey Development, Administration, and Analysis	
7.3 Description of Survey Respondents	
7.3.1 Respondents' Demographic Characteristics	

7.3.2 Respondents' Experiences with the CSPD	
7.4 Survey Findings (General Perceptions and Police-Community Relations)	
7.5 Survey Findings (Perceptions of Use of Force)	
7.6 Survey Findings (Perceptions of Personal Interactions with CSPD)	
7.7 Survey Findings (Open Ended Question Responses)	
7.8 Community Focus Group	
7.8.1 State of Police-Community Relations	
7.8.2 Transparency	151
7.8.3 Community Perceptions Regarding Police Bias	151
7.8.4 Community Engagement	
7.8.5 Data Collection and Next Steps	
7.9 Section Summary	
8. CSPD Perspectives	
8.1 Previous Research	
8.2 Focus Groups with CSPD Officers and Supervisors	
8.2.1 Methodology	
8.2.2 General Perceptions of the CSPD	
8.3 Focus Group Findings	
8.3.1 Perceptions of Police-Community Relations	
8.3.2 Transparency & Communication	
8.3.3 Staffing	
8.3.4 Impact of SB 20-217	
8.3.5 Training	
8.3.6 Technology	
8.3.7 Dispatch	
8.4 Officer Survey	
8.5 Officer Survey Respondents	
8.6 Officers' Perceptions	

		175
	8.6.1 Police-Community Relations	
	8.6.2 Perceptions of Use of Force and De-escalation Principles	180
	8.6.3 Perceptions of Changes in Use of Force Legislation	184
	8.6.4 Perceptions of Supervision and Administration	186
	8.6.5 Training	187
	8.7 Section Summary	191
9	. Summary of Findings and Recommendations	194
	9.1 Enhance the Use of De-Escalation during all Police-Citizen Encounters	195
	9.2 Enhance routine review and updates to the CSPD use of force policy	198
	9.3 Reduce the Frequency of Pointing of Firearm Events	200
	9.4 Review and improve CSPD use of force training	203
	9.5 Build Community Trust in Police through Transparency and Engagement	205
	9.6 Enhance Supervision, Accountability & Oversight related to Use of Force	207
	9.7 Enhance Data Collection	209
	9.8 Work Collaboratively to Reduce Racial/Ethnic Disparities	212
R	EFERENCES	215
A	APPENDICES	229
	Appendix A. Project Team	229
	Appendix B: TMLLC Scope of Work	231
	Appendix C: CSPD Reports: Pointing of Firearm, Use of Force, and K9 Use of Force	233
	Appendix D. Community Survey Instrument	241
	Appendix E. Responses to all Community survey items	246
	Appendix F. Responses to all Officer survey items	249

EXECUTIVE SUMMARY

The Colorado Springs Police Department (CSPD) commissioned this report in partnership with the City of Colorado Springs to provide a proactive, independent systematic review of the patterns and trends associated with use of force by the CSPD. In response to *Request for Proposal, Consultant Services (R20-093 IP), Assessment of Colorado Springs Police Department's Use of Force* released on July 20, 2020, the Transparency Matters, LLC (hereafter TMLLC) team was selected to complete this work. This report documents the results from comprehensive analyses of use of force incidents reported by the CSPD, specifically focusing on understanding how, when, why, and against whom officers use force, as well as the context of police encounters with the public, from both the community and officer perspectives. The purpose of this study is to examine current practices and identify opportunities to reduce the frequency and severity of use of force incidents, racial/ethnic disparities in force, and injuries to both officers and citizens through improvements to policies, training, and supervision.

This report includes nine sections: (1) Introduction, (2) Review of CSPD Policies and Practices, (3) Data and Research Methods, (4) Physical Force and Weapons Used, (5) Types of Force, Force Effectiveness, and Injuries, (6) Pointing of Firearms, (7) Community Perspectives, (8) CSPD Officer Perspectives, and (9) Recommendations. This executive summary provides an overview of the primary findings from each of these report sections.

Section 1: Introduction

Using both qualitative and quantitative methods that explore official police data, community and officer surveys and focus groups, and comparisons to peer agencies, we address the following research questions:

- What factors contribute to the use (and severity) of force by CSPD officers?
- How does CSPD use of force policy and training compare to similarly situated (i.e., peer) cities?
- Does the rate and severity of force align with racial/ethnic groups' representation *at risk* for having force used against them by police?
- What are possible explanations for any disparities found in police use and severity of force?
- What factors contribute to the likelihood of officer and citizen injuries?
- How do community members perceive use of force and police-community relations?
- How do CSPD officers perceive police use of force and police-community relations?
- What improvements should be made to CSPD's use of force policies, training, and data collection and analysis to meet current best practices?

Our mixed-methods approach to data collection and analysis focuses on understanding the reasons behind the patterns and practices of police uses of force, including any racial/ethnic disparities identified. Recognizing the importance of transparency and building community trust, the CSPD proactively initiated and fully engaged in this research effort by embracing a holistic approach to understanding the use of force by CSPD officers and making the findings public.

Section 2: Review of CSPD Policies and Practices

The TMLLC team reviewed the CSPD's use of force-related policies, practices, and training. The contents of this review are included in Section 2, which summarizes two primary CSPD use of force

policies and the work of CSPD's Use of Force Committee. In addition, use of force and other trainings for the academy, in-service, and field supervisors are reviewed.

CSPD General Order 500 (Use of Force) defines when and how force can be used by CSPD officers, while CSPD General Order 510 (Reporting Use of Force) delineates the reporting requirements for officers that use force. Reporting is required for the use of any of the following police actions: 1) control techniques, 2) pointing a firearm, 3) strikes, kicks, or takedowns, 4) chemical agents, 5) conducted energy weapon (CEW), also referred to by brand name TASER, 6) baton strikes or specialty impact munitions (SIM), 7) canine deployment that results in contact, 8) deadly force, 9) Tactical Vehicle Intervention (TVI), and 10) any other use of force tactic that causes pain and/or injury.

As part of the original scope of work, the TMLLC team was tasked with providing a comparison of the frequency of CSPD use of force incidents to nine peer agencies with similar residential populations, racial/ethnic diversity, agency size, and crime rates. However, there are several major limitations – documented within Section 2 – that call into question the interpretation and value of these types of comparisons. Therefore, we instead compared CSPD's force policies and practices across peer agencies. We found some types of police actions are universally reported as force, but differences across agencies (reported in Section 2) were noted for the requirement to report verbal threats, escort holds, handcuffing, and the display or pointing of less lethal weapons. Six of the nine peer agencies include pointing of a firearm as a reportable use of force, as does the CSPD.

We also compared the force-related policies of the CSPD with its peer agencies on a series of policyrelated topics based on the guidance and recommendations compiled from several sources, including the *Guiding Principles* (Police Executive Research Forum—PERF), *National Consensus Policy and Discussion Paper on Use of Force* published by the International Association of Chiefs of Police (IACP)¹, and 8 *Can't Wait* campaign (Campaign Zero). Overall, we found the CSPD is largely consistent with best practice standards, along with peer agencies, in several areas (e.g., requiring use of de-escalation techniques, when possible; verbal warning before deadly force; rendering of first aid; duty to intervene). However, the CSPD is a leader among its peers in the following best practices (which are not routinely followed by peer agencies):

- (1) Rather than a single use of force policy, the CSPD has separate policies for the authorization of force, use of specific weapons, documentation of force, training, supervisory review, and investigations, which is consistent with the IACP guidance.
- (2) Rather than guiding officer decision-making based on a use of force continuum, the CSPD uses the Critical Decision-Making Model (a non-continuum-based model), which is favored by both the PERF and the IACP.
- (3) The CSPD prohibits chokeholds in all cases, while some peer agencies permit their use when deadly force is authorized.

One point of departure for the CSPD from best practice (and some peer agencies) is the public issuance of annual reports on use of force, which is not currently required by CSPD policy.

¹ The *National Consensus Policy and Discussion Paper on Use of Force* was originally published in October 2017 and revised in July 2020. It was a collaborative effort among 11 of the most significant law enforcement leadership and labor organizations in the United States.

Section 3: Data and Research Methods

Three forms for types of use of force are collected by the CSPD: (1) general uses of force that include physical force and weapon use; (2) canine use of force; (3) and pointing of firearms. Unfortunately, these three reports collect different types of information; given this inconsistency in measurements, statistical analyses are provided separately for the information from each of the different forms. For analyses examining use of physical force and weapon use, force incidents are examined for a four-year period, from January 1, 2017 – December 31, 2020. For incidents involving pointing of a firearm, incidents are analyzed for a 47-month period (February 2017 – December 2020).²

We measure use of force as the number of individuals who had force used against them during an incident (regardless of whether the incident involved multiple individuals, officers, or force actions). If an individual was involved in a single incident and had force used against them by more than one officer, we count this as *one individual* who had force used against them, although we included information from *each* of the involved officers' reports. CSPD officers used force against 5,933 individuals during the four-year study period. The majority of individuals who had force used against them involved the pointing of firearms (69.7%). The remaining 2,084 individuals (35.1%) had physical force or weapons used against them by the CSPD.³

We also report the findings of analyses measuring racial/ethnic disparities throughout the report, and define the measures related to the examination of differences across racial/ethnic groups as follows:

- **Disproportionality:** A difference in outcomes *within a single racial/ethnic group* (e.g., use of force against Black individuals) compared to that group's representation in a selected comparison population (e.g., Black residential population).
- Disparity: A difference in outcomes *across groups* (e.g., racial/ethnic groups) in policing.
- **Racially biased policing:** Occurs when law enforcement inappropriately considers race or ethnicity in their decisions to intervene in a law enforcement capacity.

Although this report assesses the CSPD's use of force patterns and trends, statistical analyses that measure racial/ethnic disparity cannot be reliably used to determine the reasons for these differences, including whether individual officers, or the agency, engages in racially biased policing.

In addition, several types of statistical analyses are conducted in this research study. The type of statistical analysis selected varies based on the structure of the data available, and the specific research questions the team is addressing. These statistical analyses are briefly summarized below:

- Descriptive statistics: summarize quantitative data with counts and percentages.
- Bivariate analyses: assess the relationship between two variables (e.g., race and force) with a

² The use of physical force or weapon usage data is the most comprehensive and consistently reported across the four-year study period. In contrast, the canine use of force was documented on the use of force report from January 2017 to April 2018 but changed to a canine force-specific form beginning in May 2018. Finally, pointing of firearms is generally documented on a separate, less detailed report, and collection began in February 2017.

³ This figure excludes 36 individuals with canine-only force, who were removed from analyses due to the differences across the information collected for this type of force and due to the relative rarity of its occurrence.

chi-square analysis, but do not consider any other factors that might influence use of force.

- **Interrupted time series analyses:** rigorous quasi-experimental design that assesses whether (and to what extent) there are statistically significant 'shifts in the trends' (i.e., use of force) that correspond with particular period-specific events.
 - Time series analyses require a long enough period following the event date of the "interruption" to determine if there are statistically significant changes to the overall time trend.
- **Benchmark analyses:** Comparison of the percent of racial/ethnic groups who experience an outcome (e.g., use of force) compared to the same groups' *expected* representation in the outcome, assuming no bias; requires the measurement of benchmark data.
 - Multiple benchmarks intended to estimate racial/ethnic groups' expected representation in use of force incidents are measured and compared.
 - Various benchmarks are derived from residential population, CSPD arrest, and CSPD reported criminal suspect data.
 - Each of these have strengths and weaknesses that are more fully described in Section 4.
 - Comparisons using residential population have been shown to underestimate the population *at risk* for police intervention, while arrestee data may overestimate.
 - Comparisons using the criminal suspect data benchmark likely produce findings with the strongest validity, as they best approximate the population of individuals *at risk* for interactions involving the use of force.
 - All benchmark analyses have noteworthy limitations and should be used to identify patterns and trends of racial disparities, but not individual officer or departmental racial/ethnic bias.
 - **Disproportionality Index:** Calculated within one racial/ethnic group (i.e., the percentage of Black individuals who have force used against them is divided by the percentage of Black individuals in the benchmark).
 - **Disparity Ratio:** Calculated across racial/ethnic groups by dividing the disproportionality index of a minority group by the disproportionality index of the majority group. Interpreted as the likelihood of having force used against a person within that racial/ethnic group *compared to the majority group*.
- **Multivariate Regression Analyses:** Statistical models estimate the likelihood that force is used in similar arrest situations (e.g., similar characteristics of the person, situation, and neighborhood). The models isolate what factors in these similar situations predict the use of force.
 - **HGLM Analyses:** A special type of multivariate modeling required for data reflecting more than one level of aggregation (e.g., arrests within the same CSPD zone sectors).⁴
 - **Predicted Probabilities:** A more precise estimation method that demonstrates the impact of the independent variables in a multivariate model. A predicted probability is simply the probability of an event, all other factors being equal.

⁴ Hierarchical Growth Linear Modeling (HGLM) analysis partitions all level-1 measures and level-2 measures independently to avoid a violation of the assumption of statistical independence in multivariate modeling.

- The key weakness of multivariate analysis is that it can only control for *measured* variables included in the statistical models.
- Throughout the report when findings are reported to be significant, this refers to *statistical significance*, or the confidence level that the observed differences are not due to random chance and/or sampling error.⁵

Section 4: Physical Force and Weapons Used

The number of individuals (n=2,084) who had physical force or weapons used against them by CSPD during the four-year study period steadily increased from 2017 to 2020 by 24%. The monthly trends in CSPD use of force were examined using interrupted time series analyses. The findings demonstrated the likelihood that the timing of two events during the study period – (1) the death of George Floyd at the end of May 2020 and (2) the implementation of SB-217 at the end of June 2020 – interrupted the overall upward trend of CSPD use of force. These events led to an immediate reduction in the frequency of use of force events that ranged from 21 - 23%. Further, these reductions in use of force after these events were observed across racial/ethnic groups.

Of the 2,084 individuals who had physical force or weapons used against them by CSPD from January 2017 to December 2020:

- The majority of individuals were White (56.6%), followed by Black (22.8%), Hispanic (16.6%), and other race/ethnicity (1.7%).⁶
 - Considerable variation in individuals' race/ethnicity was shown across CSPD divisions, although some variation should be expected based on differences in population, reported crimes, and arrests.
- Roughly 81% were male, 17% were female, and 2% were of unknown gender.
- Nearly 70% of individuals who had force used against them were perceived by officers as having some type of impairment: 56.5% perceived to be under the influence of alcohol or drugs and 14.1% perceived to be emotionally disturbed (officers can only report one type of impairment).
- Black and Hispanic individuals were significantly more likely than White individuals to have force used against them when they had no reported impairment.
- Slightly more than 7% of the individuals that had force used against them were involved in more than one use of force event during the four-year study period.
 - There were no statistically significant differences by race/ethnicity in repeat use of force individuals, but individuals who had force used against them more than once were significantly more likely to be male compared to female.
- Over 95% of individuals who had force used against them were reported by officers as showing active resistance or active aggression toward officers.

⁵ Statistical significance is identified with a p-value; typically the social sciences rely upon a confidence level of 95% for indicating statistical significance. A p-value of .05 or less indicates that there is 5% or less of a possibility that the finding is due to random chance and/or sampling error.

⁶ Individuals of "other" race/ethnicity includes those who are Asian/Pacific Islander, Native American, and Middle Eastern.

- Individuals' average level of resistance was stable across years and did not vary significantly by their gender or race/ethnicity.
- Officers in Falcon and Gold Hill Divisions reported slightly higher levels of the most serious level of resistance (active aggression) compared to Sand Creek and Stetson Hills Divisions.
- Half of the individuals who had force used against them were actively evading or resisting arrest (50%), while 23% threatened or attacked officers or others.
 - No statistically significant racial/ethnic or gender differences were found in the reasons for the use of force.
- Approximately 22% of individuals who had force used against them were not subsequently arrested (may have been released, taken to a hospital or mental facility, etc.).
 - Individuals who engaged in more serious resistance were more likely to be arrested, but arrests did not significantly differ by individuals' race/ethnicity or gender.

Racial/Ethnic Disparity (Benchmark) Analyses for Use of Force

As summarized above, the percent of individuals in a racial/ethnic group who have force used against them is not particularly meaningful unless it is compared to the same groups' *expected* rate of use of force assuming no bias. This comparison is known as a benchmark; the limitations of this type of analysis are described in Section 3 and Section 4. Given the inherent limitations of measuring racial/ethnic disparities using benchmark analyses, we conduct analyses and compare results using seven distinct benchmarks:

- (1) Percent Residential Census Population
- (2) Percent Arrestee Population (all crimes)
- (3) Percent Arrestee Population (Part I crimes)
- (4) Percent Arrestee Population (Part I violent crimes)
- (5) Percent Suspect Population (all crimes)
- (6) Percent Suspect Population (Part I crimes)
- (7) Percent Suspect Population (Part I violent crimes)

As graphically displayed in Figure ES.1 below, the resulting disparity ratios (calculated from disproportionality indices) demonstrated the following:

- Disparity ratios are the highest when based on the residential census data for Black individuals.
- Disparity ratios using all other benchmarks produced disparity ratios close to 1.0, indicating that there is little or no disparity between White individuals and Black or Hispanic individuals' likelihood of having force used against them when benchmarks that better approximate risk of use of force are used.
- For several benchmarks, the disparity ratios are less than 1.0, indicating that Black and Hispanic individuals were less likely to have force used against them compared to White individuals given their representation in the violent arrestee and violent criminal suspect populations.
- Citywide, the analyses using criminal suspect population as the benchmark comparisons (shades of blue in Figure ES.1 show very minor or no racial/ethnic disparities in use of force for both Black and Hispanic individuals compared to White individuals.

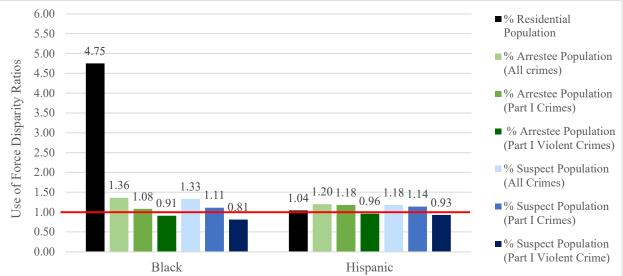


Figure ES.1 Comparison of CSPD Use of Force Racial/Ethnic Disparity Ratios Across Benchmarks

At the CSPD division level, criminal suspect benchmark analyses show:

- Black individuals were 1.4 times more likely than Whites to have force used against them in Gold Hill, while the other three CSPD divisions demonstrated lesser or no disparities.
- Hispanic individuals were roughly 1.2 times more likely than White individuals to have force used against them in Sand Creek and Stetson Hills Divisions.

Arrest Trends

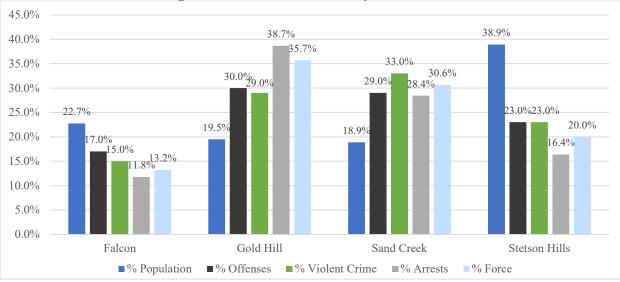
Of the 2,084 individuals who had physical force or weapons used against them, 77.6% were arrested. We analyzed all arrest incidents to determine what factors predict an increased likelihood of use of force. Although use of force increased slightly in 2020 compared to 2019 (2.9% increase), arrests significantly declined (11.7%) during this same period. Interrupted time series analyses demonstrated that the reported increases in arrests from 2017 - 2019 changed abruptly with the timing of the COVID-19 shut down in March 2020, when arrests declined by 7%. Continued reductions in arrests were also experienced following the death of George Floyd and enactment of SB 20-217.

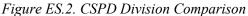
Use of Force during Arrests

From January 1, 2017 to December 31, 2020, the CSPD arrested 77,134 individuals; 2.1% of these arrested individuals also had physical force or weapons used against them. The percent of arrests involving force steadily increased from 1.9% of arrests in 2017 to 2.3% in 2020 (an increase of 21%).

- Without considering any other factors, the percentage of Black and Hispanic arrestees who also had force used against them increased 30% and 33%, respectively, from 2018 to 2019.
- The percentage of arrests involving the use of physical force or weapons used also varied considerably across CSPD divisions.
 - In Stetson Hills, the percent of arrests that involved force increased from 1.9% to 3.3%, the highest increase of any division in all four years.

Further comparisons across CSPD Divisions demonstrate additional differences. As shown in Figure ES.2 below, Gold Hill is the only division that has a higher percentage of arrests and force than their share of criminal offenses and violent crimes. Yet it is also the only division that has a lower percentage of uses of force compared to their share of arrests.





Predicting Use of Force during Arrest Incidents (Multivariate Statistical Analyses)

We used multivariate statistical modeling to estimate the factors that predict the likelihood of arrest incidents involving use of force. After statistically controlling for other factors, the results showed:

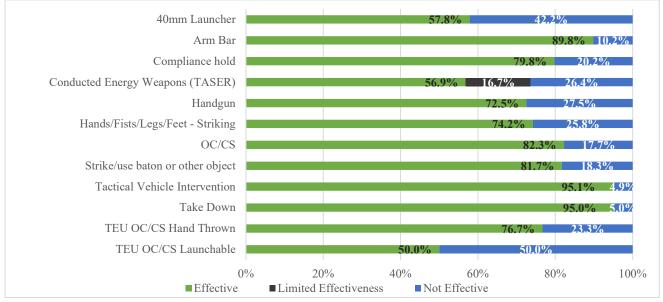
- Black and Hispanic arrestees were slightly (1.3 times and 1.2 times, respectively) more likely than White arrestees to have force used against them.
- Male arrestees were moderately (1.8 times) more likely to be involved in uses of force.
- Younger arrestees were slightly more likely to have force used against them during arrests.
- Arrests occurring in neighborhoods with more violent crimes were slightly more likely to result in the use of force.

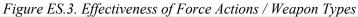
Note that an important limitation of the multivariate analyses findings is that the CSPD does not measure the resistance shown by all arrestees during encounters with police. Subjects' resistance is one of the strongest known predictors of whether officers use force during an incident but cannot be included in the statistical models using these data.

Section 5: Types of Force, Force Effectiveness, and Injuries

The three most common types of force used by the CSPD (excluding pointing of firearms) include: weaponless physical force (67%), CEW (29%) and OC/CS (13%). The use of these types of force varied somewhat across CSPD divisions, with officers in the Gold Hill Division being least likely to use weaponless physical force, but the most likely to use CEW (TASER).

As shown in Figure ES.3, officers' reported effectiveness of force in gaining compliance from a resisting subject ranged across types of force from approximately 50% to 95% effectiveness, with CEW as one of the least effective (57%).





Some differences in the types of force used against racial/ethnic and gender groups also emerged.

- Black individuals were the least likely to have weaponless physical force used against them, but most likely to have OC/CS used against them.
- Female subjects were significantly more likely than men to have weaponless physical force used against them, and significantly less likely to have a CEW deployed.

Individual (Subject) Injuries

Of the individuals who had physical force or weapons used against them by officers, approximately 73% had reported injuries related to the incident. While the reported injury rate for individuals involved in force incidents is high, the injuries themselves were rarely classified as serious; 1.5% of individuals reported serious bodily injury, and 0.6% of uses of force resulted in death.

The likelihood of individuals' injuries varied across the type of force used. Although rarely used, batons and firearms were among the highest injury rates. Weaponless physical force – which is the most common type of force – resulted in injury for nearly 70% of individuals who had that type of force used against them. CEW use also resulted in a high percentage of injuries (85%) although over half of these reported injuries were limited to TASER probe impact lacerations.

Multivariate statistical models were used to estimate the likelihood of use of force incidents resulting in subject injuries. After controlling for other factors:

• Individuals who had two or more types of force used against them were 2.9 times more likely to be injured than individuals who had a single type of force used against them.

- Individuals who displayed higher levels of resistance were 1.2 times more likely to be injured than individuals who displayed lower levels of resistance.
- Individuals perceived to be under the influence of drugs or alcohol and individuals perceived to be emotionally disturbed were both approximately 1.3 times more likely to be injured in comparison to individuals who were not perceived to be impaired.
- Black individuals were significantly *less likely* to be injured than White individuals.
- Males were 1.2 times more likely to be injured than females.
- Neighborhood characteristics did not impact the likelihood of subject injury.

Officer Injuries

Officers were injured approximately 20% of the time during use of force incidents, and 2% of these injuries were classified as "serious bodily injury." Nearly half of the 573 officers who used force at least once during the four-year study period were not injured during any incident. However, 30% of officers were injured once, 10.6% were injured twice, 5.8% were injured three times, and 3.9% were injured four or more times. Officers were most likely to be injured during incidents when they employed weaponless force (21.8%), followed by when they discharged their firearm (11.1%) or used TASERs (10.2%).

After controlling for other factors, multivariate statistical models showed the following:

- Officers who experienced a higher level of subject resistance were 1.7 times more likely to be injured.
- Officers who used two or more types of force during the incident were 1.6 times more likely to be injured.
- Female officers were 1.7 *times more likely* to be injured during use of force encounters compared to male officers.
- The predicted probability of being injured during a use of force incident also differed across officer gender; all else being equal, the likelihood of injury was 18.3% for females compared to 11.6% for males.
- Neighborhood characteristics did not significantly predict officer injury.

Additional exploration of officer injuries by gender reveals that although female officers were less likely than male officers to be involved in use of force incidents, they were more likely to be injured during those incidents, and these injuries were more likely to be bodily injuries. The data analysis suggests that the increased risk of injury to female officers during force incidents is not due to female officers being more likely than male officers to use multiple types of force during an encounter or experiencing higher levels of subject resistance. Of note, female officers were more likely than males to deploy their TASERs, and this less lethal option is among the *least effective* force types to control individual resistance.

Section 6: Pointing of Firearms

CSPD officers pointed firearms at 4,134 individuals over a roughly 47-month period (February 3, 2017 to December 31, 2020). Quantitative analyses for this type of force are limited because less information

is systematically captured in a format that is readily available for analysis. Nevertheless, our analyses revealed the following primary findings:

- The number of individuals who had firearms pointed at them was relatively stable from 2017 to 2019, before a considerable decline of 11.9% at the department level in 2020.
- The departmental decline in pointing of a firearm from 2019 to 2020 was largely driven by the decrease specifically in Gold Hill Division (-29.3%) and by the reduction in pointing incidents involving White individuals (-14.4%) as compared to reduction of 12.1% and 11.1% for Hispanic and Black individuals, respectively.
- Sand Creek Division reported the highest number of individuals who had firearms pointed at them across all four years, while Stetson Hills Division had the lowest number for three of the four years.
- Nearly 81% of individuals who had firearms pointed at them were male.
- The majority of individuals who had firearms pointed at them were White (52.6%), followed by Black (22.0%), Hispanic (19.2%), and other (1.5%). Considerably more variation in individuals' race/ethnicity was observed across CSPD divisions.
- Of the 4,088 known individuals who had firearms pointed at them, there were 3,636 distinct individuals, with 380 "repeat individuals" who had firearms pointed at them on more than one occasion (10.5%).
 - Individuals who had firearms pointed at them more than once during this period were significantly more likely to be male compared to female and significantly more likely to be Black compared to White.

Note that findings reported above are based on bivariate analyses that do not measure other factors that may be associated with the likelihood of experiencing pointing of a firearm (e.g., seriousness of the offense; time, location, reason for the stop, etc.).

Racial/Ethnic Disparity (Benchmark) Analyses for Pointing of Firearms

We also utilized benchmark analyses to compare the percent of individuals who had firearms pointed at them to an "expected" percent of individuals using the same seven benchmark comparisons as the use of physical force and weapon use analyses. As shown in Figure ES.4 below, the primary findings show:

- For Black individuals, the disparity ratio is the highest when based on the residential Census data (DR = 4.96). Disparity ratios that better account for "risk" of firearm pointing (e.g., arrests and criminal suspects) show disparity ratios for Black individuals that range from 0.85 to 1.42, indicating Black individuals were either slightly more or less likely than White individuals to have a firearm pointed at them depending on which arrestee or suspect benchmark is used.
- For Hispanic individuals, the disparity ratios range from 1.16 to 1.49 depending on the benchmark used, indicating that regardless of benchmark, Hispanic individuals were slightly to moderately more likely to have firearms pointed at them compared to White individuals.
- Similar trends in disparity ratios for Black and Hispanic individuals are evident for each of the CSPD divisions.

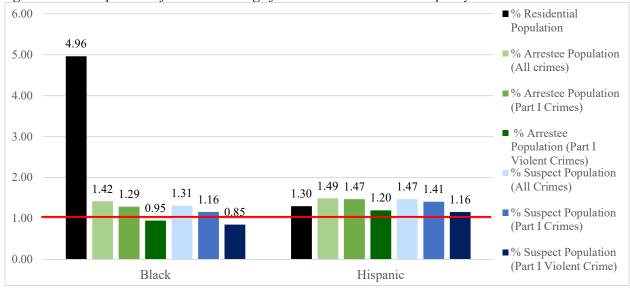


Figure ES.4. Comparison of CSPD Pointing of Firearm Racial/Ethnic Disparity Ratios Across Benchmarks

Qualitative Review of Sample of Pointing of Firearm Reports

Given the limitations of the data collected for pointing of firearms, the CSPD leadership requested a more in-depth qualitative review of a sample of pointing of firearm incidents. The TMLLC team reviewed and assessed a random sample of 140 reports of pointing of firearms incidents from February 3, 2017 to December 31, 2020.

This intensive examination demonstrated that the majority of pointing of firearm incidents (77%) were appropriate and justified, and consistent with the facts described in the incident reports. However, in roughly 14% of the reviewed cases, officers unnecessarily escalated encounters and/or applied inappropriate uses of force. Moreover, meaningful supervisory review was limited within an additional 9% of sampled incidents. Further, supervisors in each identified problematic case had approved the pointing of firearms as part of their review.

Section 7: Community Perspectives

The perceptions of Colorado Springs residents were also considered as part of the study's holistic approach to understanding CSPD use of force. Through the administration of a community survey and a TMLLC-moderated focus group, the research team assessed community members' general attitudes and perceptions of the CSPD, perceptions about CSPD use of force, and perceptions about fairness and treatment during personal interactions with the CSPD. It is important to note that the community survey was not a random sampling of the Colorado Springs community, where the findings can be easily generalized to the population. Rather, this was a convenience sampling, where all residents were able to and encouraged to participate anonymously. There were several indicators in the survey findings that illustrated that the respondents were not representative of the general population, including larger percentages of individuals who reported having force used against them and who had contact with an officer in the previous 12 months than would generally be expected based on national estimates of police interactions with the community. Although these survey findings cannot be generalized to the larger

Colorado Springs community, they provide valuable insights and perspectives that can be leveraged to improve police-community relations.

The community survey was administered for approximately four weeks in May - June 2021 and completed by 863 residents. Overall, a slight majority of survey respondents reported positive attitudes and experiences regarding the CSPD. The responses to most survey questions demonstrate a bifurcated experience, where respondents were either highly positive or highly negative in their perceptions of the CSPD. Furthermore, Non-White respondents were significantly *less likely* than White respondents to report positive responses across nearly all survey items.

Specific findings regarding community respondents' general perceptions of the CSPD include:

- Roughly 60% reported that they trust the CSPD a lot or to a great extent and that CSPD officers treat people fairly and are respectful during interactions.
- 53% said the CSPD develops relationships with community members and is responsive to their concerns.
- Less than 50% reported agreeing with statements about communicating or working with community members, which suggests that the area most in need of improvement in police-community relations is direct communication and engagement with community residents.
- Over 50% believed that the CSPD provides the same protection in neighborhoods regardless of the residential racial composition and that people of color are treated the same as White people.
- Non-White respondents held more positive opinions about their most recent contact with CSPD in comparison to their opinions about the CSPD based on more general survey items.

Specific findings related to use of force include:

- A quarter of survey respondents in Colorado Springs do not believe weaponless physical force should ever be used by police to gain compliance from a resisting subject; Non-White respondents were significantly more likely than White respondents to hold this belief.
- About half of the respondents approve of CSPD use of force practices across survey items, with approximately 30% of respondents showing disapproval.
 - o 30% are fearful of being subject to CSPD use of force
 - o 35% believe that CSPD officers are not equal in use of force across racial/ethnic groups

The focus group conducted with eight members of the Chief's Community Leaders Group centered around discussion of several general themes, including (1) the state of police-community relations in Colorado Springs, (2) the need for more transparency, (3) perceptions regarding policing and bias, (4) responses to the officer-involved shooting of De'Von Bailey and protests following the death of George Floyd, (5) community engagement, and (6) data collection and research. Participants' comments during the focus group generally reflect the quantitative descriptive findings from the community survey, and the topics raised by survey respondents in the qualitative open-ended responses.

Roughly 41% of survey respondents took the opportunity to answer open-ended survey questions and provide additional details regarding the ways that the CSPD could foster transparency, build trust, or improve interactions with the community. Some of the most common recommendations included:

- Increase transparency with the public (e.g., faster release of body camera footage, more proactive media strategy, more publicly available data and reports, improved complaint process).
- Less use of force, more reliance on less lethal weapons, de-militarization of department culture.
- Increase community programs and interactions, public education about police work.
- Increase hiring standards and diversity; increase number of officers, response time, and proactive policing; increase response to certain calls by non-police agencies.
- Increase training (e.g., de-escalation, crisis response, cultural diversity).

In summary, although there are clearly opportunities for improvement for the CSPD, the majority of survey respondents and focus group participants were optimistic that progress is being made and that police-community relations are improving.

Section 8: CSPD Officer Perspectives

Our mixed-methodological approach considers officers' perspectives – through focus group interviews and a quantitative survey – to provide context around the statistical analyses of official data, and to better inform the research team's recommendations. We also conducted four semi-structured interviews with the Chief of Police⁷ and other members of the CSPD command staff responsible for investigating use of force (Internal Affairs), training, and the department's Use of Force Committee.

Three focus groups were conducted with a cross-section of 24 officers and 12 first-line supervisors that explored participants' perceptions of police-community relations, use of force, and ways to make encounters with the public safer. The following themes emerged from the focus groups: (1) perceptions of police-community relations., (2) staffing, (3) transparency and communications, (4) impact of SB 20-217, (5) training, (6) technology, and (7) dispatch.

Much of the information gleaned from the focus group discussions was used to develop an officer survey, which was added to our study methodology based on an initial request from the Police Protective Association (PPA), and agreement by CSPD leadership regarding the need to more systematically account for officers' perspectives regarding use of force. This voluntary, anonymous survey was completed by 335 sworn officers (across ranks), representing a 48.3% response rate.

Findings from both the qualitative focus group discussions and quantitative survey data analyses were relatively consistent. First, focus group participants generally perceived that the CSPD has more trust and support from the community than most police agencies nationally, and that it was a good place to work. Similar perceptions were evident in the survey results. For example:

- 72% agreed that there was trust between the CSPD and the community.
- The majority agreed that people in the communities they patrol were willing to cooperate with the police in different ways.
- 62% believed that people in the areas they patrol care about what happens to police officers.
- Over 80% believed the CSPD does a good job addressing community concerns.

⁷ These interviews took place in December 2021 and the Chief of Police at that time was now-retired Chief Vince Niski.

As with the community survey, however, officers acknowledged a lack of support and positive relations with some members of the public. For example, 52% believed that people in the communities they patrol "are capable and willing to harm police officers."

Over 90% of CSPD officers reported it is important for officers to have detailed knowledge of the people, places, and culture in the areas where they work. Unfortunately, both focus group participants and survey respondents recognized that current staffing constraints have severely limited officers' ability to proactively engage with community members in positive interactions. For example, nearly all survey respondents agreed that the CSPD does not have enough officers to police the community and CSPD officers do not have enough time to conduct proactive police work.

Another perceived challenge to police-community relations was the disconnect between the police and the public understanding of police use of force. Focus group participants perceived that most members of the public do not understand the complexities of policing, nor do they understand specifically how little force is actually used during police contacts.

One of the core themes that emerged from the focus groups with CSPD officers was the perceived lack of transparency by the CSPD. Across the country, this is a frequently raised concern by citizens regarding their police agencies, but it is rarely identified as a core concern among the officers themselves. The focus groups with CSPD officers, however, involved considerable discussion of the need for the CSPD leadership to be more transparent with the public, particularly in the aftermath of critical incidents. In the survey results, officers' reported perceptions of the CSPD's transparency and timely release of information to the public revealed that at least 15-20% of respondents were concerned about CSPD's transparency and timely release of information to the public revealed that public.

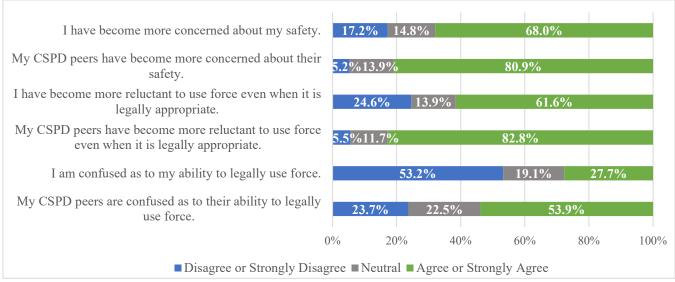
During the focus group sessions, officers also voiced concerns about officer safety because of their perceived lack of effective training. Based on our interviews with CSPD command staff, training for incumbent officers is based on an annual training plan typically developed each fall for the upcoming calendar year by the in-service Training Sergeant and the Training Coordinator. This plan must consider several mandatory training requirements; therefore, discretionary training time is limited. Approximately four years ago, the CSPD established a Use of Force Committee that is responsible for the regular evaluation and revision of CSPD's use of force policies and training as needed based on changes in law or best practices and innovation in the field. Two recent changes that were the result of work by this committee include changes to the Use of Force policy and training based on the passage of SB 20-217 and modifying the PERF Integrating Communications, Assessment, and Tactics (ICAT) de-escalation training for CSPD officers.

Survey questions probed officers regarding their perceptions of the CSPD use of force policy and training. While the majority of officers had positive perceptions of the CSPD use of force policy, they expressed reservations regarding use of force training. Specifically, officers in the focus groups were particularly concerned about the lack of hands-on, interactive, and practice components to their training. Findings from the officer survey confirm these concerns:

- 74% reported wanting more training related to use of force to perform their jobs.
- Only 20-30% of officers believed that the CSPD provided enough hands-on or interactive training both before and after COVID-19 related restrictions.
- Over 90% reported more training should be provided using shoot/don't shoot scenarios.
- Over 80% indicated they needed more training on non-lethal weapons, defensive tactics, crisis intervention, and de-escalation.

Although not addressed by the officer survey, focus group participants perceived that policy and training changes for call takers and dispatchers were also needed to improve officer safety when responding to calls for service.

Officers further expressed strong concerns regarding the recently passed SB 20-217 (Enhance Law Enforcement Integrity Act). There was widespread agreement across focus group participants that the provisions of this legislation lead to officers' hesitancy to use force and will, as a result, increase their risk of injury or death. As shown in Figure ES.5 below, a vast majority of officers' responses to survey questions regarding their perceptions of SB 20-217 mirrored these concerns.





Although CSPD developed and provided training on the statutory requirements of SB 20-217 and related CSPD policy changes, it is clear officers remained concerned about their preparedness to address the requirements associated with these legislative changes and their perceived increase in the likelihood of injury to officers that may result.

Focus group participants also noted that they did not feel they had been effectively trained on deescalation despite receiving a modified ICAT training in 2021. Officers perceived that de-escalation tactics and skills are being used in the field, but more training is needed to enhance these skills. The survey prompted officers to report perceptions that are used to assess their understanding and agreement with core ICAT (de-escalation) principles. As suggested by focus group participants, officers' responses to the majority of these measures indicated that many of the core tenets of ICAT training have not been fully embraced by CSPD officers.

Section 9: Recommendations

Based on the findings of the TMLLC research team's comprehensive and independent assessment of CSPD's use of force policies, practices, and official data, as well as additional data collected from community members and CSPD officers, we present a series of recommendations – and accompanying action steps – for appropriate changes to use of force policies, training, supervision, and data collection. Specifically, the following eight recommendations (with associated specific action steps) are detailed in Section 9 for the CSPD's consideration.

- (1) Enhance agency culture that emphasizes, reinforces, and rewards the use of de-escalation tactics and skills by officers through systematic documentation, continual reinforcement of policies and training, and development of accountability and oversight mechanisms.
 - Action Item 1.1: Develop a data collection process to capture the specific de-escalation tactics used during police-citizen encounters and document their effectiveness.
 - Action Item 1.2 Develop, train, and implement supervisory practices for coaching, mentoring, and evaluating officers on the use of de-escalation tactics and skills.
 - Action Item 1.3 Continue to enhance and evaluate trainings designed to reduce the frequency and severity of use of force.

(2) Continue the processes established for the CSPD's Use of Force Committee for comprehensive and routine reviews and updates to policy.

- Action Item 2.1 A summary and explanation of the Use of Force Committee's work should be communicated internally down to the lowest organizational levels and included as part of the annual use of force report.
- Action Item 2.2. The CSPD Use of Force Committee should consider the following modifications to the *Use of Force CSPD General Order 500*.
- Action Item 2.3. The CSPD Use of Force Committee should consider the following modifications to the Reporting Use of Force CSPD General Order 510.
- (3) Review and update the documentation, policy, training, and supervisory oversight related to the pointing of firearms at a person.
 - Action Item 3.1 As a reportable use of force, pointing of firearms should be documented with the same level of detail as other uses of force by changing the reporting forms, and the storage and routine analyses of data.
 - Action Item 3.2 Adjust policy and training to provide more guidance regarding the appropriate use of pointing of firearms; focus on opportunities to reduce frequency of use while maintaining officer safety.
 - Action Item 3.3 Data collected regarding the frequency and circumstances of officers' pointing of firearms should be routinely reviewed by supervisors and added as a metric in the CSPD's existing Early Intervention Program.
- (4) Conduct an independent audit of CSPD use of force training to ensure content, quality, and duration of use of force training is meeting industry best practices.

- Action Item 4.1: The CSPD should develop a process to select an independent evaluator with expertise in use of force and de-escalation expertise/training to review all academy curriculum related to crisis response and use of force.
- Action Item 4.2: This training audit should be conducted expeditiously, including a review of all training curriculum/lesson plans, in-person observation of training courses, interviews with training staff, surveys of officers attending training courses, a review of dispatcher training, and interviews or focus groups with dispatchers.
- Action Item 4.3: Community representatives should be included in the audit process to ensure community perspectives are considered and included, where appropriate.
- Action Item 4.4: The CSPD must prioritize the implementation of the recommended changes based on the findings of this proposed training audit.
- (5) Enhance transparency through the timely release of information to the community to improve public confidence and trust.
 - Action Item 5.1. Develop a standardized approach for the timely release of information regarding critical incidents.
 - Action Item 5.2. Make use of force data (and summary data reports) readily available for public dissemination.
 - Action Item 5.3. Enhance the public relations strategy to better emphasize positive policecommunity engagement and public safety accomplishments.
 - Action Item 5.4. Prioritize opportunities for officers to engage community members in proactive, positive, and non-enforcement interactions to increase officers' knowledge of the community and build rapport with community members.
- (6) Continue to enhance supervision, accountability & oversight related to use of force.
 - Action Item 6.1 First-line supervisors should receive additional training on conducting use of force investigations, and specifically on evaluating the appropriateness of pointing of firearm incidents.
- (7) Review and make appropriate changes to use of force data collection to meet best practices.
 - Action Item 7.1: Standardize the CSPD's use of force reporting data collection systems.
 - Action Item 7.2: Develop a system to readily combine data sources related to the same incidents, individuals, and officers with the use of unique identifiers.
 - Action Item 7.3: Make appropriate changes to the collection of key variables in use of force incidents.
 - Action Item 7.4: Make appropriate changes to the collection of key variables for arrest reports.
- (8) Continue to work internally and externally to continually monitor and reduce racial/ethnic disparities in use of force.
 - Action Item 8.1 Internally review the racial/ethnic disparities in CSPD use of force identified in this report; provide this information directly to CSPD commanders, field supervisors, and training staff to identify (and implement) operational opportunities to reduce the disparities identified.

- Action Item 8.2 Develop internal accountability and oversight mechanisms to routinely monitor and address patterns and trends in racial/ethnic disparities in police-citizen encounters.
- Action Item 8.3 Produce annual public reports documenting patterns and trends of use of force incidents, along with the specific steps taken to reduce the frequency and severity of use of force, racial/ethnic disparities in use of force, and officer and citizen injuries and their outcomes.
- Action Item 8.4 Work collaboratively with community leaders (including the Chief's Community Leaders Group and the LETAC) to: (1) share information regarding the patterns and trends of use of force, and (2) develop plans (that extend beyond the CSPD) to assist in reducing racial/ethnic disparities.

Progress toward implementation of these recommendations will assist the CSPD in continuing to proactively improve officer decision-making, ensure fairness during encounters with the public, reduce the use of force and injuries to officers and members of the public, and increase transparency and trust with the community that it serves.

1. INTRODUCTION

In communities across the country, police use of force has become a focal point in conversations around improving police-community relations. At this critical juncture in American policing, it is imperative to better understand what factors influence police officers' decisions to use of force, to identify the types of incidents that are more likely to increase the risk of injuries to both officers and member of the public, and to understand the racial/ethnic disparities that may be associated with these actions. It is, therefore, an opportune time for police agencies across the country to begin the difficult work of 1) examining their own use of force policies and practices, 2) identifying any racial/ethnic or gender disparities in these practices, 3) exploring the possible contributors to these disparities, 4) developing and executing evidence-based practices to reduce these disparities, and 5) being proactive in their commitment to transparency and engagement with the public to address strained police-community relations. In Colorado Springs specifically, there have been calls for a closer examination of police use of force policies and practices and look for opportunities for continuous improvement to policies, training, and supervision related to officer use of force situations.

1.1 Background and Overview of Research Study

The Colorado Springs Police Department (hereafter CSPD), in partnership with the City of Colorado Springs, issued a *Request for Proposal, Consultant Services (R20-093 IP), Assessment of Colorado Springs Police Department's Use of Force* on July 20, 2020. The Transparency Matters, LLC (hereafter TMLLC) team⁸ submitted an initial proposal and follow-up response, and was ultimately selected by the Evaluation Committee to complete this work for the City of Colorado Springs.

To study CSPD use of force encounters, the research team developed a multi-faceted methodology to provide a deeper and more contextualized understanding of how, when, why, and against whom officers use force. As we conducted our work within the Colorado Springs community and the CSPD, several research components were added to our originally proposed analyses of use of force patterns and trends.⁹ In total, the study and associated findings presented within this report are designed to answer the following research questions:

- 1. What factors contribute to the use (and severity) of force by CSPD officers?
- 2. Does the rate and severity of force experienced by persons of different races and/or ethnicities align with those groups' representation among persons *at risk* for having force used against them by the police?
 - Do disparities exist in rates of force experienced by different racial and/or ethnic groups relative to risk?
 - Are individuals' race, ethnicity, or gender related to the *level of force* used by the police while accounting for resistance and other relevant individual, situational, and environmental factors?

⁸ The TMLLC's team's personnel and their bios are provided in Appendix A.

⁹ The TMLLC team's original proposed scope of work, along with the added components are detailed in Appendix B.

- 3. What are some of the possible explanations for any disparities found in police use and severity of force?
- 4. What factors or combinations of factors contribute to the likelihood of officer and citizen injuries during use of force encounters?
- 5. How does CSPD use of force policy and training compare to similarly situated agencies (i.e., peer cities)?
- 6. How do community members perceive police use of force and police-community relations in Colorado Springs?
- 7. How do CSPD officers perceive police use of force and police-community relations in Colorado Springs?
- 8. What improvements should be made to CSPD's use of force policies, training, and data collection and analysis to meet current best practices?

These specific research questions are addressed by using a comprehensive mixed-methods approach that draws on the methodological strategies and empirical findings of decades of academic research dedicated to better explaining police use of force. Using a variety of descriptive, bivariate, and multivariate statistical techniques, our research examines force used by officers, while accounting for relevant subject, officer, situational, and community-level factors that have demonstrated predictive validity in previous use of force research studies. The project also includes qualitative examinations of use of force practices through document reviews by national use of force experts and facilitated focus groups and surveys with police officers and community members, to provide additional context to the statistical findings.

Mixed-methods research provides a more complete understanding of the outcome of interest—use of force—and allows a more nuanced interpretation of the findings as they relate to the study's research questions. Every methodological approach has strengths and weaknesses; the advantage of a mixed-methods approach (combining the collection and analysis of both quantitative and qualitative data collection and analysis within the same study) is that it maximizes individual methods' strengths to minimize the overall weaknesses of the study.¹⁰

The strengths of quantitative data are its ability to predict outcomes, rigorously examine the influence of individual variables on outcomes, handle large samples, and increase generalizability.¹¹ Qualitative research components like focus groups, interviews, and expert review of documents, provide context and deeper understanding of the trends of aggregate quantitative analyses. They can also give a voice to the personal experiences and perceptions of multiple stakeholders, including, in our study, CSPD officers, supervisors, and administrators as well as community members.¹²

Qualitative and quantitative methods produce different but complementary types of knowledge that can inform each other and taken together, provide a more complete understanding of the outcome of

¹⁰ For example, see Brent & Kaska, 2010; Kelle, 2006.

¹¹ For example, see Kelle, 2006; Worrall, 2000.

¹² For example, see Fallik, Deuchar, & Crichlow, 2018.

interest.¹³ There are five distinct advantages of mixed-methods research: 1) triangulation (convergence of evidence), 2) complementarity (clarify results of the other), 3) initiation (the results of one method help identify concepts that the other method would not have uncovered), 4) development (the results of one method are used to develop measurement instruments, identify samples, etc.), and 5) expansion (use multiple methods to answer different aspects of the same research question).¹⁴

For police agencies to properly respond to racial and ethnic disparities in outcomes, it is not enough to analyze either qualitative or quantitative data alone; it is critical to engage police administrators, officers, and community stakeholders to better understand the context within which these encounters occurred. This approach to data collection and analysis focuses on understanding the reasons behind disparities, increasing trust between the police and the public they serve, and collaboratively developing strategies to respond to observed disparities. CSPD is to be commended for proactively initiating this research and for incorporating this holistic approach to understanding use of force by its officers. Further methodological details regarding the quantitative data analyses are provided in Section 3, as well as included in individual sections of the report where the findings of these analyses are presented.

1.2 Report Organization

This report is divided into nine sections, including this introduction. These sections are briefly summarized below.

- Section 2 documents the expert review of CSPD's use of force policies and practices, including a policy comparison to peer agencies.
- Section 3 describes the quantitative data provided by CSPD to analyze use of force, specifies our unit of analysis, defines relevant terms used throughout the report, and provides an overview of the quantitative statistical analyses employed.
- Section 4 examines quantitative use of force and arrest data collected by the CSPD from January 1, 2017 to December 31, 2020. This section includes descriptive statistics and bivariate analyses of use of force data; benchmark analyses of use of force rates by race/ethnicity to different comparison rates (e.g., population counts, arrests made by CSPD, and criminal suspects reported to CSPD); and multivariate statistical analyses of incidents involving arrest (to determine the factors that lead to the use of force in arrest situations). Statistical analyses within this section focus specifically on identifying the overall patterns and trends for individuals involved in use of force encounters, with a focus on racial/ethnic disparities in use of force actions.
- Section 5 provides additional information regarding the various types of force used during encounters with the public and the relative effectiveness of these approaches in gaining individuals' compliance. This section also examines the patterns and trends associated with use of force by officers, along with the frequency of injuries to individuals who had force used against them and officers, and the factors that predict the likelihood of injury during force encounters.

¹³ For example, see Brent & Kaska, 2010; Trahan & Stewart, 2013; Worrall, 2000.

¹⁴ For example, see Green, Caracelli, & Graham, 1989; Trahan & Stewart, 2013.

- Section 6 first summarizes the quantitative aggregate-level analyses of pointing of firearm incidents from February 3, 2017 to December 31, 2020. It also examines the patterns and trends associated with pointing of firearms by officers. Benchmark analyses of pointing of firearm rates to different comparison rates (e.g., population counts, arrests made by CSPD, and criminal suspects reported to CSPD) are reported. Finally, this section describes the process and findings of a qualitative review of a random sample of 140 individual pointing of firearm incidents during the study period.
- Section 7 summarizes the focus group interviews and survey of community members. This section provides additional context regarding the citizens' perceptions of CSPD and use of force specifically.
- Section 8 focuses on the perspectives of CSPD personnel regarding use of force, based on focus group interviews, a survey of sworn officers, and interviews conducted by TMLLC team with select CSPD command staff.
- Section 9 summarizes the main findings of the report and provides comprehensive data collection, policy, training, supervision, and other organizational recommendations for the CSPD to continue to proactively improve officer decision-making, ensure fairness during encounters with the public, reduce the use of force and injuries to officers and members of the public, and increase transparency and trust with the community that it serves.

2. REVIEW OF CSPD POLICIES AND PRACTICES

Law enforcement agency policies direct and constrain officers' discretionary decision-making to ensure their behavior is consistent with the agency's mission and vision. Research indicates that administrative policies are an important organizational control on officer behavior. Related specifically to use of force, studies show that relaxing or tightening the policy restrictions can impact the frequency and severity of force used.¹⁵ Recent police reform efforts have focused on identifying best practices in policy and training to ensure that force is used fairly and consistently, reduce the frequency and severity of force, and minimize injuries for both officers and members of the public.¹⁶

As part of our mixed-methods approach, the information reported in this section is based on a comprehensive and independent assessment of CSPD's use of force policies, practices, and training. In addition, we conducted four semi-structured interviews with the Chief of Police¹⁷ and other members of the CSPD command staff responsible for investigating use of force (Internal Affairs), training, and the department's Use of Force Committee. The purpose of these interviews was to gather information that could provide additional context for the quantitative and qualitative findings. Understanding this context assists in the development of tailored recommendations. In this section, we describe CSPD's policies and practices, but we reserve our recommendations for Section 9 as part of the overall report's comprehensive recommendations to CSPD.

2.1 CSPD Use of Force Policies

The CSPD has several force-related policies; primary among them is CSPD General Order 500 (Use of Force) and CSPD General Order 510 (Reporting Use of Force).¹⁸ In this section, we first discuss the content of General Order 500 and then turn our attention to General Order 510.

2.1.1 CSPD General Order 500 (Use of Force)

CSPD General Order 500 (Use of Force) defines when and how force can be used by CSPD officers:

It is the policy of the Colorado Springs Police Department that officers use only the force that is reasonably necessary to effectively bring an incident under control. A use of force must be objectively reasonable. The officer must only use that force which a reasonably prudent officer would use under the same or similar circumstances. Officers must stop using force when the officer reasonably believes that the subject of force is fully under control of law enforcement (CSPD General Order 500.04).

¹⁵ For example, see: Bishopp et al. 2015; Crow & Adrion, 2011; Ferdik et al., 2014; Jennings & Rubado, 2017; Morabito & Doerner, 1997; Shjarback et al., 2021; Terrill, & Paoline, 2017.

¹⁶ For example, see: IACP, 2017; PERF, 2016; PERF, 2020, which are more fully discussed later in this section.

¹⁷ These interviews took place in December 2021 and the Chief of Police at that time was now-retired Chief Vince Niski. ¹⁸ These policies are publicly available at: https://public.powerdms.com/CSPD2/tree/documents/867211. Other relevant

CSPD General Orders include G.O. 815 Deadly Force Investigations, G.O. 904 Vehicle Pursuits, G.O. 1203 Canine (K-9) Unit; G.O. 1817 Early Intervention Program, DL-500-01 Conducted Electrical Weapons (CEW), DL-500-02 Oleoresin Capsicum (OC), DL-500-03 Specialty Impact Munitions (SIM) & Specialty Impact Delivery System, and DL-500-04 Baton. Note that CSPD Baton use was discontinued on October 11, 2021 by Order of the Chief of Police,

This policy also:

- Requires officers to provide a verbal warning of their intent to use force. If the warning is related to deadly force, the officer will specifically warn of the impending use of firearms or other deadly physical force, if possible. (General Order 500.04)
- Requires the use of "de-escalation techniques when it is reasonable, safe, and appropriate to do so" (General Order 500.07)
- Specifies the circumstances under which the following types of force are authorized, and the restrictions associated with each:
 - Deadly force (General Order 500.10, 500.20)
 - Pointing of a firearm (General Order 500.25)
 - Less lethal force (General Order 500.30)
- Requires that officers "use force in a manner that is consistent with the minimization of injury to others" (General Order 500.30)
- Delineates the factors to consider in use of force incidents (General Order 500.40)
- Requires that medical attention be provided as soon as practicable to any person who has a complaint of injury or pain, suffered a visible injury, was unconscious, or who otherwise requests medical attention (General Order 500.50)
- Officers are to provide first aid consistent with their training and summon medical services and/or facilitate the transportation of an individual to the hospital when needed
- Explains the duty to intervene in cases of excessive force and the consequences of failure to intervene (General Order 500.60; discussed in more detail below)
- Documents the training requirements for use of force policies, skills, and case law updates (General Order 500.70)

2.1.2 CSPD General Order 510 (Reporting Use of Force)

CSPD General Order 510 (Reporting Use of Force) requires that all officers that used reportable force against one or more individuals complete a report in BlueTeam¹⁹ by the end of the shift unless a supervisor approves a delay.²⁰ Officers are required to include specific information in these reports including (General Order 510.30):

- Why and how the contact occurred, including lawful authority.
- Description of the force used by the officer against the individual.
- Reasons for the use of force, including: the explanation of why the officer determined nonviolent means would have been ineffective in the situation; the manner in which the officer

¹⁹ BlueTeam is a software platform used by police departments to document uses of force, police pursuits, firearm discharges, complaints, and other internal procedures (e.g., Early Intervention Program, etc.) BlueTeam's workflow process ensures all use of force/pointing of firearm incidents are forwarded through the appropriate chain of command. This ensures that review and any necessary responses by supervisors/commanders will occur in a timely manner, along with accountability at all levels.

²⁰ There are three different reports that officers use to capture use of force, depending on the type of force used: Use of Force Report, Pointing of Firearm Report, and Canine Use of Force Report. The differences in these reports are more fully explained in Section 3 and the reports are provided in Appendix C.

acted to minimize injury to suspects, officer, or others; and the force options considered and reasons why the ones used were chosen.

- Extent of injury to the officer or other person, whether medical treatment was required, and the name of the medical facility used
- Interviews with witnesses
- Other pertinent information the officer wishes to include

Table 2.1 summarizes the types of force that are reportable by CSPD officers. This required report is completed by each individual officer who uses force.

Force Type	Force Description
Control Techniques	The use of empty hand pain compliance techniques.
Pointing a Firearm	The officer points a firearm at a person.
Strikes, Kicks, or Takedowns	The use of strikes, kicks, or takedowns. This includes but is not limited to the arm bar, bar hammer, and figure four takedown.
Chemical Agents	The use of chemical agents (e.g., Oleoresin Capsicum, CS gas)
Conducted Energy Weapon (CEW), also referred to as TASER	The use of a conducted energy weapon.
Baton strikes or specialty impact munitions	The use of an approved police baton to escort, control, takedown, or strike a suspect. The use of Specialty Impact Delivery Systems (SIM) to deliver specialty impact munitions.
Canine deployment that results in contact	The deployment of a police canine, whether on-lead or off-lead, for the purpose of searching for and/or apprehending a suspect, which results in physical canine contact with a subject, regardless of any injuries sustained.
Deadly force	Deadly force as defined in section 500.05 is reported using the procedures detailed in GO 815, Deadly Force Investigations.
Tactical Vehicle Intervention	The deliberate act of impacting a suspect vehicle with a law enforcement vehicle in an attempt to force the suspect's vehicle to stop in a pursuit.
Any other use of force tactic that causes pain and/or injury	The preceding list does not cover every possible use of force tactic. This category covers any unlisted use of force tactic that causes pain and/or injury.

 Table 2.1. CSPD Types of Reportable Force

Source: CSPD General Order 510 Reporting Use of Force

Upon using reportable force, CSPD officers are required to notify their supervisor. CSPD General Order 510 also delineates supervisory responsibilities when use of force is reported. Supervisors are expected to respond to the scene when reportable force is used and ensure specific actions are completed; in cases where the force was exclusively pointing of a firearm, supervisors are not required to respond to the scene but may do so depending on the circumstances.

Upon responding to the scene, supervisors are to obtain the facts from involved officers about what led to the use of force, how the officer(s) tried to minimize injury, and whether verbal de-escalation was attempted. Officer statements are not recorded to afford officers due process.²¹ Supervisors also ensure anyone injured is examined and treated as necessary, photographs are taken, witnesses are identified and interviewed, and notification of next of kin is arranged in the case of serious bodily injury or death.

In cases of less-lethal force, the supervisor is expected to review the use of force report, Body Worn Camera (BWC) footage, and case reports to ensure their accuracy, adding commentary to further explain the situation and their observations. Supervisors are responsible for ensuring all case reports and supplements are complete at the time of their BlueTeam use of force report review. If there are potential policy violations, the responsible supervisor must initiate the appropriate personnel investigation prior to going off shift. The supervisor is expected to review use of force incidents to determine whether policies and procedures were followed and to determine whether the use of force was objectively reasonable.

The report is forwarded to the appropriate Lieutenant and then Commander in the officer's chain of command and finally to the Professional Standards Division/Internal Affairs Section. The report must be routed to the Division Commander within 20 days of the use of force incident. If the use of force is found to be "not objectively reasonable" an internal investigation is opened, and the chain of command is notified along with Internal Affairs. Investigations are governed by CSPD General Order 600 (Complaints and Internal Investigations).²²

2.2 CSPD Use of Force Committee

Several of our interviewees discussed the proactive role that the internal Use of Force (UOF) Committee serves for CSPD. Approximately four years ago, the CSPD established a UOF Committee that is responsible for the regular evaluation and revision of CSPD's use of force policies and training as needed based on changes in law or best practices and innovation in the field, including recommendations from the International Association of Chiefs of Police (IACP) and the Police Executive Research Forum (PERF). The UOF Committee gives careful consideration to what is most appropriate for CSPD, rather than a blanket adoption of practices, and makes recommendations to the Chief of Police.

The UOF Committee meets monthly, unless nothing is scheduled for review, and is led by the Deputy Chief of the Investigations and Special Operations Bureau. It includes the line-level representatives from patrol, training, and other areas; sergeants from patrol and specialized units (e.g., Tactical Enforcement Unit, Downtown Area Response Team; a tactical lieutenant and Training Academy lieutenant; the

²¹ In very specific circumstances, Public Safety Statement interviews may be administered by the supervisor. This is information obtained by a supervisor at the scene of an officer-involved shooting or other critical incident where there is serious bodily injury or death, that is specifically limited to determining threats to public safety and to identify evidence needing preservation.

²² General Order 600.05 (Complaints and Internal Investigations) distinguishes two types of investigations as follows: "Level One (1) Investigation: A less extensive investigation, usually conducted within an employee's chain of command, where it is anticipated a written reprimand will be the maximum discipline imposed, if sustained.

Level Two (2) Investigation: A more extensive and structured investigation into allegations of more serious violations, for which discipline in excess of what is available in a Level 1 Investigation is probable, if sustained." Level 2 investigations are typically investigated by the Internal Affairs Section.

Administrator of the Research and Development Section; Commanders of both Patrol and Management Services; and the Deputy Chief of Patrol.

One recent example of the work of the UOF Committee occurred after the State of Colorado passed SB 20-217, the Enhance Law Enforcement Integrity Act, in June 2020. The CSPD incorporated several changes to CSPD policy and developed specific training (discussed below) related to the new legislation. Specifically, the UOF Committee made changes in policy language regarding CSPD's deadly force definitions and banning chokeholds (CSPD General Order 500.10), the minimization of injury (multiple subsections of CSPD General Order 500), and an officer's duty to intervene based on observing another officer using excessive force (CSPD General Order 500.60).²³

2.3 CSPD Use of Force Training

This section documents the review of multiple types of training conducted by CSPD, including academy, in-service, and supervisory, as well as spotlights recent training examples. All training courses and instructors are evaluated by the participants in order for the Training Director to regularly assess training experiences, requests for additional instruction, and instructor performance. Completed Use of Force reports are also provided to the Training Academy to develop and revise training as needed.

2.3.1 Academy Training

The CSPD Academy schedule for the 73rd class includes instruction on the U.S. Constitution, legitimate government, and the importance of legitimacy in maintaining police-community relations. Five hours of class instruction includes content related to:

- The First Amendment: The right of the people to peacefully assemble and an officer's responsibility to protect individual rights under the U.S. and Colorado Constitutions.
- The Fourth Amendment: definitions such as Arrest, Probable Cause, Reasonable Suspicion, Search and Seizure; review of the standards of *Tennessee v. Garner* and *Graham v. Connor* cases are included as part of cadet basic training group presentations.

The introduction into the Criminal Justice System (three hours of instruction) includes discussion on the six pillars of *The President's Task Force on 21st Century Policing* model and report.²⁴

The 73rd Academy Class POST²⁵ Schedule also includes 80 hours of Arrest Control Orientation, three hours of UOF considerations, and 2.5 hours of De-escalation of Force, in addition to the eight hours of Integrating Communications, Assessment, and Tactics (ICAT) specific de-escalation training that is more fully described below. Academy training includes 53.5 hours of reality-based training, including traffic stops, searches, and other scenarios.

²³ SB 20-217 made failure to intervene a Class 1 misdemeanor instead of just an administrative policy violation.

²⁴ https://cops.usdoj.gov/pdf/taskforce/taskforce_finalreport.pdf

²⁵ POST (Peace Officer Standards and Training).

There is also instruction on Colorado Revised Statutes²⁶ regarding an officer's duty to report and intervene in situations of excessive use of force, prohibition on chokeholds, and providing a verbal warning before use of firearms or other deadly physical force unless it would unduly place peace officers or other persons at risk of death or injury. The academy instruction also covers the CSPD General Orders 500 (Use of Force) and 510 (Reporting Use of Force), that mirror the Colorado revised statutes where appropriate.

2.3.2 In-Service Training

Training for incumbent officers is based on an annual training plan typically developed each fall for the upcoming calendar year by the in-service Training Sergeant and the Training Coordinator. This plan must consider POST and CALEA²⁷ requirements; therefore, discretionary training time is limited. POST requires 24 hours of in-service training, 12 hours of which must be in perishable skills (e.g., driving, arrest control, firearms, etc.). In-service training is mostly internally developed and instructed, but occasionally includes third party instructors, particularly for vendors that require specific instruction (e.g., Axon, TASER).

The CSPD has a state-of-the-art training simulator (TI Ultra World) that includes high-stress, realistic scenarios to emphasize de-escalation techniques to prepare officers for real-world situations. The simulator features four rooms with projection screens capable of showing 1,000 different scenarios with which officers can interact. There are cameras inside each room that allow for outside observation to assess the officers' performance. The department is in the process of cycling all incumbent officers through simulator training. The simulator is also incorporated into the reality-based academy training when appropriate. Finally, CSPD is currently developing Tactical Vehicle Intervention (TVI) training for recruits and incumbent officers, which is anticipated to be fully implemented in two years.

2.3.3 Supervisory Training

As described above, most use of force investigations are completed by field supervisors. All newly promoted sergeants and officers pending promotion complete four 10-hour days of new supervisor instruction at the CSPD Training Academy. This training includes 1.5 hours on Supervisor Oversight of Officer UOF – Objectively Reasonable Force, 1.5 hours on Supervising and Analyzing Officer Vehicle Pursuits, and 4 hours of Internal Affairs related instruction (e.g., interviewing, preserving evidence, etc.). In addition, the Internal Affairs Section allows new supervisors to shadow investigators for one day to two weeks as permitted by their chain of command. Currently, this is completed on an ad hoc basis, but CSPD leadership is exploring the feasibility of making it standard procedure for new supervisors to complete a one-week shadowing experience with Internal Affairs. In addition, the interviewees from CSPD Command Staff indicated that the course content for supervisory training is

²⁶ The included Colorado Revised Statutes are as follows: 18-1-901 – Definitions; 18-8-801 – Definitions; 18-8-802(1) – Duty to report Use of Force; 18-8-802(2) – Making false statement in report; 18-1-704 - Use of physical force in defense of a person; 18-1-706 - Use of physical force in defense of property; 18-1-707 – Use of force • 18-8-803 – Use of excessive force; 16-3-101 – Arrest – When and how made; 16-3-102 – Arrest by peace officer.

²⁷ CALEA (Commission on Accreditation for Law Enforcement Agencies)

currently undergoing revision.

2.3.4 Recent Training

Prior to 2020, the Use of Force Committee identified the ICAT de-escalation training developed by the Police Executive Research Forum (PERF) as appropriate for the CSPD. Trainers from PERF were scheduled to conduct train-the-trainer instruction but were delayed due to the onset of the COVID-19 pandemic. Rather than delay training any further, the CSPD trainers worked directly with PERF to modify the existing ICAT training to meet their current needs and certification of instructors.

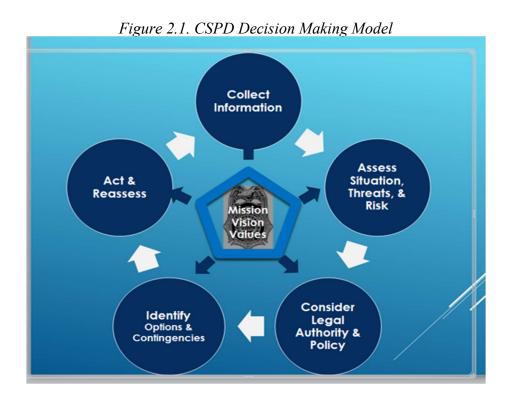
The UOF Committee formed a subcommittee of three sergeants and one officer who were responsible for making recommendations about how to modify ICAT to best suit CSPD's mission, vision, and values. The subcommittee recommended adding a procedural justice block of instruction, adapting the Critical Decision-Making model, and eliminating some of the time-intensive scenarios. All department personnel were trained in 2021 using this modified training, and the curriculum is now included in academy training. The resulting in-service training was 10 hours, but the academy training was modified to an eight-hour class by excluding the procedural justice portion because academy students receive a separate four-hour block of instruction regarding that topic. The CSPD interviewees indicated that the modified ICAT training has been well received by CSPD personnel.

Note that ICAT training is typically administered as a two-day (up to 16-hour block of training). The full version of this training has been independently evaluated by some members of the TMLLC team. Using a randomized control trial (RCT) design to evaluate the effectiveness of ICAT training implemented in the Louisville Metro Police Department (LMPD), the research team found that the training was associated with a 28% reduction in use of force incidents, 26% reduction in citizen injuries, and 36% reduction in officer injuries.²⁸

The ICAT training is based on the Critical Decision-Making model (CDM). The CDM model includes four components that guide officers' decision-making in analyzing and responding to incidents: 1) police ethics, 2) agency values, 3) concept of proportionality, and 4) sanctity of all human life.²⁹ The CDM model adopted by CSPD is displayed in Figure 2.1 and includes CSPD's mission, vision, and values at its core. The steps for guiding officer decision-making include: 1) collecting information, 2) assessing the situation, threats, and risks, 3) considering legal authority and policy, 4) identifying options and contingencies, and 5) acting and re-assessing the situation. This model is also displayed in line-up rooms. CSPD sergeants are also instructed to use it when debriefing officers (with the organizational mindset that it can be applied by officers in almost any situation, regardless of whether it is related to use of force).

²⁸ For example, see Engel et al., 2022a; Engel et al., 2022b; Engel et al., 2020a, Engel et al., 2021.

²⁹ See: Police Executive Research Forum (March 2016). *Guiding Principles on Use of Force*.



As noted above, another recent example of training that resulted from the work of the UOF Committee occurred after the State of Colorado passed SB 20-217, the Enhance Law Enforcement Integrity Act, in June 2020. As required by the legislation, the CSPD developed and delivered training on its use of force components between July 16 and August 31, 2020. Lieutenants across CSPD were trained on the new material, and then trained subordinate officers.

The tenets of the training included an explanation of the intent of the law to CSPD officers. CSPD trainers used three of the statutory requirements as a consistent theme throughout the training:

- (1) What is your legal authority?
- (2) How do you know non-violent means would be ineffective?
- (3) How can you minimize injury?

Officers were trained to verbally articulate these statutory requirements for capture on body worn camera and to document each in their written reports. CSPD has also used the training simulator described above for officers to practice articulating verbal responses to these three questions. The initial training sought to clarify the legislation's vague language by providing clear guidelines to officers about:

- (1) What is required (e.g., use of non-violent means, when possible, before utilizing force),
- (2) What the legislation changed (e.g., justification for deadly force, penalty for duty to intervene, banning chokeholds),
- (3) What the legislation formalized that CSPD already was taking into consideration with regard to the use of force (e.g., minimization of injury, verbal warning before utilizing deadly force).

Based on officers' responses to TMLLC-developed surveys and participation in focus groups, changes related to SB 20-217 appeared to be of great concern to CSPD officers. While this training was provided by CSPD, officers remained concerned about their preparedness to address the requirements associated with these legislative changes and their perceived increase in the likelihood of injury to officers that may result. These issues are more thoroughly discussed in Section 8.

2.4 Comparisons to Peer Agencies

As part of the original scope of work, the TMLLC team was tasked with providing a comparison of the frequency of CSPD use of force incidents to other peer agencies with similar residential populations, racial/ethnic diversity, agency size, and crime rates. A list of comparison agencies provided by CSPD is shown in Table 2.2. Although the peer agencies are reasonably comparable, there is still considerable variation. For example, CSPD serves the second most populated geographic area, with a population that is more than 75,000 residents larger than five of the comparison agencies. CSPD also serves the largest population of White non-Hispanic residents. CSPD's number of sworn officers falls near the middle of the range for the comparison agencies. The crime rates in Colorado Springs are also close to the average of the comparison agencies, but there is a wide range on these measures. For example, the Part I index per 1,000 ranges from 31 to 65.

Geographic Area	2019 Residential Population	% Population White non- Hispanic	Number sworn officers	Part 1 Index Violent Crimes	Part 1 Index Property Crimes	Total Part I Index	Part I Index per 1,000
Albuquerque, NM	560,513	74%	908	7,596	26,059	33,655	60
Colorado Springs, CO	478,221	79%	725	2,806	17,587	20,393	43
Omaha, NE	478,192	78%	868	2,883	17,144	20,027	42
Virginia Beach, VA	449,974	66%	760	5,831	7,906	13,737	31
Minneapolis, MN	429,606	64%	861	3,990	19,469	23,459	55
Tulsa, OK	401,190	64%	842	3,964	21,336	25,300	63
Arlington, TX	398,854	60%	680	2,055	11,291	13,346	33
Wichita, KS	389,938	74%	649	4,451	20,759	25,210	65
Aurora, CO	379,289	60%	688	2,799	11,106	13,905	37
Lexington-Fayette, KY	323,152	75%	602	967	9,776	10,743	33

Table 2.2. Peer Agency Descriptive Statistics (Ordered by Population)

While it may seem initially appealing to compare agencies in the frequency of use of force incidents, there are several reasons that this type of quantitative comparison across agencies are not valid:

- (1) Agencies do not collect and define reportable force the same way, and often make periodic changes to the data that is collected.³⁰
- (2) Agencies vary in their definitions of resistance and officer/citizen injuries.³¹
- (3) Agencies vary in the circumstances under which specific weapons are permitted; that is, some policies are more restrictive with regard to the use of specific types of force. Some agencies use a force continuum and others use a totality of the circumstances model.³²
- (4) Use of force training differs across agencies.³³
- (5) Use of force is related to crime rates, arrests, and other factors that are not included in aggregate counts of use of force or U.S. Census measures.

Based on these limitations of a quantitative comparison of aggregate use of force rates across CSPD's peer agencies, we instead provide a comparison of reportable force across peer agencies (Table 2.2) and examine some of the components of CSPD's force-related policies in comparison to peer agencies' policies (Table 2.3). Most police agencies are not engaged in an in-depth examination of use of force data or taking a mixed-methods approach to a holistic understanding of use of force. We argue that this approach is methodologically stronger and provides better actionable recommendations than any external comparison.

The differences in how reportable force is defined across agencies are numerous. Table 2.3 provides a comparison of CSPD's reportable force to what is considered reportable force by its peer agencies. ³⁴ Across agencies, some actions are universally reported as force, including weaponless physical force, chemical spray, less-lethal weapons (e.g., CEW/TASER), impact weapons (e.g., baton, SIM), and firearm use. This is consistent with previous research.³⁵

Whether verbal threats, handcuffing, and display or pointing of a less-lethal weapon should be reported as force is debated and varies widely across agencies.³⁶ Most of the compared peer agencies do not report verbal threats to use force or escort holds as force. CSPD policy also specifically excludes these as reportable forms of force. Four peer agencies do report the pointing or display of less-lethal weapons as force; CSPD policy does not require this. Like CSPD, six of the nine peer agencies also include pointing of a firearm as a reportable use of force. It is unknown, however, if full information is collected by peer agencies regarding pointing of firearm incidents or if the information is more limited as with the CSPD data collection.

³⁰ For example, see: Fridell, 2017; Garner et al., 2002, 2018; Hickman et al., 2008; Klahm et al., 2014; Terrill et al., 2018.

³¹ For example, see: Kaminski et al., 2015

³² For example, see: Terrill et al., 2012.

³³ For example, see: Fridell, 2017; Terrill et al., 2012.

³⁴ This review was based on the most recent publicly available Use of Force policies of the peer agencies. Policies are routinely updated, however, and we cannot guarantee our comparison is based on the current agency policy.

³⁵ For example, see: Klahm et al., 2014

³⁶ For example, see: Fridell, 2017; Klahm et al., 2014; Klinger, 1995, Terrill, 2003, Willits & Makin, 2018, Wolf et al., 2009.

	Verbal threats to use force	Escort holds	Hand- cuffing and/or restraints	Display or pointing of less- lethal weapon	Pointing of firearm	Bodily force ³⁷	OC/CS ³⁸	CEW / ECW / CED / TASER	Baton	Specialty impact munitions ³⁹	Divers- ionary device	Tactical vehicle inter- vention		Firearm / deadly force
Albuquerque, NM				Х	Х	X	X	Х	X	Х		X	X	Х
Colorado Springs, CO					X	X	X	Х	X	X	X	X	X	X
Omaha, NE						Х	X	Х	X	Х		X	X	Х
Virginia Beach, VA					Х	Х	X	Х	X	Х			X	Х
Minneapolis, MN	X	Х	X	Х	X ⁴⁰	X	X	Х	X	Х	X	X	X	Х
Tulsa, OK						Х	X	Х	X	Х	X	X	X	Х
Arlington, TX			X ⁴¹	Х	Х	Х	X	Х	X	Х	X		X	Х
Wichita, KS				Х	Х	Х	X	Х	X	Х			X	Х
Aurora, CO			Х			Х	Х	Х	X	Х		X	X	Х
Lexington-Fayette, KY			Х		Х	Х	Х	Х	X	Х				Х

Table 2.3. Comparison of Reportable Use of Force for CSPD and Peer Agencies

³⁷ These tactics include several soft or hard empty hand control tactics (e.g., strength, muscling, joint locks, pressure points, wrist or finger locks, leverage techniques, balance displacement techniques, strikes, kicks or sweeps; and takedowns).
³⁸ This category includes chemical sprays, hand-thrown, and launchable.
³⁹ This category may include: 37/40 mm, bean bag, etc.
⁴⁰ Minneapolis PD also reports unholstering of a firearm without pointing it at subject.
⁴¹ This applies as a reportable force only if the person is released without arrest.

In 2016, PERF, a research organization dedicated to studying issues in policing, published *Guiding Principles on Use of Force*. Similarly, the International Association of Chiefs of Police (IACP), the world's largest professional organization for law enforcement executives, released the *National Consensus Policy and Discussion Paper on Use of Force* in 2017 and updated it in 2020. Both publications sought to provide guidance to law enforcement agencies on best practices in use of force. PERF's *Guiding Principles* includes recommendations related to policy, training and tactics, equipment, and information exchange, while the IACP *National Consensus Policy* is specifically focused on policy.

In Table 2.4 below, we compiled a series of policy-related topics based on the *Guiding Principles, National Consensus Policy,* and Campaign Zero's *8 Can't Wait* campaign, but this is not an exhaustive list of policy components. Overall, the force-related policies of CSPD and its peer agencies are largely consistent with best practice standards and each other. For example, CSPD and all its peer agencies:

- (1) Require the use of de-escalation tactics, when possible (agencies differ in the level of detail included in their definition of de-escalation and description of specific de-escalation tactics),
- (2) Define force options and their permissible uses and restrictions,
- (3) Require a verbal warning before shooting,
- (4) Require officers to render first aid consistent with their training and request medical services,
- (5) Require the duty to intervene in cases of excessive force by a peer officer.

Below we note where there are differences across agencies:

- (1) The compared police agencies differ in their approach to use of force policy, with some agencies including all force-related components in a single comprehensive policy, while others have separate policies for the authorization and application of force, documentation of force, training, supervisory review and investigations, or use of specific weapons. The latter is consistent with the *National Consensus Policy*. CSPD uses several related but separate use of force policies.
- (2) Although some of CSPD's peer agencies guide officer decision-making based on a use of force continuum, both the PERF *Guiding Principles on Use of Force* and the *IACP Consensus Policy* strongly discourage the use of a force continuum, in favor of a totality of circumstances force model. As described above, CSPD uses the Critical Decision-Making Model (a non-continuumbased model).
- (3) The CSPD and peer agencies differ in their approach to the use of chokeholds, with some agencies like CSPD prohibiting them in all cases, and others prohibiting them unless the use of deadly force is authorized.
- (4) As noted previously in Table 2.3 and again in Table 2.4, all agencies required documentation of any reportable force, but not all agencies consider pointing of a firearm as a reportable force.
- (5) Most of the compared agencies issue some type of annual report on use of force to the public, but these are often summary reports and do not provide an in-depth examination of use of force like the current report does.

As noted above, we provide policy and training recommendations in Section 9 as part of the overall report's comprehensive recommendations to CSPD based on the review documented in this section as well as the other components of this study described in Sections 3-8.

		1 uoic 2.7.	. Comparison c	<u> </u>	ee Related I	Uncies je	n CDI D unu I	cer ng	eneres		
	Comprehensive policy or separate policies	De- escalation when possible	Use of force continuum or decision- making model	Define force options and permissible uses	Chokeholds	Verbal warning before shooting	<i>Prohibit</i> shooting at or from moving vehicles ⁴²	Duty to inter- vene	Render first aid / request medical services	Report all force (inc. pointing of firearm)	Issue regular UOF reports to the public
Albuquerque, NM	Separate	Yes	Totality of Circumstances Model	Yes	No, unless deadly force authorized	Yes	Yes	Yes	Yes	Yes, inc. POF	Yes
Colorado Springs, CO	Separate	Yes	CDM Model	Yes	Prohibited	Yes	Yes ⁴³	Yes	Yes	Yes, inc. POF	No
Omaha, NE	Comprehensive	Yes	Totality of Circumstances Model	Yes	Prohibited	Yes	Yes	Yes	Yes	Yes, no POF	Yes
Virginia Beach, VA	Comprehensive	Yes	UTD ⁴⁴ from Policy	Yes	No, unless deadly force authorized	Yes	Yes	Yes	Yes	Yes, inc. POF	No
Minneapolis, MN	Comprehensive	Yes	UTD from Policy	Yes	Prohibited	Yes	Yes	Yes	Yes	Yes, inc. POF	Yes
Tulsa, OK	Separate	Yes	UOF Continuum	Yes	No, unless deadly force authorized	Yes	No	Yes ⁴⁵	Yes	Yes, no POF	No
Arlington, TX	Comprehensive	Yes	Totality of Circumstance Model	Yes	No, unless deadly force authorized	Yes	Yes	Yes	Yes	Yes, inc POF	Yes
Wichita, KS	Separate	Yes	UTD from Policy	Yes	Prohibited	Yes	Yes	Yes	Yes	Yes, inc POF	Yes
Aurora, CO	Separate	Yes	UTD from Policy	Yes	Prohibited	Yes	Yes	Yes	Yes	Yes, no POF	Yes
Lexington- Fayette, KY	Comprehensive	Yes	Resistance Control Continuum	Yes	No, unless deadly force authorized	Yes	Yes	Yes	Yes	Yes, inc. POF	Yes

Table 2.4. Comparison of Use of Force-Related Policies for CSPD and Peer Agencies

⁴² Unless deadly force is authorized, or exigent circumstances exist.

⁴³ CSPD General Order 500.20 states that "Firearms shall not be discharged from a moving vehicle, except in cases of extreme emergency" and that "Firearms may be discharged at a moving vehicle if the officer is authorized to use deadly force pursuant to section 10 of the policy."

⁴⁴ Unable to Determine from policy. This information is often found in department training materials rather than in the use of force policy.

⁴⁵ This provision is included in the Complaints Against Personnel policy 31-304A, not the Use of Force policy.

3. CSPD DATA AND RESEARCH METHODOLOGY

Section 3 begins by describing CSPD's use of force data and specifying our units of analyses for various statistical analyses. The section concludes with an in-depth description of the quantitative statistical analyses employed by the TMLCC research team and reported in Sections 4, 5, and 6. The methodology and data collected specifically with the community and officer surveys, focus groups, and in-depth CSPD Command Staff interviews are described in Sections 7 and 8, respectively.

3.1 CSPD Use of Force Dataset Description

As described in Section 2, CSPD GO 510 requires officers to document any reportable use of force. The CSPD uses products from CI Technologies called BlueTeam and IAPro to collect and track force data. Use of force data, compiled from three different reporting forms, were supplied for the purpose of analyzing CSPD officers' use of force that occurred from January 1, 2017 through December 30, 2020.⁴⁶ These include:

- 1. Use of force that includes physical force and weapon use (UOF)
- 2. Canine (K9)
- 3. Pointing of firearm (POF)

The use of force data was captured in the same manner for the entire study period. Canine use of force was documented on the use of force report from January 2017 to April 2018, but beginning in May 2018, it was reported on a distinct form specific to canine force. Finally, the CSPD initiated the documentation of pointing of a firearm as a reportable use of force on February 3, 2017. Officers can complete one of two different reports depending on the circumstances surrounding the pointing of a firearm, and on the standard use of force report when used in conjunction with another form of force by the same officer.

The three data reports listed provide information regarding the types of reportable force required by GO 500 and 510. Table 3.1 shows the types of information available in each report, copies of which are provided in Appendix C.⁴⁷ As shown in Table 3.1, the use of force report provides the most comprehensive incident information. The canine use of force report contains information that is specific to that type of force but does not include other important information about the individual that is captured in the use of force data (e.g., resistance, impairment, etc.). The pointing of firearm report is the most limited. Although the pointing of a firearm report narrative often includes more detailed information, this information is not systematically captured and is not readily available for quantitative analyses.

⁴⁶ CSPD also provided data files including arrests, calls for service, reported offenses, and geographic police patrol boundary shapefiles used for mapping purposes. All data sources had address locations, which we mapped and plotted to the police division and patrol boundaries. U.S. Census (2020) data were used to supplement analyses. These additional data sources are described in more detail related to multivariate analyses in Section 4.

⁴⁷ In addition to the displayed incident and individual variables, officer identification number is provided in each type of report, which could be linked to officer race/ethnicity, gender, date of birth, and date of hire.

Finally, each of the reports includes the name, date of birth, race/ethnicity, and gender of the individual who had force used against them. Unfortunately, because the three reports collect information differently, the information available for analysis is not uniform and cannot be analyzed as a single comprehensive dataset.⁴⁸ Given the complexity of our analyses to unravel correlates of force, and the small sample size of canine bites, we focus our analysis on (1) individuals who had physical force and/or a weapon used against them (UOF) and (2) individuals who had a firearm pointed at them (POF).

	Incident Info	Individual Info
Use of Force	Date and Time	Name
(UOF)	Use of Force Action / Weapon Type (can be multiple selections)	DOB
	Reason for Force	Race/Ethnicity
	Resistance Displayed by Individual	Sex
	Service Rendered (crime in progress, disturbance fight, etc.)	
	Whether Force was Effective (yes/no by force type)	
	Suspect and Officer Injury	
	Impairment (alcohol/drug, Emotionally Disturbed Person)	
	Post-force (arrested, hospitalized)	
Canine Use of	Date and Time	Name
Force	K9 Name	DOB
(K9)	Other Officer Bitten (yes/no)	Race/Ethnicity
	Suspect Injury (bitten)	Sex
	Suspect Treated	
	K9 Type of Utilization (Tactical Enforcement Unit, area search,	
	building search, felony suspect apprehension)	
Pointing of	Date and Time	Name
Firearm (POF)	Shift	DOB
	Incident Type	Race/Ethnicity
		Sex

<i>Table 3.1.</i>	Use of	f Force R	eporting	Comparison
-------------------	--------	-----------	----------	------------

3.2 Unit of Analysis

Studies of use of force are often complex due to the myriad of ways that force can be counted (Garner et al., 2018), including: (1) the number of incidents involving any use of force, (2) the number of individuals⁴⁹ who had force used against them in a single encounter, (3) the number of different types of force (or officer actions) used, or (4) the number of officers using force. It is important to clearly identify the unit of analysis because use of force counts can vary dramatically based on the unit of analysis at which they are measured. This concept is graphically displayed in Figure 3.1 below. A single use of force incident can include one or more individuals who have one or more types of force used against them by one or more officers. Among all three CSPD use of force reports, these are all possible units of analysis. Each officer completes one of the three types of reports for the different force types they personally used against one or more individuals.

⁴⁸ These data are analyzed separately because there is overlap in reporting for the same individuals (e.g., same individual can have a pointing of firearm only by one officer and have force used against them by another officer – equating to two different reports that include different information). To assess as much as possible, the data available based on the UOF report are the primary point of analysis. If the data from the two reports were merged, there is a high probability of duplicate information (same individual counted twice via different reports and there would be substantial missing data on certain variables.

⁴⁹ Throughout this report, we use the term "individual" or "subject" to refer to people who had force used against them by CSPD, rather than civilian, citizen, or suspect.

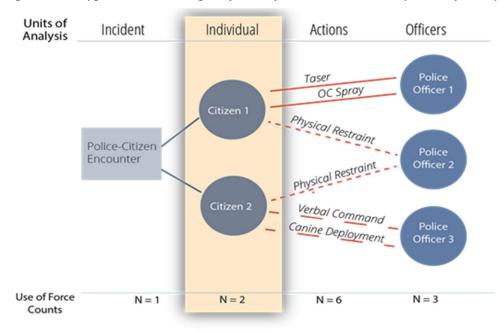


Figure 3.1: Hypothetical Example of Use of Force Measures, by Unit of Analysis

Note: The individual level is the unit of analysis used in this study.

Source: "Examining the Impact of Integrating Communications, Assessment, and Tactics (ICAT) De-escalation Training for the Louisville Metro Police Department: Initial Findings," (Engel et al., 2020a, pg. 13).

The consideration of which unit of analysis to examine is based on the research questions of interest. Based on our study's focus on whether individuals of particular racial/ethnic groups have force used against them in a disparate manner, unless otherwise noted, the unit of analysis this study focuses on is each individual against whom force was used (regardless of whether the incident involved multiple individuals, multiple officers, or multiple force actions).⁵⁰ It is important to note that the same individual can have force used on them in multiple events (i.e., same person / different date, which we describe as repeat individuals). Individuals who had force used against them on more than one occasion are included in the dataset as many times as they have unique encounters with officers that resulted in force.

Measuring force at the individual level means that data from the three different types of reports are not mutually exclusive; that is, multiple officers could use more than one type of force against a single individual which may be captured on different reports. For example, there were three instances of a single person who had one officer who only pointed a firearm at them (documented on the POF report), another officer who used force against them (documented on the UOF report), and a third officer (canine handler) who completed the canine use of force report when the individual was also bitten by a canine. Despite the various use of force reports, all uses of force on the same individual had the same call for service number (e.g., two officers use different force types and complete two different reports, POF and UOF, on the same individual). We matched the call for service number for the same individual (name)

⁵⁰ If a different unit of analysis is used to examine use of force, it is noted in the text and accompanying tables and figures. For example, in Sections 5 and 6, some analyses examining the patterns of use of force and pointing of firearms are conducted at the officer level.

to identify which force incidents (at the individual level) had multiple reports (and we removed the duplicates when conducting event tabulations).

If an individual was involved in an incident with more than one officer, we included information from *each* of the involved officers' reports to provide a comprehensive vantage point of the force used against each individual. It is important to note that the information reported by officers may vary, even though they were involved with the same individual. For example, officers can use different types of force or can have different perceptions of an individual's impairment. In each case, we retained information from every officer, which is why the categories are not mutually exclusive for each individual. In circumstances of multiple officers reporting different information, we collected information on each measure if at least one officer designated a positive value on the measure being collected. As an example, if two officers each use a different type of force against the same individual (i.e., one officer uses weaponless force and another officer uses OC spray), we integrate these data into each force type for the individual (e.g., the individual would have a "yes" for weaponless force and a "yes" for OC spray). We did this for every measure in the data for comparing, compiling, and contrasting purposes.

It is also important to note that not all use of force incidents include information about the specific individual that force was used against. The CSPD requires officers to report force used even if the identity of the person the force was used against was unknown (e.g., use of force in crowd control during disturbances or demonstrations). Uses of force against unknown individuals are included in some analyses below documenting the amount of force used by the CSPD, but they are excluded in other analyses that examine the specific characteristics of the individuals who had force used against them.

3.3 Data Sample

Across these various types of force, CSPD officers used force against 5,933 individuals from January 1, 2017 – December 31, 2020. Most of this force involved the pointing of firearms. Specifically, 4,134 individuals (69.7%) had a firearm pointed at them during our study period and 3,813 individuals (64.3%) had a firearm pointed at them as the *only* type of force. Roughly 8% of the 4,134 individuals who had a firearm pointed at them had an additional type of force used against them. There were 2,120 individuals who had physical force or a weapon used against them (including canine uses of force). For analysis purposes, the 36 individuals with canine-only force are excluded from this foundation of 2,120 individuals due to the change in data collection method for canine force and the relative rarity of its occurrence (used, on average, 12 to 20 times per year). Individuals who had canine use of force in addition to another type of force remain in the data for analysis.⁵¹ Excluding these cases leaves a final use of force dataset of 2,084 individuals who had force used against them from January 1, 2017 to December 31, 2020.

3.4 Definitions

It is important to note that, although this report assesses CSPD's use of force patterns and trends, statistical analyses used to measure disproportionality and disparity cannot be reliably used to determine

⁵¹ The analyses in Section 5 that examine specific force types do not present canine force because examining canine force that occurred with another type of force may not be reflective of canine force used alone. Canine uses of force are briefly summarized in Section 5.

the reasons for these differences, including whether individual officers, or the agency, engages in racially biased policing or bias. For this report, we define these terms as follows:

- <u>Disproportionality</u>: A difference in outcomes within a single racial/ethnic group (e.g., use of force against Black individuals) compared to that group's representation in a selected comparison population (e.g., Black residential population)
- *Disparity:* A difference in outcomes across groups (e.g., racial/ethnic groups, gender, etc.) in policing
- <u>*Racially biased policing:*</u> Occurs when law enforcement inappropriately considers race or ethnicity in their decisions to intervene in a law enforcement capacity
- <u>Bias</u>: Prejudice in favor of or against one thing, person, or group compared with another, usually in a way considered to be unfair

3.5 Description of Statistical Analyses

Most statistical analyses in this report are conducted at the overall department level. Where appropriate, analyses are also conducted at the CSPD division level and include all officers assigned to these geographic divisions (i.e., Falcon, Gold Hill, Sand Creek, and Stetson Hills Divisions).

The statistical analyses used in this report include basic descriptive statistics, bivariate analyses, interrupted time series analyses, benchmark analyses, and multivariate analyses. **Descriptive statistics** (e.g., frequencies) summarize quantitative data with counts and percentages. **Bivariate analyses** assess the relationship between two variables (e.g., race and force), but do not consider any other factors that might influence use of force. **Interrupted time series analyses** are a rigorous quasi-experimental design that allows researchers to assess whether (and to what extent) there are statistically significant 'shifts in the trends' (i.e., use of force) that correspond with particular period-specific events. Time series analyses are pragmatic when there are 'dates of interest' that researchers want to assess whether outcomes experience a shift (increase or decrease) that correspond with such dates of interest (i.e., the series 'breaks or shifts'). The two remaining statistical analyses – benchmark analyses and multivariate analyses – are described in more detail.

3.5.1. Benchmark Analyses

Interpreting the rates of police use of force across racial/ethnic groups is a complex task. Often the level of force is simply reported as a percentage for each racial/ethnic group. However, this begs the question: Compared to what? Is this percentage of force for each racial group disproportionate (different than what would be expected for that group) and/or disparate (unequal across groups)? Measuring and interpreting disproportionality and disparity is complicated by the limited measures available to social scientists. Nevertheless, a series of statistical analyses are often performed by researchers to further interpret rates of police use across racial/ethnic groups. In doing so, researchers seek to answer the "compared to what?" question, with the results providing additional evidence regarding the levels of disproportionality and disparity in police actions.

A common analytical technique to measure racial/ethnic disparities in police actions includes the use of **benchmark analyses**. Essentially, the percent of racial/ethnic groups who experience force can be compared to the same groups' representation in a comparison data source that provides an estimate of

the "expected" rate of force.⁵² This comparison is known as a "benchmark," and it should represent similarly situated people at risk of experiencing force, assuming no police bias exists.⁵³ The analytical steps followed to create estimates of racial/ethnic disparities are described in detail below.

Step 1: Creation of Disproportionality Indices

The first step of a benchmark comparison is to create a **Disproportionality Index (DI)** for each racial/ethnic group by dividing the observed percent of uses of force by race/ethnicity (the numerator) by the "expected" percent of force by race/ethnicity given no police bias (the denominator). Disproportionality indices estimate the differences between the "actual" and "expected" rates of police outcomes within different demographic groups⁵⁴ and are calculated as follows:

Disproportionality	Proportion of racial/ethnic groups observed uses of force
Index (DI) =	Proportion of racial/ethnic groups expected uses of force (using benchmark proxy)

Indices greater than 1.0 show the group has force used against them more than would be expected based on their percentage in the benchmark population; conversely, a DI of less than 1.0 indicates that a group has force used against them less often than would be expected compared to a benchmark. The larger the size of the DI, the greater the disproportion between use of force and the groups' representation in the selected benchmark.

There are several issues to note when creating and interpreting disproportionality indices. First, there is an obvious connection between the perceived validity of disproportionality indices and the type of benchmark used to make the comparison. A benchmark with a higher degree of validity will produce disproportionality indices with more validity. Not all benchmarks are of equal validity. For example, although the most common benchmark used to compare group rates of force is the racial/ethnic groups' representation in residential population statistics (e.g., Census data), over two decades of research have detailed the numerous limitations of census-derived benchmarks to represent the population at risk of experiencing police use of force, or any other police action.⁵⁵ These weaknesses are fully described in Section 4, but we note here that disproportionality indices based on residential census data must be interpreted with caution and an acknowledgment of its limitations. For this reason, we also make benchmark comparisons based on CSPD arrestee and criminal suspect populations and specifically note that benchmark findings using criminal suspect data are likely the most valid, as they are based on the best available proxy measure of the population of individuals *at risk* of being involved in interactions with police that subsequently result in the use of force.

Second, the stability of the disproportionality indices is based, in part, on the size of the denominator. This is especially a concern when census figures are used to estimate the expected rate of uses of force

⁵² For example, see Engel et al., 2002; Fridell, 2004.

⁵³ For example, see Engel & Calnon, 2004; PERF, 2021; Tillyer et al., 2010.

⁵⁴ For example, see Fridell, 2004.

⁵⁵ For example, see Alpert et al., 2004; Engel & Calnon, 2004; Ridgeway, 2007; Smith et al., 2019.

by a specific racial/ethnic group. For example, as will be shown in Section 4, in three of the four CSPD divisions (Falcon, Gold Hill, and Stetson Hills), the residential population of Black individuals is less than 5%. Thus, any moderate number of uses of force against Black individuals in these areas would substantially increase the disproportionality indices because the denominator is small to moderate in size. In other words, in areas with smaller denominators (benchmarks), the numerator has a larger influence on the resulting disproportionality index.

Third, there is no accepted standard or threshold for the interpretation of the size of disproportionality indices. It is therefore difficult to determine if a given disproportionality index is "too big" or "too small," as there is no accepted "rule of thumb" used by researchers regarding the appropriate size of disproportionality indices.⁵⁶ Consequently, one of the shortcomings of the disproportionality index is the difficulty in interpreting the level of disproportionality based on the method described above. Some of these shortcomings are minimized by creating a disparity ratio (described below).

Step 2: Disparity Ratio

Given the concerns regarding the interpretability of disproportionality indices, a common method of reporting the results is to calculate a disparity ratio. To calculate this value, the disproportionality index must be available and calculated for both the minority group population and the majority group population. Once those values are determined, the disparity ratio is calculated as follows:

Disparity	Minority Group's Disproportionality Index
Disparity Ratio (DR) =	Majority Group's Disproportionality Index

The resulting value is the disparity ratio, which is interpreted as the likelihood of having force used against a person within that racial/ethnic group *compared to the majority group*. For example, if the disparity ratio is 2.0, this indicates that the group of interest (minority group) is roughly *two times more likely* to have force used against them in comparison to the majority group (White, non-Hispanic).

Disproportionality indices and disparity ratios are different measures. While the disproportionality index is strictly calculated using one racial group, (i.e., the percentage of Black individuals who have force used against them is divided by the percentage of Black individuals in the benchmark), the disparity ratio compares the difference between the disproportionality index of the minority group against the majority group.⁵⁷

While the disparity ratio is often preferred to the disproportionality index (for reasons of interpretability), the validity of the benchmark remains an unresolved issue. In addition, the statistical instability of the denominator (noted above) is also not rectified, meaning that benchmarks with small percentages of minority populations may be unduly affected by small changes in the amount of force. Finally, there is no agreed-upon value that unequivocally provides a threshold for a determination of disparity. Notwithstanding these concerns, the disparity ratio is a superior measure to the disproportionality index due to its clearer interpretative value and comparison across racial/ethnic

⁵⁶ For example, see Farrell et al., 2004; Fridell, 2004; Geller et al., 2021.

⁵⁷ For example, see Fridell, 2004; Smith et al., 2019; Tillyer et al., 2008.

groups. In the analyses reported in Sections 4 and 6, both disproportionality indices and disparity ratios are calculated.

3.5.2 Multivariate Statistical Analyses

A **multivariate statistical model** is one that measures the individual and independent impact on the outcome of each variable in the model, holding all other variables in the model constant. Sections 4 and 5 include multivariate statistical models that estimate the likelihood of two different outcomes: that an individual has force used against them in similar arrest situations and that an individual or officer is injured in similar use of force situations. These models isolate what factors in these similar situations predict injury or use of force. For example, if you want to know if Black individuals are more likely than White individuals to have force used against them during encounters that result in arrest, you must make sure you are simultaneously considering other factors (e.g., other characteristics of the person, situation, etc.) that may also impact if force is used. This is how and why multivariate statistical models are used.

Although multivariate analysis is a stronger analytical strategy than bivariate analysis, the key weakness of multivariate statistical analysis is that it can only statistically control for those variables that are measured. This is called "specification error" or the error in a statistical model due to the inability to specify all factors that might have an influence over the outcome. If these excluded variables vary across racial/ethnic groups, their inclusion in the statistical models would increase or lessen the predicted impact of individuals' race/ethnicity on the likelihood of injury. Therefore, while researchers can be more confident in multivariate results, the results must be interpreted with this limitation in mind.

Interpreting the Models

The appropriate statistical modeling technique for a binary outcome (e.g., whether force is used or whether an individual is injured) is logistic regression as the outcome is dichotomous. It is important to note that readers should pay attention to two components of the results of regression analyses.

First, the initial information produced by the models is the degree of relative strength of the observed relationship. The analyses produce information about the strength of an observed relationship in two related values: 1) the coefficient, or predicted log-odds, and 2) the odds ratio for each independent variable in the model. The coefficient represents an additive expression of a particular variable. If the coefficient is accompanied by a negative sign, this indicates the direction of the relationship is negative, i.e., the influence of the variables means the outcome is less likely. If the coefficient has no sign (i.e., is a positive number), this indicates that the influence of that variable is positive, and the outcome is more likely. In logistic regressions the results are presented as "odds ratios" which represent the strength of association between two events.⁵⁸ Odds ratios > 1.0 are a positive relationship and odds ratios less than 1.0 are a negative correlation. Odds ratios are interpreted as a change in the likelihood of the outcome occurring because of a specific variable. The amount of influence of a particular variable, or the strength of its relationship with the dependent variable (represented by the size of the odds ratio) is one of the

⁵⁸ Technically, this odds ratio is a form of log-odds, but the interpretation of this value is not intuitively straightforward; therefore, this type of coefficient is usually exponentiated to allow for interpretation in terms of odds (Liao, 1994). The odds ratio represents this antilog transformation of the coefficient into the multiplicative odds of the outcome variable based on the predictor variable, all being equal.

most important considerations. Generally speaking, an odds ratio that is 1.5 or lower is small, 1.5 to 2.5 is medium, and 2.6 or greater is large.⁵⁹

Second, throughout the report when findings are reported to be significant, this refers to *statistical significance*, or the confidence level that the observed differences are not due to random chance and/or sampling error. Sometimes group differences may exist, but they are not statistically significant. This means that we cannot be confident that the difference is not due to chance. For each variable in the model a threshold of statistical significance is identified with a p-value. The social sciences traditionally rely upon a confidence level of 95% (indicating statistical significance – that the finding is 5% or less due to random chance and/or sampling error). This represents the degree of confidence associated with the relationship or the extent to which the relationship is not due to chance. If a statistically significant relationship (p-value within the tables) is represented as less than 0.05, this suggests a greater level of confidence in the relationship. For example, a positive relationship between male individuals having force used on them within arrests means that the relationship holds true 95 (or more) out of 100 times.

Finally, regular multivariate analyses are based on one level of data and reflect a one-to-one ratio between variables at that level. That is, variables in most data are independent of other variables. Our data, however, do not conform to this rule because we are dealing with arrests and uses of force that occur within and across neighborhoods. Thus, the shared characteristics between events within neighborhoods are not independent of one another; arrests and use of force within the same neighborhoods share those neighborhood characteristics. This was a frequent problem in educational research when trying to assess the achievements of children in school independent of school structures (i.e., kids from the same classrooms share the same teacher characteristics; and kids from the same schools share the same school characteristics). HLM analysis was specifically designed to handle this child/teacher/school problem and has been extended over the past thirty years to tackle similar issues in criminal justice (i.e., the impact of neighborhood characteristics on crime). Therefore, to understand the impact that neighborhood level variables might have on the use of force, we use Hierarchical Growth Linear Modeling (HGLM), which is a special type of multivariate modeling required for data reflecting more than one level of aggregation. HGLM analysis partitions all level-1 measures and level-2 measures independently (so, using our school example, we can assess the impact of children's attributes on their achievement independent of their shared teacher and shared school characteristics when comparing many kids from many different schools). This partitioning of levels avoids a violation of statistical independence given that many arrests occurred within the same police districts.

⁵⁹ For example, see Chen et al., 2010.

4. PHYSICAL FORCE AND WEAPONS USED

Section 4 describes the empirical analyses conducted of the use of force data provided by CSPD. We first describe the characteristics of CSPD's use of force during contacts with the public from January 1, 2017 to December 31, 2020 and the individuals against whom force was used. We present use of force trends over time and consider if these patterns were changed by seminal events occurring in 2019 and 2020. Thereafter, we examine racial/ethnic disparities in use of force by comparing rates of force at the department and division level to several different "expected" rates of force, known as benchmarks. Disparity ratios compare Black and Hispanic individuals' likelihood of having force used against them compared to White individuals. Finally, this section documents our analysis of all arrest encounters from 2017 to 2020 to identify the factors that predict whether CSPD officers used force during these encounters. Following this section, Section 5 provides an in-depth examination of various types of force, their effectiveness, and the injuries that result from force.

Again, as described in Section 3, although we focus on the 2,084 individuals who had physical force or a department authorized weapon used against them in this section's analyses, it is critical to reiterate that these individuals *only represent 35% of all individuals who had any reportable force used against them by CSPD officers*. Nearly two-thirds of the individuals with reportable uses of force had firearms pointed at them, without any other use of force during the incident. Although the CSPD considers pointing of a firearm as a "reportable use of force" it gathers this information on a separate form and officers are not required to provide as much information as they are with other uses of force. Given these inconsistencies in reporting requirements – along with the fundamental differences associated with pointing of a firearm versus other types of physical force or weapon deployment during police-citizen encounters – we examine pointing of firearm incidents separately in Section 6. In addition, 58 individuals who were involved in use of force incidents with a canine are also examined separately (in Section 5). While deployment of canines can result in a reportable use of force. In summary, the analyses reported within this section examine individuals who had reportable uses of force, excluding those that have only a pointing of a firearm, or only involve the deployment of a canine.

4.1 Use of Force Patterns and Trends

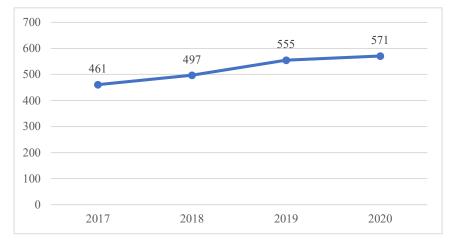
Table 4.1 shows the number of individuals who had force used against them overall, and by year, at the department and division levels.⁶⁰ This information is graphically displayed at the department level in Figure 4.1 and at the division level in Figure 4.2. As shown, at the department level, CSPD had reported use of force against 2,084 individuals during our four-year study period. The number of individuals who had force used against them increased steadily from 2017 to 2020 (overall percent change = 23.9%). The largest increase occurred from 2018 to 2019 (percent change = 11.7%), while the increase between 2019 and 2020 was only 2.9%.

⁶⁰ There were 11 individuals whose event date was missing. As a result, the yearly column totals do not add to the overall column total. Additionally, there were 33 individuals whose event location could not be mapped to a division due to missing data. As a result, the division totals do not add to the overall department total.

	Overall	2017	2018	2019	2020
CSPD	2,084	461	497	555	571
Falcon	268	65	71	68	64
Gold Hill	747	172	172	196	207
Sand Creek	624	142	142	158	182
Stetson Hills	412	73	105	128	106

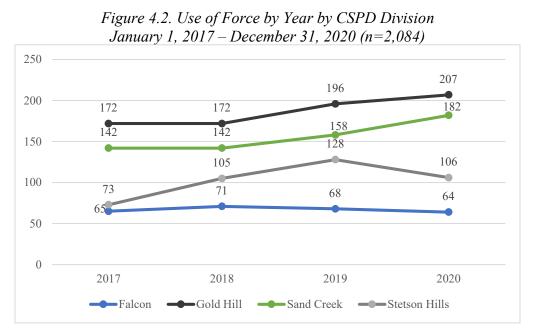
Table 4.1. Use of Force Overall and by Year & by Department and Division LevelJanuary 1, 2017 – December 31, 2020 (n=2,084)

Figure 4.1. CSPD Use of Force by Year January 1, 2017 – December 31, 2020 (n=2,084)



As shown in Table 4.1 above and Figure 4.2 below, at the CSPD division level⁶¹, Gold Hill Division consistently reported the largest number of individuals who had force used against them. Similarly, Sand Creek Division consistently had the second-highest number of individuals who had force used against them across years and increased from 2019 to 2020 (percent change = 15.2%). The yearly trends in Stetson Hills Division differed from the other divisions, as the number of individuals who had force used against them substantially increased (+75.3%) from 2017 to 2019 before declining 17.2% in 2020. Finally, the number of individuals who had force used against them was lowest in Falcon Division and was stable across all four years.

⁶¹ As noted in Section 3, analyses that are conducted at the CSPD division level include all officers assigned to these geographic divisions.



There are likely many reasons that account for the variation in use of force across CSPD divisions, including differences in police deployment patterns, calls for service, and reported crimes that increase the relative risk that individuals residing in certain areas will encounter police and ultimately have force used against them. The first step in any analysis is to describe the distribution of the data and identify any specific patterns or trends that should be considered further. Throughout the remainder of Section 4 as well as in Sections 5 and 6, we continue to explore differences by CSPD division to better understand these trends.

Figure 4.3 graphs, by month, the number of individuals who had force used against them during unique encounters with police (including both known and unknown individuals). As shown, there appears to be random fluctuation across months in the number of individuals who had force used against them across multiple years of data.

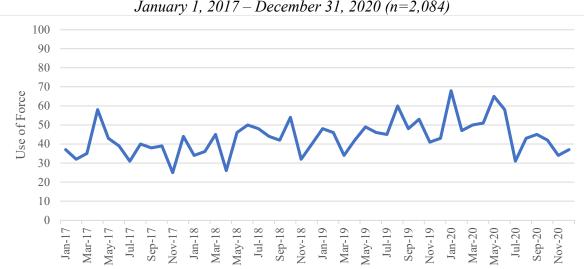


Figure 4.3. Individuals Who Had Force Used Against Them by Month January 1, 2017 – December 31, 2020 (n=2,084)

4.1.1. Interrupted Time Series Analyses

It is important to further consider, however, if critical incidents or events interrupt what would otherwise be a normal pattern of fluctuation in the use of force across months. Such events might include, for example, important changes to CSPD policies or training, high-profile uses of force (locally or nationally), or major societal disruptions. An interrupted time series analysis is a rigorous quasiexperimental design that allows researchers to assess whether (and to what extent) there are statistically significant shifts in the pre-existing trends (e.g., arrests, calls for service, criminal offenses) that correspond with period-specific events. Time series analyses are particularly salient when there are dates of interest that researchers want to assess whether outcomes experience a shift (increase or decrease) that corresponds with specific dates or time periods (i.e., does the pre-existing pattern experience a change or break).

We examined the possible impact on the pattern of use of force incidents on four such critical events during this four-year period:

- 1) CSPD officer-involved shooting of De'Von Bailey (August 3, 2019)
- 2) Colorado Executive Order declaring COVID 19 Disaster Emergency (March 11, 2020)
- 3) Officer-involved death of George Floyd in Minneapolis (May 25, 2020)
- 4) Enactment of SB 20-217: Enhance Law Enforcement Integrity (July 1, 2020)

The interrupted time series analyses are conducted on the monthly totals of individuals who had force used against them. Note that the last two events – the death of George Floyd and the enactment of SB-217 were close in time (within six weeks). As a result, the monthly analyses that follow cannot disentangle the possible impact on use of force resulting from the response to the death of George Floyd and the enactment of SB-217.

Four interrupted time series analyses were conducted to examine if the trend in CSPD use of force was "interrupted" or changed directly following the events noted above.⁶² The findings from the interrupted time series analyses examining the trends in use of force suggest that the frequency of police force was **not** significantly altered in the time periods directly following the officer-involved shooting of De'Von Bailey or the response to COVID-19.⁶³ However, the six month-time period following the death of George Floyd did result in **marginal decreases** in the number of reported CSPD use of force incidents (declining by roughly 20.6%). In addition, the five-month period following the enactment of SB-217 showed a slightly larger **statistically significant** decline in uses of force (with a reduction of roughly 23.3%).⁶⁴ The use of force monthly trends are graphically displayed in Figure 4.4, where the red vertical lines represent statistically significant interruptions, or in this case, reductions in the pre-existing trend of monthly use of force counts; the black vertical lines indicate non-significant events.

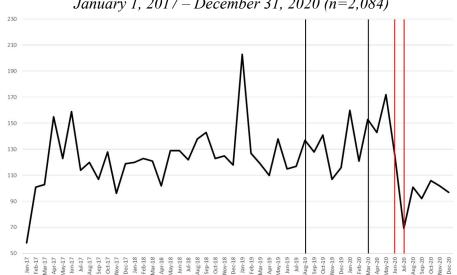
It must be noted that using a time series approach requires a long enough period following the event date of the "interruption" to determine if there are significant changes to the overall time trend. When

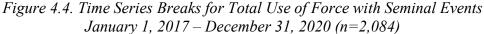
⁶² Breaks in the time series are as follows: August 2019 for the officer-involved shooting of De'Von Bailey, March 2020 for COVID-19 pandemic, June 2020 for responses to the death of George Floyd, and July 2020 for SB-217.

⁶³ For use of force, the Aug 2019 and Mar 2020 breaks showed no significant divergence (p-values above 0.10).

⁶⁴ For the June and July 2020 breaks in the series, the majority of the reduction was across racial/ethnic groups. The point estimates increased in size between June and July 2020, suggesting a greater reduction in July although with only a five-month follow-up period it is difficult to discern this relationship.

examining the changes after the death of George Floyd, there is only a six-month follow-up period (through December 31, 2020), making the statistical estimates somewhat unstable. The same issue applies for the five-month period following SB-217. In short, we note the beginning of a downward trend in use of force that may result in a significant decline in the overall trajectory, depending on the frequency of reported uses of force in 2021 and beyond. It is important to reiterate, however, that no significant changes in the time series were noted for the frequency of CSPD uses of force following the officer-involved shooting of De'Von Bailey or in response to the onset of the COVID-19 pandemic.





It is also important to consider if the monthly fluctuations in the frequency in CSPD uses of force differ by individuals' race/ethnicity. All three racial/ethnic groups demonstrate random monthly fluctuations in uses of force. Again, time series analyses were conducted to examine the potential impact of four critical events (officer-involved shooting of De'Von Bailey, onset of COVID-19, Officer-involved death of George Floyd, and SB-217) on the patterns of CSPD uses of force – this time examining by separate racial/ethnic groups (Black, Hispanic, and White). The findings demonstrate that, as with the overall analysis, the only significant changes in the frequency of use of force incidents for all racial/ethnic groups occurred after the George Floyd incident, and SB-217.

The significant reductions in CSPD uses of force were noted in the six months following the death of Floyd for all three racial/ethnic groups. Specifically, uses of force for White, Black, and Hispanic individuals all experienced statistically significant declines (averaging overall a roughly 21% decline). These reductions in police use of force were consistently observed across all racial and ethnic groups (suggesting it was an overall police behavioral change that corresponded with the time period following the officer-involved death of George Floyd that did not vary significantly by race/ethnicity of individuals).⁶⁵ Likewise the reductions in use of force following the enactment of SB-217 also indicated

⁶⁵ The reductions in police use of force in the months following the death of George Floyd ranged from 19% for Black individuals to 29% for Hispanic individuals; use of force declined for White individuals by 22%.

a slightly larger decline (by roughly 23%) across racial/ethnic groups.

As noted, the stability of the change in the pattern (decreases in uses of force) is somewhat questionable given the short follow-up period that was analyzed. It will be imperative for the CSPD to continue examining this trend for possible deviation in the 2021 data. In addition, it cannot be determined specifically what "caused" the changes in the reported use of force patterns, only that significant changes occurred in June and July 2020 that altered the pre-existing trends.

4.2 Characteristics of Individuals that Had Force Used Against Them: Descriptive and Bivariate Analyses

4.2.1 Individuals' Race/Ethnicity and Gender

Table 4.2 presents the gender and race/ethnicity of the individuals who had force used against them in the four-year period from 2017 to 2020. This information is presented for CSPD's overall department and its four divisions. At the department level, of the 2,084 individuals who had force used against them, roughly 81% were male, 17% were female, and 2% were of unknown gender.

The majority of use of force involved White individuals (56.6%), followed by Black individuals (22.8%), Hispanic individuals (16.6%), and individuals of other races/ethnicities (1.7%), which includes Asian/Pacific Islander, American Indian, and Middle Eastern. When the data is combined White, Black, and Hispanic individuals accounted for 96% of all those who had force used against them; therefore, the remainder of the statistical analyses in this report focus on these three racial/ethnic categories.

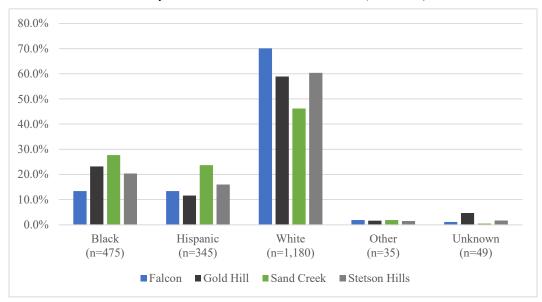
Use of Force		Gender N (%)		Race/Ethnicity N (%)					
	Female	Male	Unknown	Black	Hispanic	White	Other	Unknown	
CSPD (n=2,084)	347	1,694	43	475	345	1,180	35	49	
	(16.7%)	(81.3%)	(2.1%)	(22.8%)	(16.6%)	(56.6%)	(1.7%)	(2.4%)	
Divisions	(2011)	(011211)	()	()	(101011)	(2 2 2 2 2)		()	
Falcon	41	226	1	36	36	188	5	3	
(n=268)	(15.3%)	(84.3%)	(0.4%)	(13.4%)	(13.4%)	(70.1%)	(1.9%)	(1.1%)	
Gold Hill	104	610	33	173	87	440	12	35	
(n=747)	(13.9%)	(81.7%)	(4.4%)	(23.2%)	(11.6%)	(58.9%)	(1.6%)	(4.7%)	
Sand Creek	106	516	2	173	148	288	12	3	
(n=624)	(17.0%)	(82.7%)	(0.3%)	(27.7%)	(23.7%)	(46.2%)	(1.9%)	(0.5%)	
Stetson Hills	94	312	6	84	66	249	6	7	
(n=412)	(22.8%)	(75.7%)	(1.5%)	(20.4%)	(16.0%)	(60.4%)	(1.5%)	(1.7%)	

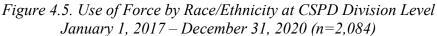
Table 4.2. CSPD Use of Force: Race/Ethnicity and Gender of Individuals
January 1, 2017 – December 31, 2020 (n=2,084)

Also displayed in Table 4.2 above, at the division level, the overall percent of uses of force that involved males was relatively consistent (ranging from 81.7% to 84.3%), with the exception of Stetson Hills Division where a notably lower percentage of males had force used against them (75.7%).

Considerably more variation across divisions, however, was observed by individuals' race/ethnicity. For example, 70.1% of individuals who had force used against them were White in Falcon Division, compared to 46.2% of individuals in Sand Creek Division. Conversely, the percentages of Black and

Hispanic individuals who had force used against them in Sand Creek Division were higher than in any other division. Finally, the percent of individuals with unknown race/ethnicity was highest in Gold Hill Division (likely the result of response to protests and crowd management situations, where the individuals involved in use of force incidents are less likely to be known). Some variation in racial/ethnicity across divisions should be expected, based in part on crime and population differences. The possible explanations for racial/ethnic differences are further explored in additional analyses later in this section. This information is also graphically displayed in Figure 4.5.





The characteristics of individuals who had force used against them are further explored by year in Table 4.3. Some differences for both gender and race/ethnicity are noted. The percent of females who experienced force increased across years from 11.7% in 2017 to 17.9% in 2020 (percent change = 53%), while the percent of males who had force used against them decreased from 88.1% in 2017 to 80.0% in 2020 (percent change = -9.1%).

Table 4.3. Gender and Race/Ethnicity of Individuals who had Force used against them by Yea	r
January 1, 2017 – December 31, 2020 (n=2,084)	

Use of Force		Gender N (%)			Race/Ethnicity N (%)					
	Female	Male	Unknown	Black	Hispanic	White	Other	Unknown		
2017 (n=461)	87	364	10	112	58	276	6	9		
	(11.7%)	(88.1%)	(2.2%)	(24.3%)	(12.6%)	(59.9%)	(1.3%)	(2.0%)		
2018 (n=497)	70	420	7	103	92	285	6	11		
	(14.1%)	(84.5%)	(1.4%)	(20.7%)	(18.5%)	(57.3%)	(1.2%)	(2.2%)		
2019 (n=555)	88	453	14	120	91	316	13	15		
	(15.9%)	(81.6%)	(2.5%)	(21.6%)	(16.4%)	(56.9%)	(2.3%)	(2.7%)		
2020 (n=571)	102	457	12	140	104	303	10	14		
	(17.9%)	(80.0%)	(2.1%)	(24.5%)	(18.2%)	(53.1%)	(1.8%)	(2.5%)		

Table 4.3 also shows the racial/ethnic percentages of individuals who experienced force. This information is also graphically displayed in Figure 4.6. As shown, there was a steady decrease in the percentage of White individuals who had force used against them by year (percent decrease of 11.4% from 2017 to 2020). In comparison, use of force for Black individuals also decreased from 2017 to 2018 but then steadily increased back to approximately the same percentage in 2020 as in 2017. Conversely, there was a sharp increase in use of force against Hispanic individuals from 2017 to 2018 (increase of 46.8%), but the percentage of Hispanic individuals who had force used against them stabilized for the two years following.

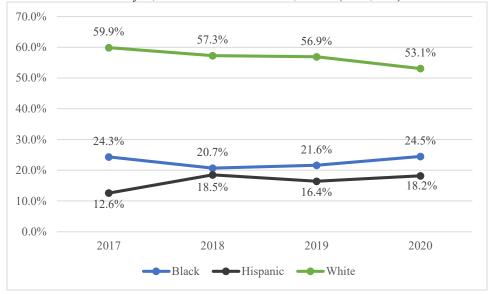


Figure 4.6. Race/Ethnicity of Individuals Who Had Force Used Against Them by Year January 1, 2017 – December 31, 2020 (n=2,084)

4.2.2 Individuals' Impairment (Alcohol/Drugs and Mental Health)

Research examining police use of force shows that individuals who are impaired in some manner are more likely to have force used against them.⁶⁶ CSPD officers record if they perceive that an individual is under the influence of drugs or alcohol or is an emotionally disturbed person (EDP)/mentally unstable. Unfortunately, officers can select only one of these categories, or that no impairment was perceived (i.e., "none"). Collected in this manner, this does not allow for officers to capture when an individual encountered is perceived to have comorbid issues of alcohol and/or drug use as well as mental health issues, which research has shown can increase the likelihood of force more than single types of impairment.⁶⁷

⁶⁶ For example, see Crawford & Burns, 1998; Kaminski et al., 2004; Morabito et al., 2017; Rossler & Terrill, 2017.

⁶⁷ For example, see Morabito et al., 2017.

It is unknown to the research team how officers determine which impairment category to select if multiple impairments are observed. Further, if more than one officer is involved with the same individual, there can be different perceptions of impairment reported. For example, one officer could report no impairment while a second officer reports alcohol/drug impairment and a third officer reports that the individual is EDP. Because individual officers are not able to select more than one type of impairment, we have retained all officer reports of impairment for a single individual; therefore, percentages in Table 4.4 below exceed 100%. Approximately 2% of individuals were reported to have more than one type of impairment when the encounter involved more than officer. When two or more officers were involved, individuals were coded as not impaired *only if all officers reported no impairment*.

Table 4.4 documents the perceived impairment of individuals who had force used against them by CSPD officers. As shown, 56.5% of individuals were perceived by at least one officer to be under the influence of alcohol or drugs, while 14.1% were perceived by at least one officer to be emotionally disturbed. Finally, approximately 31.4% of individuals were perceived to have no impairment by any officer involved in the encounter.

Table 4.4 also shows differences in impairment types by gender and race/ethnicity. There were no statistically significant gender differences for either no impairment or perceived impairment by alcohol/drugs. Approximately 57% of both males and females who had force used against them were reported to be impaired by alcohol or drugs. Females were, however, significantly more likely than males to be perceived as being impaired from mental health issues when involved in police use of force.

Table 4.4 also demonstrates that Black and Hispanic individuals were significantly more likely than White individuals to have force used against them when they had no reported impairment. Black individuals who had force used against them were significantly less likely to be perceived as impaired by alcohol/drugs in comparison to individuals of all other races/ethnicities. Finally, Hispanic individuals who had force used against them were least likely to be perceived to be EDP, while White individuals and individuals of "other" races/ethnicities who had force used against them were most likely to be perceived as EDP.

	No Impairment Listed	Alcohol/Drug	EDP/Mentally Unstable
All Individuals (n=2,084)	654 (31.4%)	1,178 (56.5%)	294 (14.1%)
Gender			
Female (n=347)	91 (26.2%)	197 (56.8%)	67 (19.3%)
Male (n=1,694)	530 (31.3%)	972 (57.4%)	226 (13.3%)
Race/Ethnicity			
Black (n=475)	175 (36.8%)	245 (51.6%)	64 (13.5%)
Hispanic (n=345)	118 (34.2%)	203 (58.8%)	28 (8.1%)
White (n=1,180)	318 (26.9%)	696 (59.0%)	193 (16.4%)
Other (n=35)	10 (28.6%)	21 (60.0%)	6 (17.1%)

Table 4.4. Impairment of Individuals During Use of Force Events, by Gender and Race/EthnicityJanuary 1, 2017 – December 31, 2020 (n= 2,084)

The differences reported in individuals' perceived impairment are graphically displayed in Figure 4.7 below. Again, we note that approximately 31.3% of males who had force used against them were not perceived to be impaired by any officer, compared to 26.2% of females.

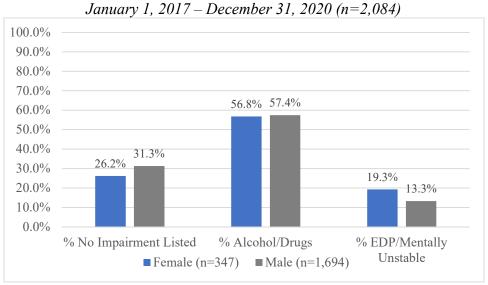


Figure 4.7. Impairment Type by Individuals' Gender January 1, 2017 – December 31, 2020 (n=2.084)

Figure 4.8 below displays racial/ethnic differences in the reported impairment of those who had force used against them. Approximately 37% of Black individuals and 34% of Hispanic individuals who had force used against them were not perceived to be impaired by any officer, compared to roughly 27% of White individuals. In summary, of the individuals who have force used against them, White individuals were more likely to be perceived as impaired by either drug/alcohol or mental health issues, compared to Black and Hispanic individuals.

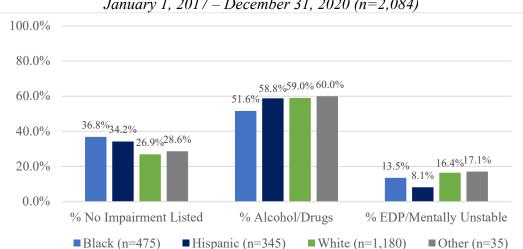


Figure 4.8. Impairment Type by Individuals' Race/Ethnicity January 1, 2017 – December 31, 2020 (n=2,084)

4.2.3 Individuals with Repeat Uses of Force

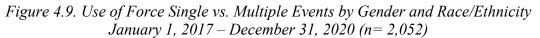
Among the 2,084 individuals who had force used against them by CSPD officers, 2,052 were known individuals (98.5%), while the other 32 individuals were unknown. Of the 2,052 known individuals who had force used against them from 2017 to 2020, there were 1,886 distinct individuals, with 147 "repeat individuals" who had force used against them on more than one occasion. Of these 147 repeat individuals, 132 individuals were involved in two distinct events, 11 in three events, and 4 in four events for a total of 313 events. *In summary, 7.2% of the individuals that had force used against them were involved in more than one event during this four-year time period.*

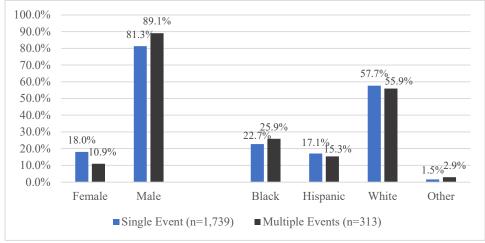
Table 4.5 presents information comparing the percentage of individuals who had force used against them in single vs. multiple events by gender and race/ethnicity. There are statistically significant differences by gender based on a chi-square analysis; individuals who had force used against them more than once during this time period were significantly *more likely to be male* compared to female. Although there are slight racial/ethnic differences in the percentages of single and repeat individuals, these differences are *not statistically significant*.

Table 4.5. Use of Force Single vs. Multiple Events by Gender and Race/EthnicityJanuary 1, 2017 – December 31, 2020 (n= 2,052)

	Gender			Race/Ethnicity		
	Female	Male	Black	Hispanic	White	Other
Single Event	313	1,414	394	297	1,004	26
(n=1,739)	(18.0%)	(81.3%)	(22.7%)	(17.1%)	(57.7%)	(1.5%)
Multiple Event	34	279	81	48	175	9
(n=313)	(10.9%)	(89.1%)	(25.9%)	(15.3%)	(55.9%)	(2.9%)

This comparison of single vs. multiple use of force events by gender and race/ethnicity is also presented graphically in Figure 4.9. Again, repeat individuals who had force used against them more than once during this time period were significantly more likely to be male compared to female but there were no statistically significant differences by race/ethnicity.





4.2.4 Individuals' Reported Resistance

Resistance shown by suspects is defined by CSPD General Order 500 as occurring within three general categories: (1) passive resistance⁶⁸, (2) active resistance⁶⁹, and (3) active aggression⁷⁰. The definitions for these categories are presented in Table 4.6. For purposes of our analysis, we exclude 19 cases (0.9%) where the category "none-incidental contact" was selected, as these are likely data entry errors, or possibly errors when combining different data sets for analysis.⁷¹ In addition, 42 individuals (2%) had missing or insufficient information to determine the level of resistance and are also excluded from the analyses. Therefore, these analyses are based on 2,023 cases instead of 2,084. Officers may enter more than one level of resistance, which may capture the progressive nature of use of force encounters.⁷² For 30.7% of the individuals who had force used against them, there was a single measure of resistance reported. For the remaining 69% of individuals, either a single officer reported more than one level of resistance that was different from one another.

#	Type of Resistance	Description as defined by CSPD policy
1	Passive Resistance	• Physical actions that do not prevent the officer or marshal's attempt to control, for example, a person who remains in a limp, prone position, or passive demonstrators.
2	Active Resistance	 Physically evasive movements to defeat an officer or marshal's attempt to control, including, but not limited to, bracing, tensing, pushing, flailing arms, running away, or verbally signaling an intention to avoid or prevent being taken into or retained in custody. Active Resistance also includes attempting to avoid apprehension and failing to comply with an officer or marshal's order to reveal themselves from concealment or surrender. Walking away may be considered active resistance if the person continues to walk away from an officer or marshal after having been given a lawful order or having been told the person is under arrest. Active Resistance is a higher level of resistance than Passive Resistance.
3	Active Aggression	 A threat or overt act of an assault, coupled with the present ability to carry out the threat or assault, which reasonably indicates that an assault or injury to any person is imminent. Threatening body language includes, but is not limited to, blading the body, assuming a boxer stance, circling officer or marshal's position, clenching of the hands from an open to closed position, forming a fist, etc. Active Aggression is a higher level of resistance than Active Resistance.

Table 4.6. CSPD Reported Types of Citizen Resistance

⁶⁸ For analytical purposes, we created "passive resistance" category by collapsing responses that CSPD officers entered as passive resistance with entries for "failure to leave premises."

⁶⁹ For analytical purposes, we created "active resistance" by collapsing responses that CSPD officers entered as active resistance with entries for "resisted police officer control."

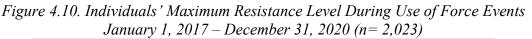
⁷⁰ For analytical purposes, we created "active aggression" by collapsing responses that CSPD officers entered as active aggression with additional entries for: danger to the public, fired weapon at officer or another, physical threat/attack on officer or another, threatened/attacked officer or another with blunt object, edged weapon, firearm, or motor vehicle.

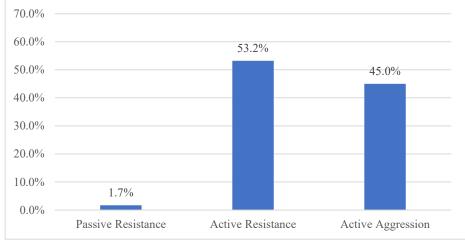
⁷¹ Exclusion of these 19 cases resulted in no statistically significant differences and did not substantively alter the findings or conclusions derived from analyses.

⁷² For example, see Alpert & Dunham, 1999; Hine et al., 2018; Wolf et al., 2009.

It is important to note that the CSPD data does not allow for the establishment of temporal ordering or the sequencing of actions. Therefore, it is only known if the officer perceived that the individual was resistant, and what type of resistance that was shown. It cannot be assumed that the use of force reported by the officer precedes or follows the specific type of resistance documented. Further, we must again stress that the official use of force data – including resistance shown – is collected from the perspective of the officer. These are known limitations of most agency reported use of force data.

Because 69% of individuals who had force used against them were reported by officers as displaying more than one category of resistance during the incident, we examine individuals' maximum level of resistance. Figure 4.10 displays the highest level of resistance reported by officers for the individuals who had force used against them across the CSPD. As shown, roughly 1.7% of individuals showed passive resistance, 53.2% showed active resistance, and 45.0% exhibited active aggression toward CSPD officers as their most severe form of resistance.





Differences in maximum resistance at the division level are reported in Table 4.7 and graphically displayed in Figure 4.11. Across all divisions, a small percent of individuals were reported to have displayed only passive resistance. The percent of individuals who displayed active resistance ranged from 48% in Gold Hill Division to approximately 59% in Sand Creek Division. Finally, individuals reported as displaying active aggression at some point during their encounters ranged from approximately 40% in Sand Creek Division to approximately 50% in Gold Hill Division.

Table 4.7 also displays the average resistance level, where passive resistance = 1, active resistance = 2, and active aggression = 3. Across the department, the average level of the maximum resistance shown is 2.43 on a 3-point scale. The average maximum resistance level reported for individuals across CSPD divisions shows very little variation, ranging from a low of 2.39 in Sand Creek and Stetson Hills Divisions to a high of 2.47 in Falcon Division.

	Passive Resistance	Active Resistance	Active Aggression	Average Resistance Level
CSPD (n= 2,023)	35 (1.7%)	1,077 (53.2%)	911 (45.0%)	2.43
Divisions				
Falcon (n=257)	3 (1.2%)	129 (50.2%)	125 (48.6%)	2.47
Gold Hill (n=717)	16 (2.2%)	344 (48.0%)	357 (49.8%)	2.43
Sand Creek (n=611)	8 (1.3%)	359 (58.8%)	244 (39.9%)	2.39
Stetson Hills (n=406)	6 (1.5%)	232 (57.1%)	168 (41.4%)	2.39

Table 4.7. Individuals' Maximum Resistance Level by Department and Division
January 1, $2017 - December 31$, 2020 (n=2,023)

Figure 4.11 displays the yearly differences in levels of resistance reported by officers as displayed by individuals who had force used against them. As shown, few individuals who had force used against them were reported by CSPD officers as displaying only passive resistance across all four years of study, although this percentage was highest in 2020. The percent of individuals who displayed active resistance as their most serious resistance was relatively stable from 2018 to 2020, but lower in 2017. The highest level of resistance reported by officers as shown by individuals during use of force encounters – active aggression – was also relatively stable from 2018 to 2020, but highest in 2017. The average level of maximum resistance across years (not graphically displayed) did not differ significantly (2017=2.44, 2018=2.45, 2019=2.41, 2020=2.44).

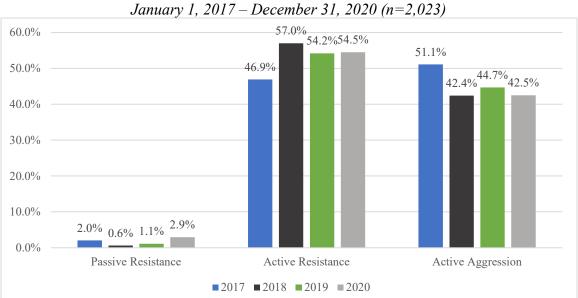


Figure 4.11. Maximum Resistance Levels by Year January 1, 2017 – December 31, 2020 (n=2.023)

Finally, we examine differences in officers' reported maximum level of resistance for individuals involved in use of force incidents, by their gender and race/ethnicity. This information is presented in Table 4.8. Although small differences are noted between males and females and across racial/ethnic

groups, these are not statistically significantly different using the chi-square statistical test. These findings are consistent with previous research that similarly found no significant differences in the levels of resistance demonstrated across race/ethnicity and gender groups involved in encounters with police.⁷³

	1 = Passive Resistance	2 = Active Resistance	3 = Active Aggression	Average Resistance Level
Gender				
Male (n=1,645)	20 (1.2%)	882 (53.6%)	743 (45.2%)	2.44
Female (n=340)	8 (2.4%)	188 (55.3%)	144 (42.4%)	2.40
Race/Ethnicity				
Black (n=465)	9 (1.9%)	242 (52.0%)	214 (46.0%)	2.44
Hispanic (n=336)	3 (0.9%)	194 (57.7%)	139 (41.4%)	2.41
White (n=1,148)	17 (1.5%)	614 (53.5%)	517 (45.0%)	2.44
Other (n=34)	1 (2.9%)	17 (50.0%)	16 (47.1%)	2.44

Table 4.8. Individuals' Maximum Resistance Level by Gender and Race/Ethnicity
January 1, 2017 – December 31, 2020 ⁷⁴

4.3 Reason for Force

The reason for use of force is captured by CSPD officers in one of the following four categories:

- 1) Passive Resistance/Failure to Disperse or Leave Premises
- 2) Pre-Attack Indicators⁷⁵/Resisted Officer Control
- 3) Actively Evading or Resisting Arrest
- 4) Physical Attack or Threat⁷⁶

Officers can select only one reason for force on the reporting form, but in incidents with multiple officers, there may be differing reasons for force. Therefore, we report the most severe category (reported by any officer).

As shown in Figure 4.12, less than 7% of individuals who had force used against them were designated as falling within the passive resistance/failure to disperse category. Approximately 18% of individuals who had force used against them were reported by officers as displaying pre-attack indicators or resisting officer control as the most severe reason for use of force. Nearly half of individuals were reported by officers as actively evading or resisting arrest as the most serious reason for use of force.

⁷³ For example, see Engel, 2003a; Whichard & Felson, 2016.

⁷⁴ This analysis is based on 1,985 cases that have valid gender and resistance data and 1,983 cases that have valid race/ethnicity and resistance data.

⁷⁵ Pre-Attack indicators can include: balled fist, fighting stance, posturing.

⁷⁶ Physical Attack or Threat includes: physical attack on another person, the officer, or another officer; physical threat to another person or the officer; threatened use of firearm or another weapon; threatened/attacked officer or another with blunt object, edged weapon, firearm, or motor vehicle; and verbal threat to person or the officer.

Finally, 23.2% of individuals that had force used against them were reported by at least one officer as threatening or attacking the officer, another officer, or another person.

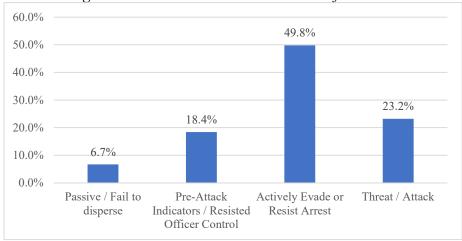


Figure 4.12. CSPD Most Serious Reason for Force

Table 4.9 shows the reported reasons for force for the entire CSPD, along with the four CSPD divisions separately. Some variation was noted across divisions, which is also displayed graphically in Figure 4.13. Specifically, when considering differences in trends across divisions, the most severe reason for use of force (i.e., physical attack or threat) has the largest variation. In Gold Hill Division, nearly 30% of individuals who had force used against them were reported by at least one officer as engaging in a physical attack or threat, compared to less than 18% of individuals who had force used against them in the Sand Creek Division.

	000000000000000000000000000000000000000	200000000000000000000000000000000000000		
	Passive / Fail to disperse	Pre-Attack Indicators / Resisted Officer Control	Actively Evade or Resist Arrest	Threat / Attack
CSPD (n= 2,084)	140	383	1,037	483
	(6.7%)	(18.4%)	(49.8%)	(23.2%)
Divisions				
Falcon (n=268)	14	50	134	62
	(5.2%)	(18.7%)	(50.0%)	(23.1%)
Gold Hill (n=747)	56	110	339	222
	(7.5%)	(14.7%)	(45.4%)	(29.7%)
Sand Creek (n=624)	32	123	351	110
	(5.1%)	(19.7%)	(56.3%)	(17.6%)
Stetson Hills (n=412)	35	94	197	82
	(8.5%)	(22.8%)	(47.8%)	(19.9%)

*Table 4.9. Individuals' Most Serious Reason for Force by Department and Division January 1, 2017 – December 31, 2020 (n=2,084)*⁷⁷

⁷⁷ For 41 of the 2,084 individuals (2%), information regarding resistance displayed was missing or insufficient to determine the reason.

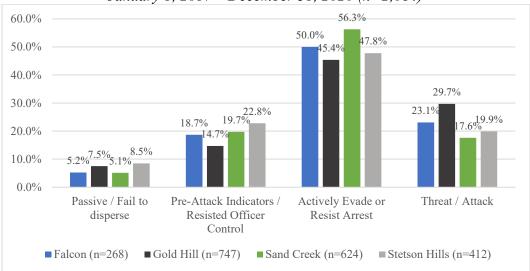


Figure 4.13. Individuals' Most Serious Reason for Force by Division January 1, 2017 – December 31, 2020 (n=2,084)

Finally, we examined gender and racial/ethnic differences in individuals' most serious reason for force reported by involved officers. Although small differences are noted between males and females and across racial/ethnic groups, these are not statistically significantly different using the chi-square statistical test. These slight differences are reported in Table 4.10 below. In summary, no single racial/ethnic group or gender is significantly more or less likely than another to vary in the severity of reason for use of force.

	1 = Passive /	2 = Pre-Attack Indicators / Resisted	3 = Actively Evade or Resist	4 = Threat /
	Fail to Disperse	Officer Control	Arrest	Attack
Gender				
Male (n=1,694)	100	305	871	383
	(5.9%)	(18.0%)	(51.4%)	(22.6%)
Female (n=347)	23	75	158	87
	(6.6%)	(21.6%)	(45.5%)	(25.1%)
Race/Ethnicity				
Black (n=475)	32	91	231	114
	(6.7%)	(19.2%)	(48.6%)	(24.0%)
Hispanic (n=345)	14	66	191	67
	(4.1%)	(19.1%)	(55.4%)	(19.4%)
White (n=1,180)	76	212	591	281
	(6.4%)	(18.0%)	(50.1%)	(23.8%)
Other (n=35)	2	9	15	7
	(5.7%)	(25.7%)	(42.9%)	(20.0%)

Table 4.10. Individuals' Most Serious Reason for Force by Gender and Race/Ethnicity
January 1, 2017 – December 31, 2020 (n=2,084)

4.4 Arrestees vs. Non-Arrestees

Some individuals who have force used against them are not taken into physical custody by police. These individuals may be released, taken to a hospital or mental facility, or some other alternative to arrest. To demonstrate, between 2017 and 2020, 77.6% of the 2,084 individuals who had force used against them (n=1,617) were also arrested. Table 4.11 reports individuals' demographic comparisons across these two groups (i.e., individuals who had force used against them and were arrested, compared to individuals who had force used against them but were not arrested). Although slight differences between the groups are evident by gender and race/ethnicity, these differences are not statistically significant.

	Arrested	Not Arrested
Gender		
Male (n=1,694)	1,329 (78.5%)	365 (21.5%)
Female (n=347)	280 (80.7%)	67 (19.3%)
Race/Ethnicity		
Black (n=475)	379 (79.8%)	96 (20.2%)
Hispanic (n=345)	260 (75.4%)	85 (24.6%)
White (n=1,180)	941 (79.7%)	239 (20.3%)
Other (n=35)	26 (74.3%)	9 (25.7%)

Table 4.11. Comparison of Gender and Race/Ethnicity of Arrestees and Non-Arrestees
Who Had Force Used Against Them

As expected, however, there are statistically significant differences in the maximum resistance level displayed by individuals who were arrested and not arrested. As shown in Figure 4.14, individuals that demonstrated active resistance or active aggression (resistance levels 3 and 4, respectively) were significantly more likely to be arrested compared to those with lower levels of maximum resistance shown.

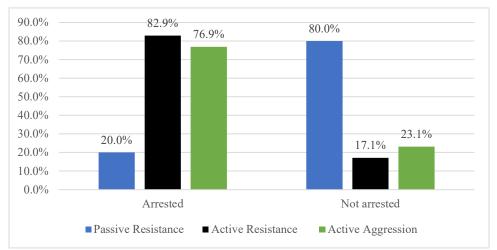


Figure 4.14. Comparison of Maximum Resistance Level Between Arrestees and Non-Arrestees Who Had Force Used Against Them

4.5 Racial/Ethnic Disparity (Benchmark) Analyses

It is important to consider how the patterns and trends in police use of force reported above vary across racial/ethnic groups. There are a variety of statistical techniques that can be employed to further examine the impact of race/ethnicity on police use of force. These statistical techniques were described in Section 3, including a description of what benchmark analyses are and how they are calculated. Here we briefly remind readers that benchmark analyses compare the percent of racial/ethnic groups who experience force to the same groups' representation in a comparison data source that provides an estimate of the "expected" rate of force. Identifying the appropriate "benchmark" population (or individuals at risk) in police disparity analyses has long been a source of contention.

The most common benchmark used to compare group rates of force is the racial/ethnic groups' representation in residential population statistics (e.g., census data), as these data are the most readily available and are widely used by the non-scientific community to demonstrate racial/ethnic disparities in criminal justice, education, and health outcomes. However, over two decades of research have detailed the numerous limitations of census-derived benchmarks to represent the population at risk of experiencing police use of force, or any other police action.⁷⁸ The difficulty with census-based comparisons is two-fold: first, the risk of force being used against members of any racial or ethnic group is unlikely to be calibrated directly with that group's representation in the residential population because different racial/ethnic groups vary in their frequency and nature of contacts with the police, along with their known or suspected involvement in criminal activity.⁷⁹ Second, aggregate-level census data do not measure the complexity and interactive nature of individuals' contacts with police, or the legal and extralegal characteristics that research shows puts individuals at risk of experiencing force, particularly individuals' *legally relevant behaviors* like resistance, presence of a weapon, and criminal behavior.⁸⁰

Simply stated, aggregate level comparisons of coercive police outcomes, like use of force to residential population figures by racial/ethnic group, do not consider the complexity of police-citizen interactions and cannot be used as a methodologically valid technique for measuring whether police are biased in their decision-making.⁸¹ Residential population benchmarks can provide a gross estimate of the racial/ethnic disproportionality in policing outcomes within a given jurisdiction and can provide insight about how different groups within a given jurisdiction experience police outcomes, but they cannot provide reliable information regarding the reasons for these differences, and therefore *cannot not be used to estimate the prevalence of police bias*.

Given the substantial, known weaknesses of Census-based benchmarks, we provide these comparisons in the analyses that follow only to establish an introductory examination of differences in CSPD use of force across racial/ethnic groups, and to demonstrate the volatility and limitations of examining racial/ethnic disparities using these methods. Residential population rates used within these analyses are based on the 2020 U. S. Census data.

⁷⁸ For example, see Alpert et al., 2004; Engel & Calnon, 2004; Ridgeway, 2007; Smith et al., 2019.

⁷⁹ For example, see Cesario et al., 2019; Geller et al., 2021; Fridell, 2004; Fryer, 2019; Shjarback & Nix, 2020; Worrall et al., 2021.

⁸⁰ For example, see: Engel et al., 2000; Garner et al., 2002; Klahm & Tillyer, 2010; Morgan et al., 2020.

⁸¹ For example, see: Alpert et al., 2004; Cesario et al., 2019; Fridell, 2004; Nix et al., 2017; Ridgeway, 2007; Smith et al., 2019; Tregle et al., 2019.

We next compare CSPD's use of force rates to several alternative benchmarks that many scholars and policing experts consider more valid when analyzing police use of force, including arrestees and crime suspects. Our second category of benchmarks is based on the population of individuals arrested by CSPD for criminal offenses (i.e., arrestee population). We examine the racial/ethnic composition of arrestees for all criminal offenses, but also explore a subset of arrestees for two additional benchmarks: arrestees for only Part I (serious) crimes, and arrestees for only Part I violent crimes. Of the benchmark data examined by our research team, the arrestee population is likely a stronger proxy measure for estimating those who are most at risk for having force used against them.⁸² As noted previously, 77.6% of the individuals who experienced force were arrested. An inherent problem, however, with using arrestees as a benchmark for use of force comparisons is that there may be disparities in who is arrested. This disparity would go undetected because the analysis begins with arrests (based on the inherent assumption that this measure is unbiased). However, if officers have disproportionately over-arrested racial and ethnic minorities (due to overt or implicit bias, deployment patterns, or other reasons), the use of arrest as a benchmark may underestimate the actual disparity between arrestees and rates of use of force.⁸³ Furthermore, some uses of force occur in situations that do not result in arrest, including approximately 22% of CSPD's use of force between 2017 and 2020. Both issues indicate that arrestbased benchmarks are not without limitations as proxy measures for the population at risk of having force used against them.⁸⁴

The final data source used for benchmarks analyses is criminal suspects data, which includes persons described by victims to the police when reporting a crime. That is, when crimes are reported to the CSPD by the public, the race/ethnicity of the suspect (if known) is captured. The known criminal suspect population likely represents a better proxy measure of the population at risk of police interactions that may result in the use of force compared to simple residential population but does not have the same inherent problems as using arrest data where racial/ethnic disparities may already exist. Therefore, we examine the racial/ethnic composition of three types of criminal suspects: Suspects of all reported criminal offenses, suspects of reported Part I (serious) criminal offenses, and suspects of reported Part I *violent* crimes. These data were obtained from the CSPD records management system for the four-year period examined.

Again, the use of this benchmark data reduces the potential of police-related bias associated with official arrest data because the police collect, but do not generate, information about the race of criminal suspects.⁸⁵ Instead, community members are typically the source of information for most criminal suspects, through reported crimes and calls for service. Furthermore, the information provided by citizens when reporting crimes and disorder aligns better with the population at risk of police contact and subsequent use of force compared to residential population.⁸⁶ It is possible, however, that the public introduces biases of their own which may under- or over-report certain activities that are related to the likelihood of use of force.⁸⁷ Further, this measure captures only information about reported crimes when

⁸² For example, see Davis et al., 2018; Garner et al., 2018; Hickman et al., 2008.

⁸³ For example, see Cesario et al., 2019; Geller et al., 2021; Knox et al., 2020; Knox & Mummolo, 2020.

⁸⁴ For example, see Fryer, 2020; Shjarback & Nix, 2020; Tregle et al., 2019.

⁸⁵ For example, see Ridgeway & MacDonald, 2010; Tregle et al., 2019.

⁸⁶ For example, see Ridgeway & MacDonald, 2010.

⁸⁷ For example, see Klinger & Bridges, 1997; Ridgeway & MacDonald, 2010.

the suspect is known (or seen) by the reporting party. As a result, the measure does not accurately capture the race/ethnicity of all who commit crime (e.g., burglary and other property crime suspects are often unknown to the reporting victims). This proxy measure, therefore, likely better reflects the race/ethnicity of perpetrators of violent crimes (situations where an offender is more likely to be known or at least seen by the victim). Despite these possible shortcomings, it is likely that the criminal suspect data creates the most valid benchmark comparisons for use of force analyses.⁸⁸

As a result, we recommend that the CSPD focus more directly on the findings generated from the analyses reported below that use criminal suspect data as the benchmark comparison. Note, however, that although some benchmarks are clearly better than others, none are without limitations. We address this issue by providing results from multivariate analyses (beyond benchmark comparisons) at the end of this section. First, however, we present the benchmark results using three different data courses (census, CSPD arrests, and reported criminal suspects) to create seven different benchmarks:

For the analyses that follow, seven distinct benchmarks are compared:

- (1) Percent Residential Census Population
- (2) Percent Arrestee Population (all crimes)
- (3) Percent Arrestee Population (Part I crimes)⁸⁹
- (4) Percent Arrestee Population (Part I violent crime)⁹⁰
- (5) Percent Suspect Population (all crimes)
- (6) Percent Suspect Population (Part I crimes)
- (7) Percent Suspect Population (Part I violent crime)

The analytical steps followed to create the disproportionality indices (DI) and disparity ratios (DR) to estimate racial/ethnic disparities in use of force were described in detail in Section 3. Using the percent of individuals who had force used against them as the numerator and a series of benchmarks as denominators, we present citywide disparity ratios in the use of force by race and ethnicity (Black and Hispanic) relative to White, non-Hispanic individuals. We did not create disparity ratios for other racial/ethnic groups due to limited statistical power and the lack of stability associated with small denominators (98.2% of all use of force with individuals with known race/ethnicity involved Black, White, or Hispanic individuals).

4.5.1 Disparity Ratio Findings—CSPD Overall

When using census population as the denominator, the White disproportionality index is 0.87, while the Black disproportionality index is 4.12, and the Hispanic disproportionality index is 0.9. As shown in Table 4.12 below, the percent of White individuals who had force used against them was 56.5%; for Black and Hispanic individuals, the percentages were 22.9% and 16.6%, respectively. The disparity ratio for Black individuals was 4.75 (4.75 = 4.12/0.87). This means Black individuals had force used against them at a ratio that was 4.75 times greater than White use of force compared to the White population ratio. *This finding shows that use of force for Black individuals compared to White individuals is highly*

⁸⁸ For example, see Ridgeway & MacDonald, 2010; Smith et al., 2017; Tregle et al., 2019.

⁸⁹ According to the FBI Uniform Crime Reports (UCR), Part I crimes include: criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson.

⁹⁰ UCR Part 1 Violent crimes include: criminal homicide, forcible rape, robbery, and aggravated assault.

disparate relative to their respective representation in the residential population. Conversely, for the entire city, the disparity ratio for Hispanic individuals was 1.04 times higher compared to the White (non-Hispanic) use of force population ratio. That is, *there was essentially no difference between the likelihood of use of force for Hispanic individuals compared to White individuals based on residential population statistics.* In summary, when the residential population is used as a benchmark comparison to estimate risk for police use of force, Black individuals, but not Hispanic individuals, are overrepresented in use of force reported in the City of Colorado Springs. As noted earlier, however, the residential population benchmark is fraught with several unsupported assumptions and limitations that do not withstand empirical scrutiny; residential population-based comparisons fail to adequately consider legitimate differences across racial/ethnic groups in their *risks* of experiencing force used by the police. *Therefore, these findings cannot be interpreted as evidence of police bias.*

Next, we present analyses assessing use of force by race/ethnicity while accounting for the race/ethnicity of the CSPD arrestee population from 2017 to 2020.⁹¹ When using race/ethnicity of arrestees as the benchmark or denominator, compared to the actual use of force counts, we are assessing how frequently individuals of different racial/ethnic groups have force used against them relative to their representation in the arrestee population. The disproportionality index for White individuals when using arrest as the benchmark was 0.89 (slightly under a 1-to-1 ratio of uses of force relative to arrests). For Black individuals, the disproportionality index was 1.22, while for Hispanic individuals, the disproportionality index was 1.22, while for Hispanic individuals, the disproportionality index was 1.27 (slightly over a 1-to-1 ratio). As shown below in Table 4.12 and Figure 4.15, the disparity ratio for Black individuals (Black DI relative to White DI) drops from 4.75 (using residential population) to 1.36 (using arrestee population).

This illustrates that using a different benchmark (arrests) produces a dramatically different interpretation of racial/ethnic disparity in police use of force. When the benchmark is changed to only Part 1 (most serious) arrests, the disparities are even further reduced (DR = 1.08). When we examine the arrestee-based benchmark for just those arrested for Part I violent crimes, the disparity ratio for Black individuals is less than 1.0, indicating *White individuals were actually more likely to have force used against them than Black individuals based on their representation in the violent crime arrestee population*. Although the disparity ratio for Black individuals is evident here. The disparity ratio decreases when use of force against Hispanic individuals is compared to Part I arrests and even more so for Part I violent arrests (DR = 0.96, essentially a 1-to-1 ratio). Note, however, that just as residential population comparisons may inflate the likelihood of finding racial disparities, the use of arrestee population comparisons may underestimate it.

The third and final data set used to create benchmarks is criminal suspects. The race/ethnicity recorded for individuals reported as criminal suspects (by the public reporting criminal events) is used as a proxy measure to estimate individuals at risk of having force used against them. Using all crime suspects as the benchmark, use of force rates against Black and Hispanic individuals were somewhat higher than use of force rates for White individuals (DR = 1.33 for Black individuals, DR = 1.18 for Hispanic individuals). These disparity ratios are closer to one when the criminal suspects benchmark is limited to Part I

⁹¹ There were 77,134 total arrests in Colorado Springs from 2017 to 2020. Each arrestee is person-event specific. That is, each person-event is one arrest, regardless of how many officers are included on the arrest report, how many charges are levied against the arrestee, or whether the arrestee appears more than once in the arrestee data.

criminal suspects. Finally, the disparity ratios based on Part I violent crime suspects show that Black and Hispanic individuals were less likely than White individuals to have force used against them; Black individuals were 1.25 times less likely than White individuals to have force used against them (DR = 0.81), while Hispanic individuals were slightly less likely (1.08 times) than White individuals to have force used against them (DR = 0.81).

	Percent Race/Ethnicity			Disproportionality Indices			Disparity Ratios	
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic
% Use of Force (N=2,120) ⁹²	56.5% (1200)	22.9% (482)	16.6% (352)					
Benchmark 1: % Residential Population	65.3%	5.5%	18.4%	0.87	4.12	0.90	4.75	1.04
Benchmark 2: % Arrestee Population (All crimes)	63.4%	18.7%	15.5%	0.89	1.22	1.07	1.36	1.20
Benchmark 3: % Arrestee Population (Part I Crimes)	62.0%	20.0%	15.4%	0.91	1.13	1.08	1.08	1.18
Benchmark 4: % Arrestee Population (Part I Violent Crimes)	55.7%	24.5%	17.0%	1.02	0.93	0.98	0.91	0.96
Benchmark 5: % Suspect Population (All Crimes)	53.6%	17.1%	13.4%	1.05	1.33	1.24	1.33	1.18
Benchmark 6: % Suspect Population (Part I Crimes)	46.7%	16.9%	12.1%	1.21	1.34	1.38	1.11	1.14
Benchmark 7: % Suspect Population (Part I Violent Crime)	50.7%	25.0%	16.0%	1.12	0.91	1.04	0.81	0.93

Table 4.12. Use of Force: CSPD Race/Ethnicity Disparity Ratios by Benchmark

For ease of comparison and interpretation, Figure 4.15 visually displays the disparity ratios for Black and Hispanic individuals based on each of the seven benchmarks reported in Table 4.12. The red line indicates no racial/ethnic disparities detected (DR = 1.0). Bars that are above the 1.0 threshold show that Black and Hispanic individuals have more force used against them than expected (compared to the respective benchmark), while bars that fall under the red line demonstrate less force than would be expected. Based on the known limitations of the benchmarks used, the research team recommends that while CSPD executives should consider the findings of all analyses, it should be noted that benchmark findings using criminal suspect data likely have more validity, as they are based on a stronger proxy measure of the population of individuals *at risk* of being involved in interactions with police that subsequently result in the use of force. By comparison, residential Census data creates the least valid proxy measure, as it does not measure individuals' risk for interactions with police.

The criminal-suspect based benchmarks show that Blacks were 1.3 times more likely than Whites to have force used against them in comparison to the racial/ethnic percentages of all criminal suspects, 1.1 times more likely (i.e., no measurable disparity) in comparison to criminal suspects for Part I crimes, and *less likely* than Whites to have force used against them in comparison to the racial/ethnic percentages of criminal suspects for Part I violent crimes (disparity ratio=0.81). The pattern for disparity

⁹² Not displayed in tabular or graphic format are 86 cases of "other" or unknown race/ethnicity. Furthermore, these analyses are based on all 2,120 uses of force, including all K9 uses of force (as described in detail in Section 3).

ratios based on arrest-related benchmarks is similar. It is only the comparisons to residential population statistics that show higher disparity ratios.

The disparity ratios for Hispanic individuals were quite low across all benchmarks, ranging from 0.93 to 1.20. Collectively, these findings indicate that Hispanic individuals were essentially equally likely to have force used against them (or even *less* likely) compared to White individuals.

In summary, these findings, particularly for Black individuals, are consistent with other scholarly research that has compared use of force benchmarks to one another and demonstrated that comparisons based on population statistics nearly always show large racial/ethnic disparities in use of force, while benchmarks that better capture actual risk of experiencing force show reduced or eliminated racial/ethnic disparities.⁹³ As illustrated, the disparity ratios created using non-Census data sources are all close to 1.0, indicating that there is little or no disparity between White individuals and Black or Hispanic individuals' likelihood of having force used against them when different benchmarks are used. For several of the benchmarks, the disparity ratios are less than 1.0, indicating that Black and Hispanic individuals were less likely to have force used against them compared to White individuals given their representation in the violent arrestee and violent criminal suspect populations.

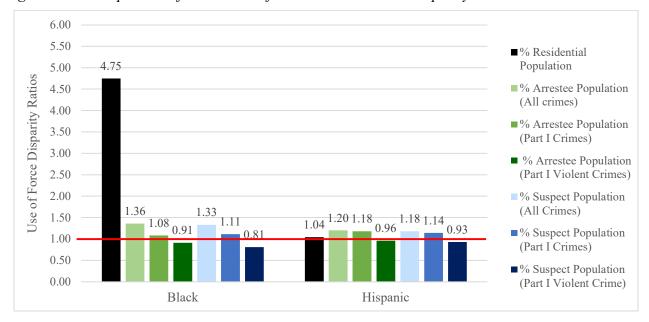


Figure 4.15. Comparison of CSPD Use of Force Racial/Ethnic Disparity Ratios Across Benchmarks

4.5.2 Disparity Ratios by CSPD Divisions

The analyses below examine use of force trends by CSPD's four organizational divisions.⁹⁴ Table 4.13 shows the counts of individuals who had force used against them by division during the four-year study period, along with the percent by racial/ethnic groups. It is noteworthy that certain divisions had higher

⁹³ For example, see Cesario et al., 2019; Fryer, 2016; Geller et al., 2021; Ross et al., 2020; Smith et al., 2019; Tregle et al., 2019.

⁹⁴ A small number of use of force incidents (n=33) could not be mapped to CSPD divisions based on missing location data.

percentages of force by race/ethnicity than did others (e.g., Falcon Division had the highest percentages of use of force against White individuals; Gold Hill and Stetson Hills Divisions had the highest percentages of use of force against Black individuals, and Stetson Hills had the highest percentages of use of force against Hispanic individuals).

For the benchmark analyses at the division level that follow, we examine only three benchmarks:

- (1) Percent Residential Census Population
- (2) Percent Arrestee Population (all crimes)
- (3) Percent Suspect Population (all crimes)

We were unable to examine the arrestee and suspect populations for only Part I and Part I violent crimes because of the smaller base population when examined by division. The reduced number of cases limits the statistical power for the analyses.

When measuring disparity ratios based on residential population across the four CSPD divisions, each shows racial/ethnic disparities in use of force for Black individuals compared to White individuals. These are displayed in Table 4.13. For example, within the Gold Hill Division, Black individuals comprise only 4.2% of the residential population but account for approximately 23% of all uses of force (DR = 6.62 when compared to the disproportionality index for White individuals). This is roughly interpreted as Black individuals in Gold Hill Division being 6.6 times more likely than White individuals to have force used against them, when compared to their representation in the residential population. Falcon and Stetson Hills have similar disparity ratios of 4.88 and 4.64, while Sand Creek, with the largest percentage of Black residential population across divisions, has the lowest disparity ratio across divisions (DR = 2.34). As noted previously, when the denominator (in this case, the Black residential population) is small, the disproportionality indices are likely to be inflated and unstable.

Likely as a result of their higher representation in residential population statistics, the disparity ratios for Hispanic individuals were lower across all divisions, and less than one in Gold Hill and Sand Creek, indicating Hispanic individuals were less likely than White individuals to have force used against them in comparison to their proportion of residential population statistics. As noted previously, disparity ratios based on disproportionality indices using residential census population as benchmarks fail to account for the likelihood of contact with police that would lead to a greater risk of use of force. Therefore, it is important to consider these analyses in comparison to other potentially more valid benchmarks to see if the observed patterns remain.

The next examination of disparity ratios uses all arrestees (by race/ethnicity and division) as the benchmark. Using this comparison, as shown in Table 4.13, three divisions continue to have disparity ratios greater than 1.0 for Black individuals compared to White individuals: Gold Hill (DR = 1.54), Sand Creek (DR = 1.35), and Stetson Hills (DR = 1.27), while the disparity ratio for Falcon Division is nearly one. Taken together, when using arrestee population as the benchmark, the disparity ratios for Black individuals are more similar across division and smaller than the disparity ratios produced with the residential population benchmark. The disparity ratios for Hispanic individuals based on the arrestee benchmark are very small (approximately 1.1) for all divisions with the exception of Sand Creek Division, which has a disparity ratio of 1.35 for Hispanic individuals. Across all divisions, however, low levels of racial disparities were detected. Recall however, that the arrestee benchmark is also limited, in that it does not account for possible police bias in the initial arrest decision.

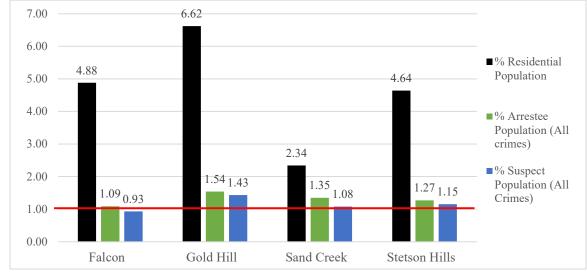
Table 4	4.13. Divisi		2					
Falcon	Perce	nt Race/E	thnicity			ity Indices	Dispar	ity Ratios
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic
% Use of Force (N=276)	69.6%	13.4%	14.1%					
78 Use of Force ($N=270$)	(192)	(37)	(39)					
Benchmark 1: % Residential Population	74.3%	2.9%	12.1%	0.94	4.57	1.17	4.88	1.25
Benchmark 2: % Arrestee	63.4%	18.7%	15.5%	0.97	1.05	1.08	1.09	1.12
Population (All crimes)	_							
Benchmark 3: % Suspect Population (All Crimes)	62.0%	20.0%	15.4%	1.27	1.18	1.30	0.93	1.02
Gold Hill	Perce	Percent Race/Ethnicity		Disprop	portional	ity Indices	Dispar	ity Ratios
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic
% Use of Force (N=754)	59.0% (445)	23.1% (174)	11.5% (87)					
Benchmark 1: % Residential Population	71.2%	4.2%	14.9%	0.83	5.49	0.77	6.62	0.93
Benchmark 2: % Arrestee Population (All crimes)	68.0%	17.3%	12.6%	0.87	1.34	0.91	1.54	1.05
Benchmark 3: % Suspect Population (All Crimes)	58.1%	15.9%	11.1%	1.02	1.45	1.04	1.43	1.02
Sand Creek	Perce	nt Race/E	thnicity	Disprop	portional	ity Indices	Dispar	ity Ratios
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic
	46.2%	27.9%	23.5%					
% Use of Force (N=638)	(295)	(178)	(150)					
Benchmark 1: % Residential Population	44.0%	11.3%	33.8%	1.05	2.46	0.70	2.34	0.66
Benchmark 2: % Arrestee Population (All crimes)	53.4%	23.9%	20.1%	0.87	1.17	1.17	1.35	1.35
Benchmark 3: % Suspect Population (All Crimes)	40.2%	22.5%	16.9%	1.15	1.24	1.39	1.08	1.21
Stetson Hills	Perce	nt Race/E	thnicity	Disproj	portional	ity Indices	Dispar	ity Ratios
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic
% Use of Force (N=418)	60.5% (253)	20.1% (84)	16.3% (68)					
Benchmark 1: % Residential Population	67.4%	4.8%	16.3%	0.90	4.16	1.00	4.64	1.12
Benchmark 2: % Arrestee Population (All crimes)	64.7%	16.9%	15.5%	0.94	1.19	1.06	1.27	1.13
Benchmark 3: % Suspect								

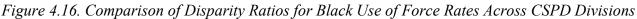
Table 4.13. Division Level Use of Force Disparity Ratios

The results of the disparity ratio analysis based on all criminal suspects are described below and displayed in Table 4.13 above. Using criminal suspects as the benchmark for the creation of disproportionality indices, the disparity ratios demonstrate that use of force against Black individuals was highest in Gold Hill (DR = 1.43), slightly greater than 1.0 in two divisions (Sand Creek, DR = 1.08; Stetson Hills, DR = 1.15), and just under 1.0 in Falcon. This demonstrates that, in three of the four divisions, little to no racial/ethnic disparities were detected in use of force for Black individuals relative to White individuals using criminal suspects as a proxy measure for those at risk for use of force. For Hispanic individuals, a similar pattern emerges, with the highest disparity ratio being 1.21 in Sand Creek and 1.16 in Stetson Hills, and the other two divisions essentially equal to 1 (DR = 1.02).

As noted previously, while the residential population benchmark likely overestimates racial/ethnic disproportionality, the arrestee benchmark possibly underestimates it. Examining disparity ratios in use of force across racial/ethnic groups while using the criminal suspect population as a benchmark likely produces findings with the strongest validity.

Again, these results are graphically presented to aid in the interpretation and comparison of finings. Figure 4.16 below displays the disparity ratios for Black individuals (compared to White individuals) across three benchmarks for each of the four CSPD Divisions. As demonstrated, when residential population is used as the denominator, the disparity ratios are especially high for Black individuals. The lowest disparity ratios across CSPD Divisions are demonstrated using criminal suspects as the benchmark. Based on these analyses, Black individuals were 1.4 times more likely than White individuals to have force used against them in Gold Hill Division, while the three remaining CSPD Divisions demonstrated less or no racial disparities.





Likewise, Figure 4.17 below displays the disparity ratios for Hispanic individuals compared to White individuals. When considering Hispanic individuals, the residential population benchmarks, while still slightly above 1.0, were much lower than those observed for Black individuals. There remains evidence of modest racial disparities present in two of the four Divisions when the criminal suspect population is used as the benchmark. Specifically, Hispanic individuals were roughly 1.2 times more likely than White individuals to have force used against them in Sand Creek and Stetson Hills Divisions, compared to their representation in the reported criminal suspects population. Based on the citywide findings however, it is likely that these racial disparities would be further reduced if only Part I or Part I violent criminal suspects had been examined.

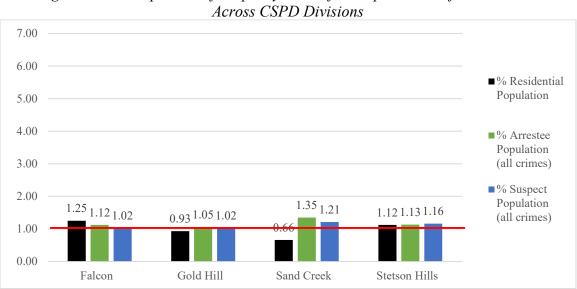


Figure 4.17. Comparison of Disparity Ratios for Hispanic Use of Force Rates Across CSPD Divisions

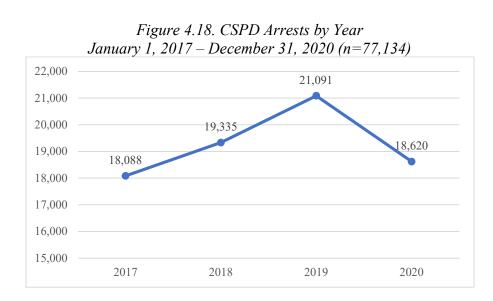
4.6 Predicting Force During Arrests

As previously reported, nearly 78% of individuals who had force used against them were also arrested. During our four-year study period, CSPD officers arrested 77,134 individuals during unique encounters with police. In this section, we examine arrest trends, compare the percent of arrests that resulted in use of force over time, by CSPD division, and by racial/ethnic and gender groups. Thereafter, the remainder of this section focuses on using multivariate statistical analyses to better understand what characteristics influence whether arrest incidents also involve use of force.

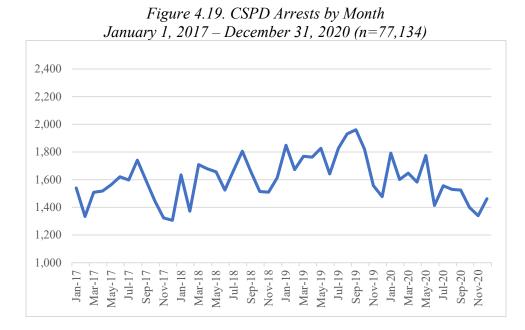
4.6.1 Arrest Trends

Given that use of force is more common among situations that involve arrests⁹⁵, the overall increase in CSPD use of force from 2017 to 2020 is important consideration in the context of the department's arrest trends. Figure 4.18 graphically displays the number of arrests CSPD officers made by year from 2017 to 2020. As shown, arrests steadily increase from 2017 to 2019, with a 6.9% increase from 2017 to 2018, and a 9.1% increase from 2018 to 2019, for a total percent change over these three years of 16%. The increase in force during the same time period was 20.4%. In 2020, however, the number of arrests declined by 11.7% from 2019; however as previously noted, the number of uses of force increased 2.9% during this year.

⁹⁵ For example, see Garner et al., 2018; Hickman et al., 2008.



To better understand how and why the overall CSPD arrest patterns compared to the use of force patterns deviate in 2020, additional time series analyses were conducted on the monthly arrest data (graphically displayed in Figure 4.19 below). It is possible that both arrest and use of force patterns in 2020 are an anomaly, based on the response to the COVID-19 pandemic, the economic downturn, and widespread protests and civil unrest related to high profile police use of force events nationally. Again, four specific months (August 2019, March 2020, June 2020, and July 2020) were identified to conduct interrupted time series analyses to determine if specific events within these months may have interrupted the previous arrest pattern.



The findings of the time series analyses show that – similar to the use of force patterns – the timing of the officer-involved shooting of De'Von Bailey (August 2019) demonstrated no significant changes in the time series (for total arrests, or race-specific arrests). Unlike the use of force trends however, the onset of COVID-19 (March 2020) did coincide with a statistically significant 7% reduction for total arrests, including arrests of both White and Black suspects; Hispanic arrests did not shift post COVID.

The impact following the death of Floyd (June 2020) on the monthly patterns of arrests also showed significant reductions for all racial/ethnic groups, along with reductions in arrests following the enactment of SB-217 (July 2020). These changes are graphically displayed in Figure 4.20, where the red vertical lines represent statistically significant reductions in the pre-existing trend of monthly arrest counts; the black vertical line shows the timing of a non-statistically significant event.

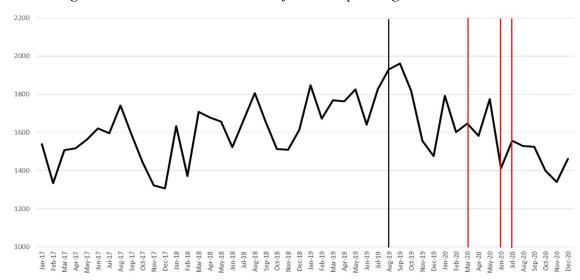


Figure 4.20. Total Arrest Trend Shifts Corresponding with Seminal Events

Comparing the arrest patterns to use of force trends in 2020 demonstrates that arrests were significantly influenced (i.e., reduced) by the onset and response to the COVID-19 pandemic in mid-March, however reductions in use of force were not significant until after the officer-involved death of George Floyd in late May. It therefore appears likely that the CSPD experienced significant reductions in uses of force, until a different seminal event (the death of George Floyd) occurred several months later. It is also noteworthy that while the shifts in arrests were statistically significant (in the post-George Floyd and SB-217 periods), the effect sizes ranged somewhere between small to slightly moderate (-10.6% for post-June 2020 and -10.4% for post-July 2020) – suggesting that these changes were not as substantial as the reductions in use of force trends.

4.6.2 Use of Force during Arrests

The overwhelming majority of arrests by CSPD are accomplished without the use of force; on average, approximately 2.1% of arrests resulted in the use of force from 2017 to 2020. Figure 4.21 shows the percent of CSPD arrests yearly that resulted in use of force. As shown, the percent of arrests that resulted in force steadily increase from 1.9% of arrests in 2017 to 2.3% of arrests in 2020. This is a percentage change increase of 21.1%, which is very similar to the percent change in the number of individuals who had force used against them by year presented at the beginning of Section 4.

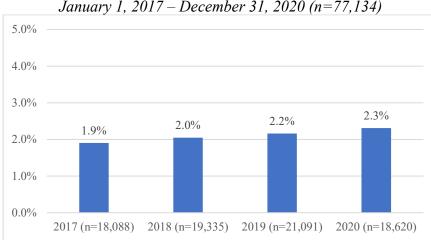


Figure 4.21. Percent of Arrests Resulting in Use of Force by Year January 1, 2017 – December 31, 2020 (n=77,134)

Figure 4.22 shows the percent of CSPD arrests that resulted in use of force from 2017 to 2020 by month. Again, there is no consistent pattern of increase or decrease in the use of force during arrests, but rather considerable variation over time. At its lowest, 1.5% of arrests resulted in force in April 2018, while June 2020 accounted for the highest percentage of arrests resulting in force (4.2%), which is likely related to CSPD's response to resistance shown during the protests and civil unrest following the death of George Floyd in Minneapolis. This increase in the monthly percentage of arrests that involved use of force was followed by an immediate decrease the following month (July 2020) that corresponded with the enactment of SB-217.

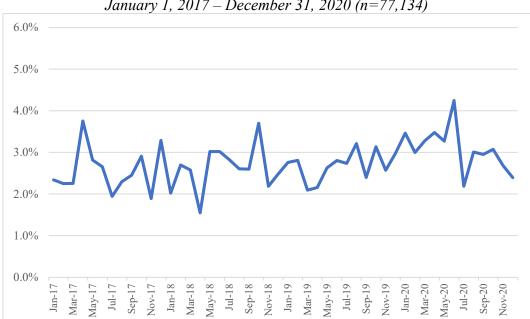
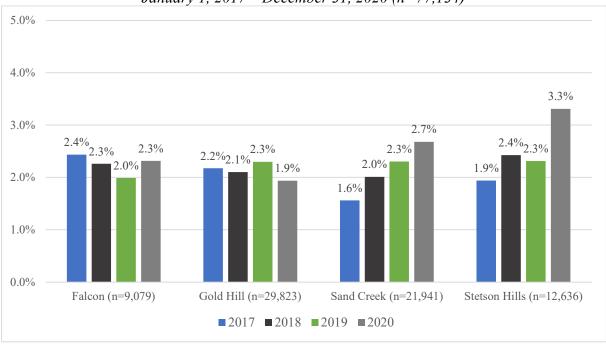
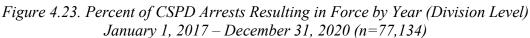


Figure 4.22. Percent of Arrests Resulting in Use of Force by Month January 1, 2017 – December 31, 2020 (n=77,134)

Figure 4.23 presents the percent of arrests yearly that involve the use of force across the four CSPD divisions. First, it is important to note that there is considerable variation in the number of arrests across CSPD divisions. Gold Hill Division had the highest number of arrests for the four-year period

(n=29,823) while Falcon Division had the least (n=9,079). Second, the overall percentage of arrests that also involved the use of force varied across CSPD division. For example, in Falcon and Gold Hill Divisions, the percent of arrests involving force was fairly consistent over time, although Falcon increased in 2020, while Gold Hill decreased. In Sand Creek Division, the percent of arrests that involved force steadily increased from 1.6% in 2017 to 2.7% in 2020. Finally, in Stetson Hills, the percent of arrests that involved force increased from 1.9% to 3.3%, the highest of any division in all four years.





One of the most likely reasons for this variation is the size and community characteristics of each division. Figure 4.24 below displays comparisons of five items of interest across the four divisions:

- 1) Percentage of total Colorado Springs residential population, 2020 Census
- 2) Percentage of all reported criminal offenses, 2017-2020
- 3) Percentage of all reported Part I Violent crime, 2017-2020
- 4) Percentage of all CSPD arrests, 2017-2020
- 5) Percentage of all CSPD uses of force, 2017-2020

As displayed, although Stetson Hills accounts for the highest percent of the residential population (n = 186,291 estimated residents), it has a smaller share of the crime and police activity than Gold Hill and Sand Creek divisions, which have higher reported levels of offenses and violent crime than their share of the residential population (Gold Hill = 93,289 estimated residents; Sand Creek = 90,389 estimated residents). Falcon also has lower percentages of offenses and violent crime than their share of the residential population (n = 108,863 residents).

Of note, Gold Hill Division appears different than the other three divisions in terms of their percentages of arrests and use of force. While roughly 30% of the citywide reported criminal offenses and violent crimes are reported in Gold Hill, this division represents nearly 39% of citywide arrests and 36% of uses

of force. Gold Hill is the only division that has a higher percentage of arrests and force than their share of criminal offenses and violent crimes. On a more positive note, Gold Hill is the only division that show a lower percentage of department-wide uses of force compared to their share of arrests.

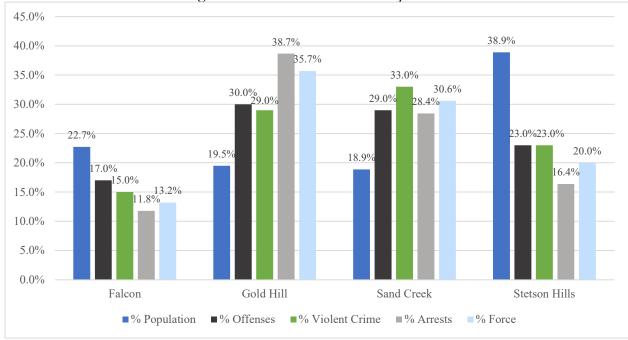


Figure 4.24. CSPD Division Comparison

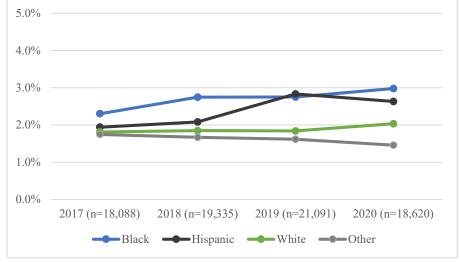
The gender and racial/ethnic composition of arrestees who also had force used against them is also considered. As shown in Table 4.14 below, a statistically significant larger percentage of male arrestees had force used against them (across all four years examined) compared to female arrestees.

	2017-2020 (n=77,134)	2017 (n=18,088)	2018 (n=19,335)	2019 (n=21,091)	2020 (n=18,620)
Overall	2.1%	1.9%	2.0%	2.2%	2.3%
Gender					
Male	2.5%*	2.3%*	2.4%*	2.5%*	2.6%*
Female	1.2%	0.9%	1.2%	1.3%	1.6%
Race/Ethnicity					
Black	2.7%*	2.3%	2.7%*	2.7%*	3.0%*
Hispanic	2.4%	1.9%	2.1%	2.8%	2.6%
White	1.9%	1.8%	1.8%	1.8%	2.0%
Other	1.6%	1.7%	1.7%	1.6%	1.5%

Table 4.14. Percent of CSPD Arrests Resulting in Force by Gender and Race/Ethnicity (* p<.05)	Table 4.14. Percent o	f CSPD Arrests	Resulting in Force	by Gender and I	<i>Race/Ethnicity</i> (* $p < .0$	5)
---	-----------------------	----------------	--------------------	-----------------	-----------------------------------	----

In addition, three of the four most recent years examined showed statistically significant racial/ethnic differences in the percentage of arrestees that also had force used against them. Specifically, Black and Hispanic arrestees were significantly more likely to have force used against them during arrest incidents, compared to White arrestees and individuals of another race/ethnicity.

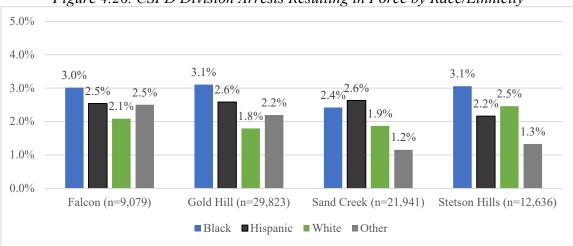
Figure 4.25 below graphs the percentage of arrestees yearly that were involved in use of force incidents by race/ethnicity. As shown, the trends are relatively consistent within racial/ethnic groups, with the exception of Hispanic arrestees. For Hispanic individuals involved in an arrest, the percentage who also had force used against them increased 33% during a one-year time period (from 2018 to 2019). In addition, for Black arrestees, the percentage who also had force used against them steadily increased 30% across the four-year period.

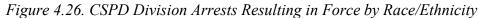




Racial/ethnic differences in the percent of arrests resulting in force are further explored at the division level in Table 4.15 and graphically displayed in Figure 4.26. For Gold Hill Division, Black arrestees were significantly more likely to have force used against them compared to arrestees of other races/ethnicities. Similar trends are evident in Falcon and Stetson Hills Divisions, but not statistically significant. In Sand Creek Division, Hispanic arrestees and, to a slightly lesser degree, Black arrestees were significantly more likely to have force used against them compared to White arrestees and arrestees of other races/ethnicities. Table 4.15 also shows that males were significantly more likely to have force used against them compared to White arrestees and arrestees and arrestees and attrestees. Table 4.15 also shows that males were significantly more likely to have force used against them than females across all divisions.

	Falcon (n=9,079)	Gold Hill (n=29,823)	Sand Creek (n=21,941)	Stetson Hills (n=12,636)
Overall	2.2%	2.1%	2.1%	2.5%
Gender				
Male	2.7%*	2.6%*	2.5%*	2.8%*
Female	1.2%	1.1%	1.2%	1.8%
Race/Ethnicity				
Black	3.0%	3.1%*	2.4%*	3.1%
Hispanic	2.5%	2.6%	2.6%	2.2%
White	2.1%	1.8%	1.9%	2.5%
Other	2.5%	2.2%	1.2%	1.3%





4.6.3 Multivariate Analyses

Scholarly research and police practitioners recognize that many factors predict when arrest encounters may escalate to physical force and particularly what prompts officers to decide to use force. Members of the public often focus on a single factor – an individual's race/ethnicity, but to understand the true impact of an individual's race/ethnicity on the likelihood of having force used against them, race/ethnicity must be examined while holding the other potential explanatory factors constant. The primary analytical tool used to do this is multivariate statistical modeling, which was described in detail in Section 3 of this report. We examine use of force by CSPD officers based on four years of CSPD arrest data (January 2017 – December 2020) to determine the factors that predict which arrests result in force. Of primary interest is whether subject race/ethnicity is a statistically significant predictor of force used once the other relevant variables (of those available in the CSPD arrest data) are controlled.

The variables that are included in these models are based on academic research that has shown their influence on police use of force and, therefore, should be statistically controlled to examine the variable of interest (e.g., arrestee's race/ethnicity). We briefly summarize the scholarly literature for the impact of legal variables, situational or incident characteristics, individual characteristics, and community characteristics on the likelihood of use of force during arrest encounters. We also describe how the variables in each of these categories are measured in the current models.

Descriptive Analyses

From January 1, 2017 to December 31, 2020, CSPD officers made 77,134 total arrests.⁹⁶ Among these arrests, 1,626 use of force events (individual-incident specific) occurred.⁹⁷ Our analyses, however, are

⁹⁶ Arrests are individual-incident-date specific; that is, each individual on each date of arrest represents a single arrest, regardless of how many charges were filed against the individual on a given incident/date of arrest.

⁹⁷ Whether the denominator is 77,134 arrests or 72,208 arrests, we have complete data for 1,626 uses of force in these data. The two greatest sources of lost data were age (N = 380) due to no reliable date of birth and poor geocoding due to an incomplete address (N = 3,655 no addresses that geocoded). In either case, uses of force comprised between 2.1 to 2.2 percent of all arrests.

based on 72,208 arrests for which we have complete data. Table 4.16 shows descriptive statistics for the dependent and independent variables in the multivariate model that follows. The dependent variable of interest is whether arrest resulted in use of force, which occurred in 2.1% of arrests (n=1,626).⁹⁸

Variables	Mean	Standard Deviation	Minimum	Maximum
Force	.022	.146	0	1
Legal Characteristics		-		
Resisting arrest charge	.120	.322	0	1
Total arrests (4-years)	4.66	6.32	1	59
Incident Characteristics	-			
2017	.236	.425	0	1
2018	.250	.433	0	1
2019	.273	.445	0	1
2020	.239	.427	0	1
Quarter 1	.253	.426	0	1
Quarter 2	.254	.425	0	1
Quarter 3	.263	.440	0	1
Quarter 4	.229	.420	0	1
Weekend	.259	.438	0	1
Nighttime	.460	.498	0	1
Multiple arrestees	1.48	2.14	1	40
Arrestee Characteristics				
Male	.698	.458	0	1
Age	33.26	12.25	10	70
White	.635	.481	0	1
Black	.187	.389	0	1
Hispanic	.154	.360	0	1
Other	.015	.121	0	1
Community Characteristics $(N = 31)$	·	·	·	·
Economic Disadvantage	.000	1.00	-1.18	2.57
Residential Mobility	.235	.053	.140	.360
Population Ages 15-24	.075	.013	.06	.10
Average Violent Crime Rate (per 1,000)	595.6	920.5	65.4	5,271.4

Table 4.16. Descriptive Statistics: Arrests and Use of Force within Arrests (n=72,208)

⁹⁸ For arrest analyses, it is virtually impossible to distinguish officer characteristics that correspond with the arrest. This is because only one officer, the reporting officer, is required to fill out an arrest report. In circumstances where two or more officers are involved in the arrest decision, only a single officer is required to populate the report. This serves in contrast to uses of force, for example, where every officer who used force is required to fill out the report (even if it is on the same suspect). Thus, for multivariate analyses of officer characteristics that correspond with arrests, we can only collect information on the reporting officer – which leads to a problem of omitted variable bias (because not all relevant characteristics of all of the officers involved in the arrest) are captured. Thus, for precision we excluded officer characteristics from these analyses.

Legal Characteristics

In terms of legal characteristics (i.e., legal factors associated within the arrest) that could potentially be associated with uses of force, we measured two key variables. First, for the individual involved in the arrest, how many *total arrests* occurred during the four-year study period. Scholarly research has devoted attention to understanding the role that 'chronic offenders' have when participating in violence and antisocial events. From this standpoint, the number of times a person encounters police in a four-year period may be correlated with involvement in antisocial behavior.⁹⁹ We therefore considered it important to, at a minimum, control for the frequency of individuals' exposure to the CSPD during arrest situations when examining the likelihood of force being used. On average, arrested individuals in this sample have multiple arrest contacts with the CSPD (averaging 4.66 arrests across the four-year study period).

Second, we captured a series of measures on the arrest charges that were levied against the individual, culled into roughly 20 categories.¹⁰⁰ The challenge with this legal measure is that the arrest charges are not mutually exclusive (i.e., a person charged with a violent crime could (and often were) charged with a weapon offense and/or a public disorder charge). When this happens, the reference category becomes more complex (i.e., the comparison group may be overlapping in ways that are difficult to unravel). To resolve this issue, we ran a series of multivariate regression models (results available upon request) where the charges were exchanged (one for another) so that the reference category (to which all estimates are compared against) was more precise. The most robust and salient arrest charge predicting the use of force was resisting arrest; 12% of individuals who were arrested were charged with resisting arrest. Of individuals who had force used against them within arrests, however, 72.8% of individuals were charged with resisting arrest. Previous research consistently shows that resistance is the strongest predictor of whether force is used against an individual and often diminishes or eliminates the impact of race/ethnicity on use of force.¹⁰¹ Therefore, this is the relevant legal charge we included in the multivariate model presented below. It is important to note, however, that regardless of the charge(s) included in the statistical models, the individual and situational predictors were very robust and consistent (and thus, not reliant upon the estimated impact of charge type).

Incident Characteristics

As shown in Table 4.16 above, to measure *incident characteristics*, we include variables capturing the year, season, day of week, time of day, and the average number of arrestees per incident. Figure 4.27 below shows the number of total arrests were very stable over the four-year window (ranging from a low of 23.5% in 2017 to a high of 27.3% in 2019).

⁹⁹ Sampson and Laub, 2003.

 ¹⁰⁰ Categories of charges included: e.g., felony, misdemeanor, violent, property, drug/alcohol, sex offenses, under an influence of drugs/narcotics/alcohol, disorderly offenses, traffic violations, weapon offenses, resisting arrest, court related crimes, trespassing, environmental offenses, trespassing, harassment, other offenses, and nonviolent charges.
 ¹⁰¹ For example, see Brandl & Stroshine, 2017; Engel & Swartz, 2014; Garner et al., 2002; Gau et al., 2010; Rossler & Terrill, 2017; Stroshine & Brandl, 2019; Terrill & Mastrofski, 2002.

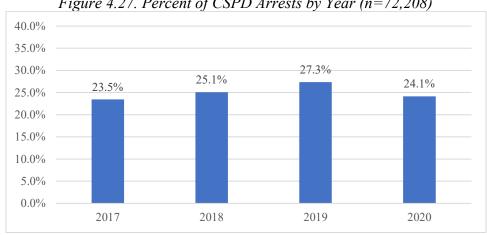


Figure 4.27. Percent of CSPD Arrests by Year (n=72,208)

The four quarterly time periods (Jan-Mar; Apr-Jun; Jul-Sept; Oct-Dec) also had a relatively stable distribution of arrests (ranging from 22.9% in Quarter 4 to 26.3% in Quarter 3). Roughly 25% of arrests took place on weekends, and nearly half (46.0%) of arrests occurred at night (7pm - 7am). Finally, the average number of arrestees (i.e., different people arrested in the same event as the individual included in the unit of analysis) per incident was 1.48, ranging from 1 (i.e., the person was only one arrested), to 40 (i.e., 39 additional people arrested during that incident).

Arrestee Demographic Characteristics

Individual demographic characteristics are nearly always examined in studies of use of force. Previous research shows that males are generally more likely than females to have force used against them and to experience more severe types of force given similar situations.¹⁰² Individuals' age is not as strong a predictor of force as gender but is often negatively related to use of force; that is, older individuals are less likely than younger individuals to have force used against them.¹⁰³

The impact of individuals' race/ethnicity on whether police use force is more complex and research findings are mixed. Some studies indicate that the influence of race/ethnicity on use of force (measured in multiple ways) is weak or non-significant once other legal, situational, and community characteristics are controlled.¹⁰⁴ Other studies, however, have found that Black and Hispanic individuals are more likely than White individuals to have any force used against them or to experience more severe force.¹⁰⁵

In our models, arrestee demographic characteristics are measured as follows: age in years, gender as a dichotomous variable $(1 = male)^{106}$, and race/ethnicity as three dichotomous variables for Black, Hispanic, and other¹⁰⁷ with White as the excluded reference category that each of these variables are

¹⁰² For example, see Gau et al., 2010; Kaminski et al., 2004; Stroshine & Brandl, 2019.

¹⁰³ For example, see Hickman et al., 2008; Terrill & Mastrofski, 2002.

¹⁰⁴ For example, see Brandl & Stroshine, 2017; Engel & Swartz, 2014; Jennings et al. 2019; Nix et al., 2017; Smith et al., 2017; Worrall et al., 2021.

¹⁰⁵ For example, see Alpert et al., 2004; Fridell & Lim, 2016; Fryer, 2019; Kramer & Remster, 2018; Terrill & Mastrofski, 2002; Terrill & Paoline, 2017.

¹⁰⁶ Officers may report an individuals' gender as male, female, or non-binary. The non-binary option was selected eight times out of 77,134 arrests. Due to this infrequency, non-binary cannot be treated as its own category for statistical purposes. They are, however, included with females as part of the reference category for the dichotomous gender variable.

¹⁰⁷ Other includes Asian, Hawaiian/Pacific Islander, American Indian/Alaska Native, Middle Eastern, Unknown.

compared to in the analyses. The average age of arrestees was 33.26 years old. As shown in Figure 4.28, most arrestees were male (69.8%). The majority of arrestees were White (63.5%), while Black and Hispanic individuals comprised 18.7% and 15.4% of arrestees, respectively.

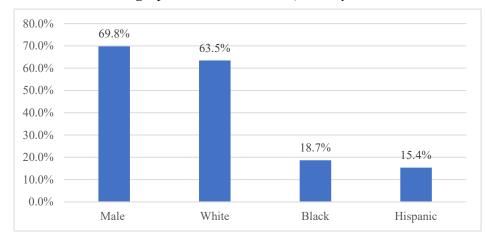


Figure 4.28. Arrestee Demographic Characteristics (January 1, 2017-December 31, 2020)

Community Characteristics

It is important to consider the characteristics of the environment in which police encounters occur to determine whether they impact police use of force. For example, previous research has examined the influence of economic disadvantage, racial heterogeneity, violent crime rate, and other community characteristics and shown mixed findings, which may be partly related to variation in the measurement of force or level of geographic aggregation used.¹⁰⁸ Additional studies have shown that neighborhood context can impact the influence of race/ethnicity on the likelihood of use of force.¹⁰⁹ Therefore, we include community characteristics in our models to better understand their independent impact on use of force, as well as their influence on racial/ethnic differences in use of force.¹¹⁰

All models presented in this section were based on 31 CSPD zone sectors as the neighborhood unit of analysis. We created measures gathered from the 2020 U.S. Census (including the percentages living in poverty, unemployed, female-headed households, aged 15-24, and renter occupied units) to gather

¹⁰⁸ For example, see Lautenschlager & Omori, 2019; Lee et al., 2014; Smith, 1986, Terrill & Reisig, 2003.

¹⁰⁹ For example, see Lee, 2016; Terrill & Reisig, 2003.

¹¹⁰ Using data at two or more levels of aggregation introduces a statistical dilemma where regression residuals for the level 1 cases (arrests) within the same level 2 units (APD police districts) may be correlated (i.e., are more similar than level 1 cases taken from independent districts). This violates the assumption of independence that underlies most ordinary regression techniques. The implications of violating this assumption are substantial, as dependence can lead to inefficient estimates and biased test statistics, making the analyses appear to have more power than they do (Raudenbush & Bryk, 2002). Hierarchical Linear Modeling (HLM) is a modeling procedure that can overcome this statistical dilemma (Raudenbush & Bryk, 2002). HLM includes an extra error term, Ui, which reflects the extra variation common to all level 1 cases within the level 2 unit, so the level 1 error term (Rij) can be independent. That is, HLM explicitly models the dependence of the residuals through this error term. For binary outcome variables like the ones utilized here, hierarchical models cannot use the standard level 1 model which assumes a linear model and normally distributed errors at level 1, once the additional error term is included (Raudenbush & Bryk, 2002). To account for these characteristics of this type of dependent variable, we employ a nonlinear form of hierarchical modeling that uses a binomial sampling model with a Bernoulli distribution, as opposed to a normal sampling model, and a logit link instead of an identity link (Guo & Zhao, 2000; Raudenbush & Bryk, 2002).

structural conditions of the various CSPD police patrol areas. Within the Census measures, we combined poverty, unemployment, and female-headed households into a single factor variable: economic disadvantage.¹¹¹ In all neighborhood models we also include percent of renters (as a proxy for residential instability) and percent of population aged 15-24 (higher risk group via age demographics) in the two-level models.¹¹² In addition to Census-based measures, we calculated the Part I UCR violent crime rate (total counts for each CSPD zone sector from 2017 to 2020 divided by four years to smooth the average risk of violent crime incidents per sector during our study period). The average crime count was divided by the population of the CSPD zone sectors and multiplied by 1,000 residents.

Multivariate Results

In Table 4.17 below, the data included in the regressions includes every arrest as the population of interest (N = 72,208) and uses of force within arrest (N = 1,626, where 0 = no force, and 1 = force) are the outcome of interest. In short, with these analyses, we are attempting to statistically predict what types of arrest situations are more likely to result in the use of force.

In the baseline analysis, which includes the majority of available measures for legal, incident, and arrestee characteristics, we note two important findings. First, the impact of individuals' demographics on the likelihood of being the recipient of police use of force holds even after accounting for legal, situational, and neighborhood characteristics. Specifically, after controlling for other factors, both Black and Hispanic arrestees have a slightly higher likelihood of having force used against them during arrest (odds ratio for Black = 1.3; odds ratio for Hispanic = 1.2) compared to White arrestees. That is, *Black arrestees are roughly 1.3 times more likely than White arrestees to have force used against them; likewise, Hispanic arrestees are 1.2 times more likely.* Additionally, both male and younger arrestees are more likely to have force used against them compared to their reference categories. However, the total number of arrests the individual had during the four-year period was *not* statistically significantly associated with the likelihood that force was used during a single arrest encounter. Overall, the impact of these demographic factors on the likelihood of use of force during arrest situations remains even after accounting for the legal, situational, and neighborhood characteristics that could be measured.

Second, in terms of neighborhood correlates associated with the likelihood of force within arrests, the HGLM model (Model 2) shows that the affluence, stability, and youth population of the neighborhood was unrelated to force (i.e., disadvantage, residential mobility, and youth populations had no significant association with uses of force within arrests). However, the higher the violent crime rate at the neighborhood level, the greater the likelihood that force was used in the arrest.

¹¹¹ The measure was obtained using principal components analysis, no rotation, and the factor loading was roughly 68.3% (intra-variable correlation with combined loading from these three distinct census measures).

¹¹² As a series of sensitivity tests within communities we also controlled for the racial/ethnic makeup of communities to assess the impact of differential racial and ethnic group majorities on use of force likelihood within arrests and found no statistically significant effects (i.e., none of the p-values approached the statistically significant threshold for the race-specific analyses at the neighborhood level).

Logistic Regression (Model 1) and HGLM (Model 2) (n=72,208)								
	Model	1	Model	2				
Independent Variables	B (SE)	Odds Ratio	B (SE)	Odds Ratio				
Intercept	-5.37*(.135)		-5.66* (.431)					
Legal Characteristics	· · ·							
Resisting arrest charge	3.11*(.058)	22.45	3.10*(.056)	22.41				
Total arrests (4-years)	001 (.005)		001 (.005)					
Incident Characteristics								
2018	.071 (.078)		.100 (.077)					
2019	.158*(.076)	1.17	.168* (.075)	1.18				
2020	.179*(.077)	1.19	.223*(.076)	1.25				
Quarter 2	.121 (.075)		.146* (.074)	1.15				
Quarter 3	.092 (.075)		.099 (.073)					
Quarter 4	.101 (.076)		.117 (.075)					
Weekend	.247*(.058)	1.28	.235* (.056)	1.26				
Nighttime	.433*(.054)	1.54	.398* (.052)	1.48				
Multiple arrestees	061*(.023)	0.94	065*(.022)	0.93				
Arrestee Characteristics								
Male	.591*(.068)	1.80	.573*(.066)	1.77				
Age	016*(.002)	0.98	015*(.002)	0.98				
Black	.293*(.065)	1.34	.304*(.064)	1.35				
Hispanic	.180*(.073)	1.19	.203*(.072)	1.22				
Other	107 (.244)		149 (.242)					
Community Characteristics								
Economic Disadvantage			068 (.070)					
Residential Mobility			452 (1.43)					
Population Ages 15-24			4.05 (4.93)					
Average Violent Crime Rate (per 1,000)			$.001^{*}(.000)$	1.001				

Table 4.17. Multivariate Regressions Predicting Use of Force within CSPD Arrest	ts
Logistic Regression (Model 1) and HGLM (Model 2) $(n=72,208)$	

*p < .05; only statistically significant odds ratios are presented (for parsimony)

The key findings from Table 4.17 are summarized as follows:

- Net of legal, situational and neighborhood characteristics, arrestees' demographic characteristics are important predictors of uses of force.
- Black arrestees were more likely to have force used against them relative to White arrestees. Note however, that the effect size (odds ratio), which approximates the magnitude of the difference between Black and White arrestees and their likelihood of force are substantively small (roughly interpreted as 1.3 times more likely).
- Hispanic arrestees were more likely to have force used against them relative to White arrestees. The effect size for Hispanic individuals is also small (roughly interpreted as 1.2 times more likely), which suggests that the estimated impact of race, while statistically significant, does not explain a high level of variation in uses of force within arrests.
- Younger arrestees were more likely to have force used on them within arrests (with a very small estimate effect size showing the degree of variation to which age predicts force is small).
- Male arrestees were significantly more likely to be involved in uses of force. The effect size for gender is moderate/medium in all regression models.
- Neighborhood affluence, mobility, and percent of population aged 15-24 do not correspond with uses of force within arrests. The more violent crimes that occur within the neighborhood,

however, the more likely that force is used within arrests (with a small effect size estimated in the regression model).

As described in Section 3, it is important to remember that multivariate analysis can only statistically control for those variables that are measured. Specification error occurs due to the inability to specify all factors that might have an influence over the outcome. If these unmeasured variables vary across racial/ethnic groups, their inclusion in the statistical models would increase or lessen the predicted impact of individuals' race/ethnicity on the likelihood of force. Therefore, while researchers can be more confident in multivariate results, the results must be interpreted with this limitation in mind.

4.7 Section Summary

Below we summarize the findings from analyses of 2,084 individuals who had force used against them during a four-year period (2017 - 2020). Analyses were conducted to examine use of force trends over time, descriptives of individuals that had force used against them, racial/ethnic disparities (benchmark analyses), and the factors that predict the likelihood of use of force during arrest incidents (multivariate statistical models).

4.7.1 Use of Force Trends

During the 4-year study period (2017 - 2020), the CSPD used force against 2,084 individuals. This represents only 35% of all individuals who had any reportable force used against them (excludes individuals that had only firearm pointed at them or canines deployed). Overall, the number of individuals who had force used against them steadily increased from 2017 to 2020 (24% increase). This steady upward trend was mirrored in Gold Hill and Sand Creek Divisions.

The trends in CSPD use of force were examined using interrupted time series analyses. The findings demonstrated that the timing of two events – the death of George Floyd and implementation of SB-217 – interrupted the overall trend in CSPD use of force, leading to an immediate decline ranging from 21 - 23% reductions. These reductions in use of force were observed across racial/ethnic groups. Changes in use of force trends, however, were not observed following the officer-involved shooting of De'Von Bailey or the response to the COVID-19 stay-at-home orders.

4.7.2 Force Descriptives

Of the 2,084 individuals who had force used against them, the majority of individuals were White (56.6%), followed by Black (22.8%), Hispanic (16.6%), and other race/ethnicity (1.7%), which includes Asian/Pacific Islander, American Indian, and Middle Eastern. Roughly 81% were male, 17% were female, and 2% were of unknown gender. There was considerable variation in subjects' race/ethnicity across CSPD divisions. Some variation should be expected based in part on differences in population and crimes. There was also variation in race/ethnicity and gender of use of force subjects across the four-year period.

- The percentage of White individuals who had force used against them by year steadily decreased across the four-year period (percent decrease of 11.4% from 2017 to 2020)
- Use of force against Black individuals decreased from 2017 to 2018 but then steadily increased back to approximately the same percentage in 2020 as in 2017

- Conversely, there was a sharp increase in use of force against Hispanic individuals from 2017 to 2018 (increase of 46.8%)
- The percent of females who experienced force increased across years from 11.7% in 2017 to 17.9% in 2020 (percent change = 53%)

Nearly 70% of individuals who had force used against them were perceived by officers as having some type of impairment.

- Officers can only indicate one type of impairment on the UOF Report
- 56.5% of individuals were perceived by at least one officer to be under the influence of alcohol or drugs
- 14.1% of individuals were perceived by at least one officer to be emotionally disturbed
- White individuals are more likely to be perceived as impaired by either drug/alcohol or mental health issues, compared to Black and Hispanic individuals.
- Black and Hispanic individuals were significantly more likely than White individuals to have force used against them when they had no reported impairment.
- Black individuals who had force used against them were significantly less likely to be perceived as impaired by alcohol/drugs in comparison to individuals of all other races/ethnicities.

Slightly more than 7% of the individuals that had force used against them were involved in more than one use of force event during this four-year time period. Repeat use of force individuals were significantly more likely to be male compared to female, but there were not significant differences by race/ethnicity.

Over 95% of individuals who had force used against them were reported by officers as showing active resistance or active aggression toward officers. The level of resistance shown against officers was relatively stable across years. Officers in Falcon and Gold Hill Divisions reported slightly higher levels of the most serious level of resistance (active aggression) compared to Sand Creek and Stetson Hills. The level of resistance shown did not vary significantly by subjects' gender or race/ethnicity.

Four reasons for the use of force were recorded by CSPD officers. Less than 7% of individuals who had force used against them was for passive resistance/failure to disperse; 18% displayed pre-attack indicators or resisted officer control; 50% were actively evading or resisting arrest; and 23% threatened or attacked officers or others. Some differences across divisions were noted: in Gold Hill Division, nearly 30% of individuals who had force used against them were reported to engage in a physical attack or threat, compared to less than 18% of individuals in the Sand Creek Division. There were no significant differences by subjects' race/ethnicity or gender in the severity of the reason for force.

Approximately 22% of individuals who had force used against them were not subsequently arrested (may have been released, taken to a hospital or mental facility, or some other alternative to arrest). There were no differences by individuals' race/ethnicity or gender in whether or not they were arrested following the use of force. Individuals who engaged in more serious resistance, however, were more likely to be arrested.

4.7.3 Racial/Ethnic Disparity (Benchmark) Analyses

Benchmark analyses compare the percent of racial/ethnic groups who experience force to the same groups' representation in a comparison data source that provides an estimate of the "expected" rate of

force. Given the known weaknesses of various individual benchmarks, we compare the results of analyses using seven distinct benchmarks. Using disparity ratios (calculated from disproportionality indices), the analyses showed:

- While the residential population benchmark likely overestimates racial/ethnic disproportionality, the arrestee benchmark possibly underestimates it. Examining disparity ratios in use of force across racial/ethnic groups while using the criminal suspect population as a benchmark likely produces findings with the strongest validity.
 - Blacks were 1.3 times more likely than Whites to have force used against them in comparison to the racial/ethnic percentages of all criminal suspects, 1.1 times more likely in comparison to criminal suspects for Part I crimes, and *less likely* than Whites to have force used against them in comparison to the racial/ethnic percentages of criminal suspects for Part I violent crimes (disparity ratio=0.81).
 - The pattern for disparity ratios for Black individuals based on arrest-related benchmarks is similar, while the least reliable benchmark based on residential population statistics shows the highest disparity ratio.
 - Disparity ratios are the highest when based on the residential census data for Black individuals.
 - The disparity ratios for Hispanic individuals range from 0.93 to 1.20 depending on the benchmark used, indicating that regardless of benchmark, Hispanic individuals were slightly more likely or essentially equally likely to have force used against them compared to White individuals.
- In summary, disparity ratios using benchmarks that better approximate risk of use of force (e.g., arrests and criminal suspects) were close to 1.0, indicating that there is little or no disparity between White individuals and Black or Hispanic individuals' likelihood of having force used against them.
- For several of the benchmarks, the disparity ratios are less than 1.0, indicating that Black and Hispanic individuals were less likely to have force used against them compared to White individuals given their representation in the violent arrestee and violent criminal suspect populations. At the CSPD division level, criminal suspect benchmark analyses show:
 - Black individuals were 1.4 times more likely than White individuals to have force used against them in Gold Hill Division, while the three remaining CSPD Divisions demonstrated less or no racial disparities.
 - Hispanic individuals were roughly 1.2 times more likely than White individuals to have force used against them in Sand Creek and Stetson Hills Divisions.

4.7.4 Arrest Trends

Of the 2,084 individuals who had force used against them, 77.6% were arrested; however, the vast majority of arrests do not involve the use of force. It is therefore instructive to analyze all arrest incidents to determine what factors lead to (or predict) an increased likelihood of use of force.

Although use of force increased slightly in 2020 compared to 2019 (2.9% increase), arrests significantly declined (11.7%) during this same period. Interrupted time series analyses demonstrated that the increases in arrests from 2017 - 2019 changed abruptly with the timing of the COVID-19 shut down in

March 2020, when arrests declined. Continued reductions in arrests were also experienced following the death of George Floyd and SB-217.

4.7.5 Use of Force during Arrests

From 2017 - 2020, the CSPD arrested 77,134 individuals; approximately 2.1% of these arrests involved the use of force. The percent of arrests involving force steadily increase from 1.9% of arrests in 2017 to 2.3% in 2020 (21.1% increase).

CSPD divisions varied considerably in their number of arrests. Gold Hill Division had the highest number of arrests (n=29,823) compared to Falcon Division with the least (n=9,079). The overall percentage of arrests that involved the use of force also varied considerable across CSPD divisions.

Additional comparisons across divisions demonstrates that Gold Hill Division appears different than the other divisions. Gold Hill is the only division that has a higher percentage of arrests and force than their share of criminal offenses and violent crimes. Yet it is also the only division that has a lower percentage of department-wide uses of force compared to their share of arrests.

Without considering any other factors, bivariate analyses show that significantly more male arrestees (compared to females) and Black and Hispanic arrestees (compared to White arrestees) had force used against them during arrest incidents. The percentage of Hispanic arrestees who also had force used against them increased 33% during a one-year time period (from 2018 to 2019). For Black arrestees, the percentage who also had force used against them steadily increased 30% across the four-year period.

4.7.6 Predicting Use of Force during Arrest Incidents (Multivariate Statistical Analyses)

We use multivariate statistical modeling to examine what factors predict the likelihood of arrests incident also involving the use of force. After controlling for other factors, the results show:

- Black arrestees were slightly (1.3 times) more likely to have force used against them relative to White arrestees.
- Hispanic arrestees were slightly (1.2 times) more likely to have force used against them relative to White arrestees.
- Male arrestees were moderately (1.8 times) more likely to be involved in uses of force.
- Younger arrestees were slightly more likely to have force used against them during arrests.
- Neighborhood affluence, mobility, and percent of population aged 15-24 years do not correspond with uses of force within arrests.
- Arrests occurring in neighborhoods with more violent crimes were slightly more likely to result in the use of force.

Note that an important limitation of the multivariate analyses findings is that we were unable to consider the resistance shown by all arrestees during the encounter with police – which we know is one of the strongest predictors of whether officers use force. The CSPD collects information about whether an individual was charged with resisting arrest but does not systematically capture resistant behavior for all arrestees as they do with those who had force used against them.

5. TYPES OF FORCE, FORCE EFFECTIVENESS, AND INJURIES

To further understand the trends in CSPD use of force, Section 5 reviews the specific *types* of force used during encounters with the public and the relative *effectiveness* of these approaches in gaining individuals' compliance. In addition, we consider the frequency and severity of injuries to both officers and individuals who had force used against them, and the factors that predict the likelihood of injury during police encounters with the public.

5.1 Force Actions and Weapon Use

As described in Section 2, the measurement of use of force varies widely across police agencies and scholarly studies examining force. The TMLLC team's initial proposal indicated we would examine whether there were racial/ethnic differences in *severity* of use of force. Force is often measured on a severity scale or "continuum." However, the severity ranking of different types of force varies by both researchers and police departments.¹¹³ **The CSPD, however, does not use a severity scale or a use of force continuum within their policies, trainings, or reports.** For analytical purposes, the lack of a use of force continuum restricts our ability to measure the severity of force on a scale. More importantly, however, the CSPD's approach to forgo a use of force continuum is consistent with evolving best practices. Specifically, both the PERF *Guiding Principles on Use of Force* and the *IACP Consensus Policy* strongly discourage the use of a force continuum in favor of a totality of circumstances force model.

The CSPD use of force report does capture all force *types* that occur within an incident. Again this is considered best practice; many agencies only report the most severe type of force, which is problematic for understanding the totality of force used and the effectiveness of approaches.¹¹⁴ Although the temporal order of the use of multiple force types cannot be determined, CSPD's data better reflect the interactive nature of many force incidents, as officers escalate or de-escalate the type of force used in response to individuals' resistance and based on the effectiveness of force employed.¹¹⁵

For analysis purposes, the TMLLC research team classified the report force actions/weapon types into nine categories:

- (1) Weaponless¹¹⁶
- (2) Oleoresin Capsicum (OC) or Corson Stoughton (CS or tear gas)¹¹⁷ (hereafter, OC/CS)
- (3) Conducted Energy Weapon (CEW)¹¹⁸
- (4) Baton¹¹⁹
- (5) Diversionary Device
- (6) Specialty Impact Munitions (SIM)¹²⁰

¹¹³ For example, see Alpert & Dunham, 1999; Klinger, 1995; Terrill, 2003.

¹¹⁴ For example, see Alpert & Dunham, 1999; Garner et al., 1995; Terrill et al., 2018.

¹¹⁵ For example, see Alpert & Dunham, 1999; Garner et al., 1995; Hine et al., 2016; Wolf et al., 2009.

¹¹⁶ Weaponless includes: Arm Bar, Compliance Hold, Hands/Fist/Legs/Feet – Striking, Take Down.

¹¹⁷ OC/CS includes chemical or natural agents, whether deployed as aerosol, hand thrown, or launchable.

¹¹⁸ This may also be referred to as a Conducted Energy Device (CED) or TASER.

¹¹⁹ The baton was an authorized weapon during our study period, but as of 10/11/2021 there is no authorized baton.

¹²⁰ Specialty Impact Munitions include 40 mm, bean bag, and FN303.

- (7) Tactical Vehicle Intervention (TVI)
- (8) $Canine^{121}$

(9) Firearm

Note that although pointing of firearm is a reportable use of force, it is excluded in the analyses that follow. As discussed in Section 3, the pointing of a firearm can be collected on one of two possible reports (i.e., Use of Force Reports and Pointing of Firearm Reports). Individuals who had firearms pointed at them are examined separately in Section 6 of this report.

It is further important to note that CSPD policy restricts the use of particular weapons based on the level of subject resistance. For example, CSPD officers are only authorized to use SIM, CEW, and Canine (Police Service Dog) when a person's actions are at a level of active resistance or active aggression. (General Orders DL-500-01, DL-500-03, and 1203). Further, some of these force actions/weapon types are only authorized for use by designated personnel (i.e., Tactical Enforcement Unit, canine handlers) with current certifications (e.g., SIM, diversionary device, canine); this likely contributes to the infrequency with which individuals experience certain types of force.

Figure 5.1 below displays the percent of types of force used on individuals by the CSPD. Given that one or more force actions can be used against a single individual by one or more officers, the percentages reported below exceed 100%. The majority of individuals, however, only had one type of force used against them (77.5%). Among individuals who had force used against them, weaponless physical force was the most commonly experienced type of force (66.8%). The other two types of force used somewhat regularly are CEW (28.7%) and OC/CS (12.5%). Individuals experienced other types of force infrequently. For the four-year study period, only 1.2% of individuals who had force used against them involved the discharge of a police firearm.

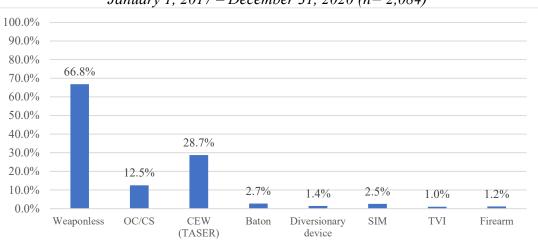


Figure 5.1. Overall CSPD Force Actions/Weapon Types January 1, 2017 – December 31, 2020 (n= 2,084)

This information is also reported in Table 5.1 at the department and division level. As shown, there is variation in the types of force across CSPD divisions. For example, individuals who had force used

¹²¹ Canine use of force is separately discussed in the next subsection because it is collected through a different report than other types of use of force.

against them in Stetson Hills Division were the most likely to experience weaponless physical force, while individuals in Gold Hill Division were the least likely to have weaponless force used against them. Individuals in Gold Hill Division, however, were most likely to have OC/CS or CEW used against them. The use of batons and diversionary devices was rare, but individuals who had force used against them in Falcon Division were the most likely to experience these force actions. Individuals who had force used against them. Individuals who had force used against them in Gold Hill Division were most likely to have specialty impact munitions against them. Individuals who had force used against them in Falcon and Sand Creek Divisions were most likely to have a firearm used against them.

	Weaponless	OC/CS	CEW (TASER)	Baton	Divers. Device	SIM	TVI	Firearm
CSPD (n=2,084)	1,392	261	598	57	29	53	20	26
	(66.8%)	(12.5%)	(28.7%)	(2.7%)	(1.4%)	(2.5%)	(1.0%)	(1.2%)
Divisions								
Falcon (n=268)	188	27	72	10	9	6	0	7
	(70.1%)	(10.1%)	(26.9%)	(3.7%)	(3.4%)	(2.2%)	(0.0%)	(2.6%)
Gold Hill (n=747)	431	140	250	21	10	29	2	7
	(57.7%)	(18.7%)	(33.5%)	(2.8%)	(1.3%)	(3.9%)	(0.3%)	(0.9%)
Sand Creek (n=624)	425	54	183	12	8	5	12	12
	(68.1%)	(8.7%)	(29.3%)	(1.9%)	(1.3%)	(0.8%)	(1.9%)	(1.9%)
Stetson Hills (n=412)	328	36	91	13	2	12	2	0
	(79.6%)	(8.7%)	(22.1%)	(3.2%)	(0.5%)	(2.9%)	(0.5%)	(0.0%)

Table 5.1. CSPD Force Actions/Weapon Types (Overall and by Division)
January 1, 2017 – December 31, 2020 (n=2,084)

5.1.1 Reported Effectiveness by Type of Force

In addition to reporting information about each type of force and/or weapon they used during an encounter, CSPD officers also capture whether each type of force and/or weapon was effective, not effective, or had limited effectiveness; that is, did the force type used result in the subject coming into compliance with or under control of law enforcement. To examine the effectiveness of types of force, we shift our unit of analysis from the individuals who had force used against them to the force actions used against them. CSPD officers used a total of 5,115 force actions/weapons against individuals from 2017 to 2020. Figure 5.2 displays the effectiveness of 4,785 force actions/weapons used where there were at least 50 cases of their use.¹²²

Scholarly research has documented differences in the effectiveness of different force actions and weapon types. Specifically, studies have shown weaponless physical force to be highly effective.¹²³ Our findings are consistent with this research. Actions of physical force were reported to be effective in the overwhelming majority of their uses: arm bars (89.8%), compliance holds (79.8%), strikes (74.2%), and take downs (95.0%). Research on the effectiveness of OC spray indicates it is also effective 70-90% of

¹²² The following force actions are excluded from this analysis of effectiveness due to statistical infrequency (i.e., less than 50 cases): FN 303 (n=19), Police Rifle AR-15 (n=10), Tactical Rifle MP7 (n=7), Diversionary Device (n=36; used by Tactical Enforcement Unit only). Also excluded are canine contacts and pointing of firearms for the reasons described in Section 3. ¹²³ For example, see effective Lin & Jones, 2010; Smith & Petrocelli, 2002; Stroshine & Brandl, 2019.

the time.¹²⁴ The use of OC/CS spray was effective 82% of the time. In contrast, CSPD officers reported CEWs were effective only 57% of the times they were deployed and had limited effectiveness in approximately 17% of their use, making this type of force one of the least effective.¹²⁵ This is consistent with research that shows the reported effectiveness range for TASER is wider than many other weapon types. Spanning from approximately 50% to 90% effectiveness, it varies by individuals' height and weight, gender, the type of clothing they are wearing, impairment by alcohol or drugs, and distance from which it is discharged.¹²⁶ With only 50% effectiveness, OC/CS launchable (used only by the Tactical Enforcement Unit) was the least effective force type.

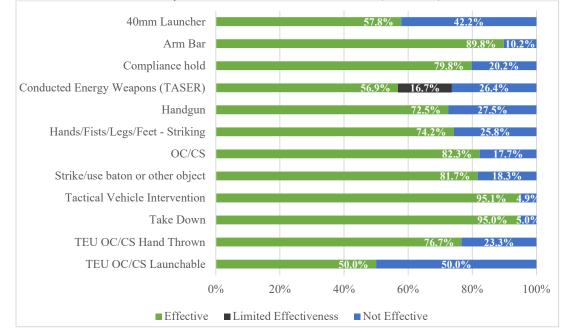


Figure 5.2. Effectiveness of Force Actions / Weapon Types January 1, 2017 – December 31, 2020 (n=4,785)

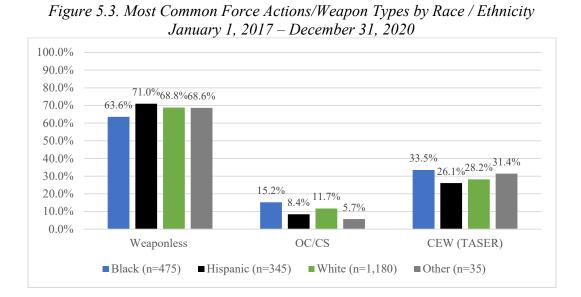
5.1.2 Types of Force by Race/Ethnicity

Figure 5.3 displays racial/ethnic differences in the three most common types of force experienced by individuals. As shown, compared to all other racial/ethnic groups, *Black individuals were least likely to have weaponless physical force used against them but most likely to have OC/CS used against them.* These differences were statistically significant. Although racial/ethnic differences on CEW use are evident, these were not statistically significant.

¹²⁴ For example, see Brandl & Stroshine, 2017; Morabito & Doerner, 1997.

¹²⁵ Limited effectiveness of CEW can occur when only one of the two prongs makes contact with the individual.

¹²⁶ For example, see Brandl & Stroshine, 2017; PERF, 2020; Somers et al., 2020; White & Ready, 2007, 2010.



Likewise, as shown in Figure 5.4 below, there were significant differences in the types of force by gender. While women were significantly more likely than men to have weaponless physical force used against them, they were significantly less likely have a TASER used during their encounter with police.

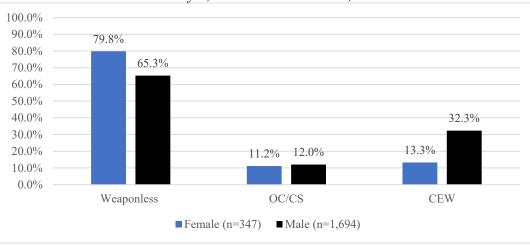


Figure 5.4. Most Common Force Actions/Weapon Types by Gender January 1, 2017 – December 31, 2020

5.2 Canine Use of Force

Recall from Section 3 that when a canine is involved in a use of force incident, a different reporting form is used by the CSPD. Between 2017 and 2020, there were 58 individuals who had use of force incidents that involved the use of a canine. The vast majority of these individuals (95%) were male (N = 55), while three were female (5%). Thirty-four of the 58 individuals were White (58.6%), 24% were Hispanic, and 17.2% were Black.¹²⁷ Of these 58 individuals, 22 (37.9%) also had another type of force

¹²⁷ One individual event (out of 58) involved 'Other' racial/ethnic group.

used (other than canine) during their encounter with police. These 22 individuals are included in all preceding use of force analyses based on the other type of force (which required a use of force report). The remaining 36 individuals are considered "canine only" uses of force and are excluded from the use of force analyses throughout Section 4 due to the use of a different reporting form and limited statistical power associated with the small sample size. However, we provide some contextual information below on this handful of cases over this four-year study period.

Beginning in May of 2018, canine use of force reports were completed on a separate specific canine use of force form, which collects more detailed information regarding the reason for the force, the types of injuries sustained by a canine bite, who was bitten, responses to the canine use of force, etc. A total of 45 reports (of the 58 total canine uses of force during the study period) were examined in this analysis for the period of May 2018 to December 2020. The reason for the canine release was reported in 34 of these events, with the majority being a felony suspect apprehension (47%) along with a suspect/area search (29.4%). In each of these events, a criminal suspect was bitten by a canine, consistent with the reporting guidelines. According to the reports, civilian bystanders were never bitten in uses of force where a suspect was bitten. Of these incidents, a canine was injured four times (8.7%), with minor cuts to the dog in each case. Of the 45 suspects who were bitten by a canine, 43 (95.6%) were treated at the hospital.

5.3 Individual (Subject) Injuries

CSPD General Order 500.30 (Use of Force) requires that officers "use force in a manner that is consistent with the minimization of injury to others." Furthermore, CSPD General Order 510.30 (Reporting Use of Force) requires that officers include in their offense report a specific explanation of "The manner in which the officer acted to minimize injury to suspects, officer, or others." CSPD GO 500.50 also requires that medical attention be provided as soon as practicable to any person who has a complaint of injury or pain, suffered a visible injury, was unconscious, or who otherwise requests medical attention. Officers are to provide first aid consistent with their training and summon medical services and/or facilitate the transportation of an individual to the hospital when needed. These policy provisions are consistent with the revisions to Colorado Revised Statutes 18-1-707 required by the 2020 legislative action SB 217.

Injuries are defined as follows in CSPD GO 500.05:

- Bodily Injury: As defined in C.R.S. § 18-1-901(3)(c), means physical pain, illness, or any impairment of physical or mental condition
- Serious Bodily Injury (SBI): As defined in C.R.S. § 18-1-901 (3) (p), means bodily injury which, either at the time of the actual injury or at a later time, involves a substantial risk of death, a substantial risk of serious permanent disfigurement, a substantial risk of protracted loss or impairment of the function of any part or organ of the body, or breaks, fractures, or burns of second or third degree.

For purposes of analysis, we examine individual injuries in the following categories¹²⁸:

¹²⁸ Injuries resulting from canine contacts were discussed in the previous section due to the separate reporting of canine use of force.

- (1) None
- (2) TASER probe impact¹²⁹
- (3) Bodily injury¹³⁰
- (4) Serious bodily injury
- (5) Fatal

Of the 2,084 known individuals who had force used against them during this four-year period, officers reported that 73.4% received some type of injury. In addition, we note that officers reported 2% of individuals that had force used against them had injuries unrelated to the use of force, including self-inflicted or pre-existing injuries. And for 1.6% of the individuals, injury information was missing, or the officer did not provide enough information to discern whether an injury occurred or its severity (e.g., merely listing that a weapon was used). Officers can report that individuals suffered more than one type of injury; therefore, the injury categories are not mutually exclusive. Approximately 8.6% of individuals experienced more than one type of injury. The majority of these individuals experienced TASER probe impact and bodily injury.

For our first descriptive analysis, we report the *most serious type of injury* for individuals who had force used against them. For the roughly 9% of individuals with more than one injury listed, we only consider the most serious injury. This information is graphically displayed in Figure 5.5 below. As shown, approximately 27% of individuals did not suffer an injury because of the force they experienced. TASER probe impact was the most serious injury for 11.3% of individuals who had force used against them.

More than half of individuals (56.3%) who had force used against them suffered some type of bodily injury as the most serious injury. However, serious bodily injury and fatal injury were rare. Only 1.5% of individuals who had force used against them had a serious bodily injury and 0.6% of individuals had force used against them that resulted in their death. These injury trends are consistent with existing research that finds that injuries resulting from use of force are somewhat common, but rarely involve serious injuries.¹³¹

¹²⁹ There is disagreement in the scholarly literature and variation in police departments' definitions about whether TASER probe impacts should count as injuries (Hickman et al., 2021; Kaminski et al., 2015; Stroshine & Brandl, 2019; Terrill & Paoline, 2012). This debate aside, CSPD policy considers TASER probe impacts as injuries, and we report them as such. It should be noted, however, whether TASER use is associated with increased or decreased likelihood of injury is strongly impacted by the classification of TASER probe impacts as injuries and our findings may differ from other research that has examined the impact of TASER use on injuries (Kaminski et al., 2015).

¹³⁰ The TMLLC team classified as "bodily injury" responses that CSPD officers entered as bodily injury as well as responses for: pain only, cuts, abrasions, scrapes, contusions, bruises, and sprains.

¹³¹ For example, see Alpert & Dunham, 1999; Bozeman et al., 2018; Garner et al., 2018; Henriquez, 1999; Hickman et al., 2021; Stroshine & Brandl, 2019; Wolf et al., 2008.

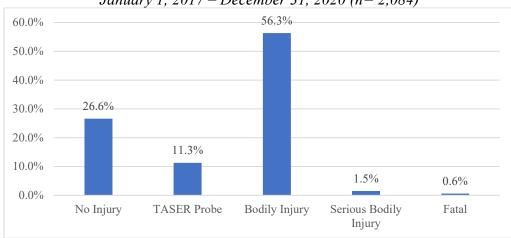


Figure 5.5. Most Serious Individual Injuries Resulting from Use of Force January 1, 2017 – December 31, 2020 (n= 2,084)

Considering if the individual experienced any injury (regardless of seriousness), we find there were no statistically significant differences across individuals' gender or race/ethnicity. There were also no statistically significant differences in overall injury rate by CSPD division.

When considering specific types of force, as expected, there were significant differences in reported injuries across race/ethnicity and gender. Specifically, because Black individuals and males were more likely to have TASERS used against them, they were also more likely to have TASER probe injuries. Males were also significantly more likely than females to have serious bodily injury (2.0% and 0.3%, respectively). No other significant differences in injuries by the type of force were noted across individuals' race/ethnicity and gender, or CSPD divisions.

Research consistently shows that injuries are related to the type of force used by officers.¹³² Citizen injuries are reported by CSPD at the incident level and are not linked to the specific type of force. When injuries of individuals who had more than one type of force used against them are analyzed, it cannot be discerned which of the types of force resulted in the injury. Therefore, to determine the types of force that are most likely to result in citizen injuries, we analyze only those incidents where an individual had a single type of force used against them (77.5% of individuals who experienced force, N=1,616).

Figure 5.6 displays the percent of individuals who had *any injury* (regardless of severity) resulting from specific types of force.¹³³ Batons, although used rarely, resulted in some type of injury for almost 92% of the individuals who they were used against. Due partially to the classification of TASER probe impacts as injuries, nearly 85% of the individuals who had CEWs used against them had some type of injury.¹³⁴ Weaponless physical force – which is the most common type of force – resulted in injury for nearly 70% of individuals who had that type of force used against them. Firearms were used rarely but resulted in some type of injury for 68.2% of individuals who had this type of force used against them.

¹³² For example, see (Alpert & Dunham, 2010; Bozeman et al., 2018; Kaminski et al., 2015; MacDonald et al., 2009; Smith, Kaminski, Rojek, Alpert, & Mathis, 2007; Taylor & Woods, 2010; Stroshine & Brandl, 2019.

¹³³ TVI is excluded from Figures 5.6 and 5.7 because it did not result in any injuries.

¹³⁴ Previous research has shown, however, that when lacerations from TASER probes are not classified as "injuries", the use of TASERS results in the least amount of injuries compared to other types of force – see Kaminski et al., 2015.

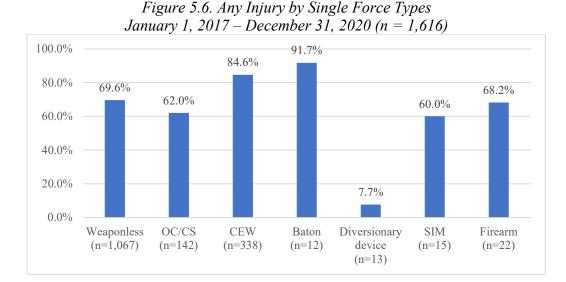


Figure 5.7 below shows the most serious type of injury that resulted from specific types of force / weapons.¹³⁵ As shown, the most severe injury for the majority of the individuals who had the most common type of force used against them-weaponless-was bodily injury; serious bodily injury occurred for only 0.9% of individuals who had weaponless force used against them. Similarly, bodily injury was the most serious injury reported for a majority of those who had OC/CS or batons used against them. In contrast, firearms, which were used only 22 times in this sample, resulted in serious bodily injury for one individual and fatal injuries for half of the individuals (N = 11).¹³⁶

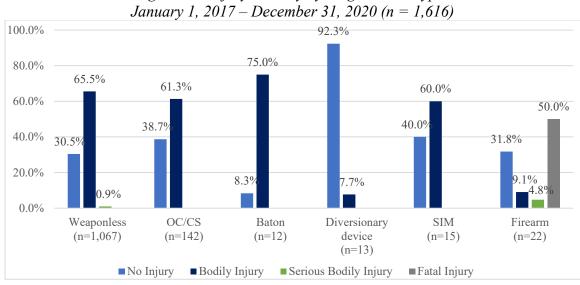


Figure 5.7. Injury Severity by Single Force Types

¹³⁵ Due to injuries unrelated to force and missing data on the nature of injuries in 44 cases (2.7%), percentages across the types of injuries within each type of force do not add to 100%.

¹³⁶ Recall that this sample only includes individuals who had a single type of force used against them; therefore, individuals who had a firearm used against them along with at least one other type of force are excluded from this particular analysis.

TASER probe impact injuries are unique to events that involve the use of a CEW. Therefore, Figure 5.8 separately presents the most serious type of injury that resulted from the use of a CEW to include this additional category of injury. As shown, over half (55%) of the individuals who had CEWs used against them had TASER probe impact injuries as their most serious injury. Approximately a quarter of individuals who had CEWs used against them had bodily injuries as their most serious injury, while only 1.5% of these individuals experienced serious bodily injury.

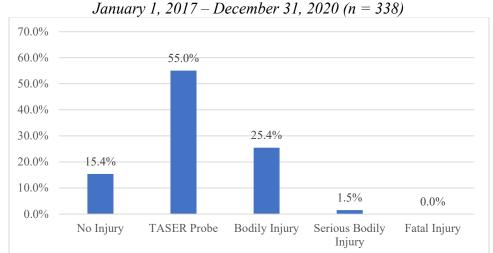


Figure 5.8. Injury Severity for CEW Use Only January 1, 2017 – December 31, 2020 (n = 338)

5.3.1 Predicting Subject Injuries

To better understand the factors that predict injuries of individuals who had force used against them, we use multivariate statistical modeling; this statistical technique is described in detail in Section 3. The multivariate statistical models that follow estimate the likelihood that an individual is injured in similar use of force situations – and the models statistically isolate what factors in these similar situations predict injury.

Previous research demonstrates that individuals are more likely to be injured if they have more than one type of force used against them or if they display physical resistance or aggression.¹³⁷ Individuals who are impaired in some way (e.g., alcohol/drugs, mental health issues) are often found to be more likely to be injured as well, but the evidence is mixed.¹³⁸ Studies examining the influence of individual demographic characteristics are also mixed in their results, but generally show that males are more likely than females to be injured and White individuals are more likely to be injured than Non-White individuals.¹³⁹ Unfortunately, additional variables that have been shown to predict injury (e.g., encounter duration, presence of a weapon, etc.) are not available in the CSPD data. Therefore, the statistical

¹³⁷ For example, see Castillo et al., 2012; Morabito & Socia, 2015; Paoline et al., 2012; Rossler & Terrill, 2017; Smith et al., 2007.

¹³⁸ For example, see Morabito et al., 2017; Morabito & Socia, 2015; Rossler & Terrill, 2017.

¹³⁹ For example, see Castillo et al., 2012; Lin & Jones, 2010; MacDonald et al., 2009; Morabito & Socia, 2015; Rossler & Terrill, 2017; Smith et al. 2007.

models presented may be "misspecified" – meaning that other (unmeasured) factors may be the cause of some relationships we observe.

After excluding the 105 uses of force missing information on injury, age, gender, and resistance we analyze 1,979 individuals who had force used against them. Injury is measured as occurring if it was reported by any officer involved in the incident (even if other officers involved in the encounter did not report an injury); using this measure, 73.7% of individuals who had force used against them were injured in some way.¹⁴⁰ Table 5.2 displays the independent variables available in the use of force data to predict individuals' injuries.

Tuble 5.2. Descriptive Statistics. Os	The S.2. Descriptive statistics. Use of Force and injuries within Use of Force $(n-1, 9/9)$									
	Mean	Standard	Min	Max						
Variables		Deviation								
Individual Injured	.737	.440	0	1						
Incident Characteristics										
Two or more force types used	.165	.372	0	1						
Maximum resistance	2.430	.529	1	3						
Under no influence	.305	.461	0	1						
Under influence alcohol/drugs	.570	.495	0	1						
Emotionally disturbed person	.140	.350	0	1						
Individual Characteristics										
Male	.830	.376	0	1						
Age	31.19	10.99	10	91						
White	.580	.494	0	1						
Black	.230	.423	0	1						
Hispanic	.170	.375	0	1						
Other	.020	.130	0	1						

Table 5.2. Descriptive Statistics: Use of Force and Injuries within Use of Force (n=1,979)

Beginning with incident characteristics, if an individual had two or more types of force used against them by one officer or had different types of force used against them by more than one officer, they are coded as having "multiple force types used" during the incident. This was true for 16.5% of individuals who had force used against them.

Another potential correlate of individual injury is individuals' level of resistance, which we categorize as "maximum resistance." As described earlier, maximum resistance is the most severe form of resistance individuals displayed at some point during their interactions with officers; categories include: (1) passive resistance, (2) active resistance, and (3) active aggression. On this 3-point scale, the average resistance level was 2.43, indicating that the most common maximum resistance shown ranged between active resistance and active aggression. Other incident measures include whether the individual was perceived by officers as having no impairment, impairment related to emotional/mental health issues, or

¹⁴⁰ There was unilateral agreement on individual injury for all but 150 individuals (total N = 2084), equating to a 93% universal agreement on individual injury across the single to multiple officers. There was also agreement on 'injury level' across all officers (where applicable) for all but 179 individuals (out of 2,084). Thus, for over 90% of individuals there were no conflicts on the reported injury. For this analysis, if an individual was reported as having an injury by any officer, they were coded as an injured individual.

impairment from alcohol or drugs.¹⁴¹ We also consider individuals' age, race/ethnicity, and gender. In this sample, over 80% of the individuals were males and the average age was 31.2 years old. The majority of individuals were White (58%), with 23% Black and 17% Hispanic.

Table 5.3 presents the results of a multivariate logistic regression predicting whether an individual was injured. The results show several important predictors of whether individuals are injured when they have force used against them. First, the strongest predictor (odds ratio = 2.86) was whether multiple force types were used in the event. Individuals who had two or more types of force used against them were 2.9 times more likely to be injured than individuals who had a single type of force used against them. Individuals who displayed higher levels of resistance were 1.2 times more likely to be injured than individuals of resistance (odds ratio = 1.20). Individuals perceived to be under the influence of drugs or alcohol (odds ratio = 1.33) and individuals perceived to be emotionally disturbed (odds ratio = 1.33) were both approximately 1.3 times more likely to be injured in comparison to individuals who were not perceived to be impaired. In terms of individuals (odds ratio = -0.79), while males were 1.2 times more likely to be injured than females, even after controlling for other factors.¹⁴² These findings are consistent with previous research studies noted above.

Variables	B (SE)	Odds Ratio
Intercept	.091 (.314)	
Incident Characteristics		
Two or more force types used	$1.06^{*}(.185)$	2.86
Maximum resistance	.178* (.103)	1.20
Under influence alcohol/drugs	.264* (.113)	1.33
Emotionally disturbed person	.281* (.168)	1.33
Individual Characteristics		
Male	.177* (.135)	1.20
Age	.005 (.005)	
Black	226*(.127)	0.79
Hispanic	023 (.147)	
Other	.104 (.440)	

Table 5.3. Multivariate Logistic Regression Predicting
Individual Injury within Uses of Force (n=1,979)

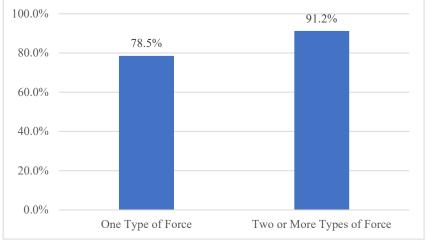
*p < .05; only statistically significant odds ratios are presented (for parsimony)¹⁴³

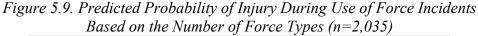
¹⁴³ The odds ratio for resistance is significant at p-value = .08, which is considered "marginally statistically significant." While the 95% threshold (p < .05) is the standard in the social sciences for statistical significance, marginally statistically significant p-values ranging between .051 to .100 are often reported as well (see Olsson-Collentine et al., 2019).

¹⁴¹ The impairment measures (alcohol/drugs and emotionally disturbed person) are not mutually exclusive as multiple officers within a single encounter could report types of impairment that did not match. Therefore, we measure whether or not *any* officer indicated that an individual was impaired.

¹⁴² The results presented here were also assessed with a series of supplemental and sensitivity analyses (not shown) and the results were virtually identical regardless of model(s) estimated. For example, like the analyses predicting use of force in Section 4, we controlled for neighborhood structural measures, but none approached statistical significance. There were two issues with this approach. First, the analysis was likely under-powered analytically given the small sample size of cases (1,979 cases across 31 neighborhoods, with some neighborhoods having as few as 13 total uses of force during the four-year period). We also conducted an analysis of a series of correlations with injuries, and again none of the neighborhood predictors had any sizable association with injuries.

While the odds ratios can describe the strength of a measure relative to other variables in the model, predicted probabilities are a more precise estimation method that demonstrates the impact of the independent variables in a regression model. A predicted probability is simply the probability of an event (in this case, the probability that an individual involved in police use of force is injured during that encounter).¹⁴⁴ Figure 5.9 shows the predicted probability of injury based on whether one or more types of force were used against an individual. As shown, all else being equal, the likelihood of injury based on one type of force.





5.4 Officer Injuries

Throughout the report, we have examined the number of individuals who had reportable force used against them (see Figure 3.1). However, in this portion of the report, we examine the *number of officers* who used force during any incident across the four-year study period and the subsequent injuries that result. Note that multiple officers may use force in a single incident against single or multiple individuals.

Before examining officers' injuries, we first measure the frequency with which officers use force. The findings that follow have several caveats and limitations. First, the identity of individual officers involved in use of force incidents is (purposefully) unknown to the research team. Therefore, it is unknown if officers were active members of the CSPD throughout the entire four-year study period. Second, we would expect some variation in the frequency of use of force based on the specific patrol area and/or assignment of officers; however, specific officer assignments are not considered in these

¹⁴⁴ The "baseline" predicted probability is the foundation of the regression model, where all estimates are set to their average values. To determine the effect size of the various statistically significant independent variables, the average values are then changed to the low-to-high values of the measures – which can be interpreted as, "all else being equal, the likelihood that x is associated with y" (e.g., race is associated with injury) is demonstrated by a given predicted probability.

descriptive analyses. Therefore, we make no determination if the number of force incidents per officer is appropriate.¹⁴⁵

Recall that each individual officer who uses force completes a Use of Force Report, even if multiple officers were involved with the same individual or group of individuals. From January 1, 2017 to December 31, 2020, 573 officers completed 2,829 Use of Force Reports. Figure 5.10 shows the frequency of use of force by officers. Of the 573 officers who completed at least one Use of Force Report during the study period, 156 (27%) were involved in a single use of force incident, while 43% (n = 245) were involved in two to five use of force incidents, and the remaining 30% of officers were involved in six or more use of force incidents (n = 172). As shown in Figure 5.11, the maximum number of force incidents for a single officer was 63. For our four-year study period, the average number of uses of force per officer was 4.9, or a little more than one use of force per officer, per year.

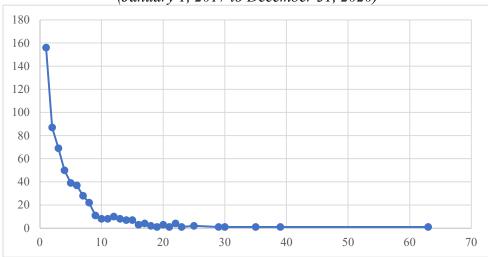


Figure 5.10. Officers' Frequency of Use of Force Incidents (n = 573) (January 1, 2017 to December 31, 2020)

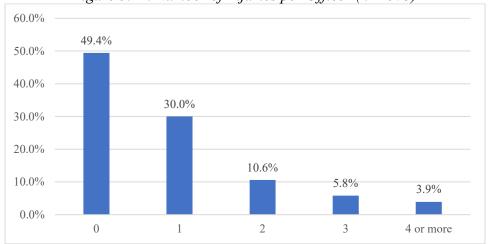
Identifying the factors that relate to officer injuries is of critical importance to provide recommendations regarding the adjustments of policies, training, and supervision to continually improve officer safety. To examine officer injuries, we consider multiple units of analysis. Within the data examined during the 4-year study period, there were 2,829 Use of Force Reports, completed by 573 individual officers (officers may be involved in multiple force events over the study period). These 2,829 reports documented 2,005 use of force incidents (multiple officers may be involved in the same incident, thereby generating multiple reports for the same incident) involving 2,192 subjects (multiple subjects could have force used against them within a single incident).¹⁴⁶

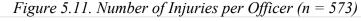
¹⁴⁵ The CSPD's Early Intervention System, however, is based on thresholds that specifically consider shift and specialized unit assignments based on frequency of contacts. This information should continue to be routinely reviewed by CSPD supervisors.

¹⁴⁶ For the previous analyses examining subject injuries, we examine only those individuals "known" to officers (because they have demographic information available for analysis). There were an additional 108 individuals who had force used against them who were unknown to officers, but are included in the analyses at the officer level.

First, at the incident level, 427 of the 2,005 incidents resulted in at least one officer injury (21.3%). Second, of the 2,829 Use of Force Reports completed by individual officers, 516 (18.3%) involved an officer injury.¹⁴⁷ Finally, the number of injuries should be considered based on how often officers are involved in use of force incidents. Therefore, we also calculated the injury rate by dividing the number of injuries by force incidents, per officer. Of the 573 officers who used force at least once, the rate of injury per officer was 20%. Nearly half of the officers (n = 283) had a 0% injury rate, indicating they were not injured in any use of force incident. Others were injured each time they used force; note, however, that 35 of the 39 officers with a 100% injury rate used force only one time.

Figure 5.11 shows the number of times officers were injured during use of force incidents. Of the 573 officers who used force at least once during our four-year study period, nearly half of the officers (49.4%) were not injured during any incident. However, 30% of officers were injured once, 10.6% were injured twice, 5.8% were injured three times, and 3.9% were injured four or more times.





With slight variation based on the unit of analysis selected, the findings generally show that officers are injured approximately 20% of the time during use of force incidents. Nearly all (98%) of the officer injuries reported were classified as "bodily injuries" with only 2% reported as "serious bodily injury." At each of these units of analysis, officer injuries occur less frequently than injuries to subjects who had force used against them (approximately 73% of subjects were injured); this difference in reported injuries is consistent with previous research.¹⁴⁸

5.4.1 Injury by Force Type

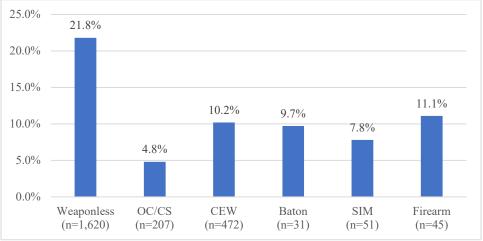
We now examine officer injuries based on the type of force used. Previous research demonstrates that the use of weapons like CEWs and OC spray are less likely to result in officer injuries, whereas

¹⁴⁷ An additional five reports (0.2%) involved officer injuries unrelated to force and 25 reports injury information was missing, or the officer did not provide enough information to discern whether an injury occurred, and if so, its severity (e.g., merely listing that a weapon was used).

¹⁴⁸ For example, see Hickman et al., 2021; Morabito & Socia, 2015; Smith et al., 2007; Stroshine & Brandl, 2019; Taylor et al., 2011; Wolf et al., 2008.

weaponless physical force is more likely to result in officer injury.¹⁴⁹ Again, injuries are reported by CSPD at the incident level, rather than linked to specific force actions. Because we cannot determine which type of force resulted in injury (if an officer uses more than one type of force), we restrict our analysis of officer injuries by force type to the 87.6% of incidents where officers used only a single type of force (n = 2,477). It is also important to note that we cannot determine with these data whether the officer injuries preceded, or resulted from, the use of force.

Restricting the sample to incidents where officers used a single type of force only (n=2,477), Figure 5.12 shows the percent of officer injuries that occurred by force type. As shown, officers were most likely to be injured during incidents when they employed weaponless force (21.8%), followed by when they discharged their firearm (11.1%).



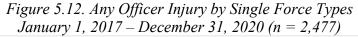


Figure 5.13 shows officers' injury severity by force type. As shown, officers were most likely to sustain serious bodily injury when they used their firearms. Bodily injury to officers occurred in 21.6% of incidents that involved weaponless physical force, 10% of incidents that involved CEW, and 9.7% of incidents that involved batons. Again, we cannot determine with these data whether officer injuries preceded or resulted from their deployment of specific types of force.

¹⁴⁹ For example, see Jetelina et al., 2017; MacDonald et al., 2009; Morabito & Doerner, 1997; Morabito & Socia, 2015; Smith et al., 2007; Stroshine & Brandl, 2019; Taylor & Woods, 2010.

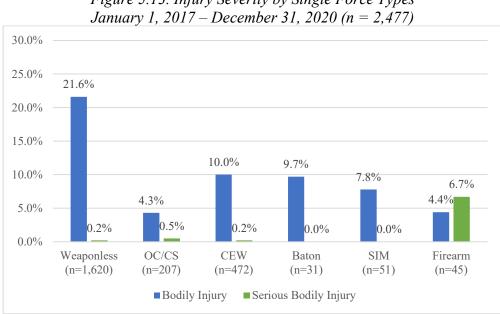


Figure 5.13. Injury Severity by Single Force Types

5.4.2 Predicting Officer Injury

To better understand the factors that predict which officers get injured during use of force incidents, we again use multivariate statistical modeling. Here the statistical models estimate the likelihood that an officer is injured when considering similar use of force situations. Our analyses are based on 2,744 out of 2,829 for which we had complete data for each of the independent variables.

Previous research demonstrates that officers are more likely to be injured during longer force encounters, when facing more aggressive resistance or an armed suspect, when they pursue a fleeing suspect, and when they use physical force; conversely, officers are less likely to be injured when they use CEWs (TASER) or OC spray.¹⁵⁰

Table 5.4 displays the independent variables that could be measured with the use of force data to predict officers' injuries. For incident characteristics, we included maximum resistance level of any individual who had force used on them; if there were multiple individuals within a single encounter, we included the maximum resistance shown across the individuals. As with previous analyses of maximum resistance, this was measured on a scale of 1 to 4, where 1 = no resistance reported, 2 = passiveresistance, 3 = active resistance, and 4= active aggression. The average maximum resistance level was 3.39, which shows the most common maximum resistance encountered by officers ranged between active resistance (3) and active aggression (4).

Another incident variable considered is whether officers used multiple types of force against the individual during a single encounter. Officers used multiple types of force in 12% of force incidents. In these analyses, 90% of the officers that used force were male, with an average age of 35.4 years old. The

¹⁵⁰ For example, see Hickman et al., 2021; Jetelina et al., 2017; MacDonald et al., 2009; Morabito & Doerner, 1997; Morabito & Socia, 2015; Smith et al., 2007; Stroshine & Brandl, 2019; Taylor & Woods, 2010.

largest percentage of the officers were White (87%), followed by Hispanic (5.8%), officers of other races/ethnicities (3.6%) and Black (3.3%).

	Mean	Standard	Min	Max
Variables		Deviation		
Officer Injured	.186	.389	0	1
Incident Characteristics				
Maximum resistance by any	2.39	.532	1	3
individual				
Multiple force types used in event	0.12	.325	0	1
Officer Characteristics				
Male	.902	.297	0	1
Age	35.35	8.63	22	63
White	.878	.327	0	1
Black	.033	.179	0	1
Hispanic	.058	.234	0	1
Other	.036	.172	0	1

Table 5.4. Descriptive Statistics: Officer Injuries within Use of Force (n = 2,744)

Table 5.5 presents the results of a multivariate logistic regression predicting whether an officer was injured. The results show that the higher the maximum resistance, the more likely the officer was injured in the use of force event (odds ratio = 1.71). Additionally, officers who used two or more types of force were 1.6 times more likely to be injured in the encounter compared to officers who only use a single type of force. It is likely that this relationship reflects situations when officers use an initial type of force that is ineffective and must resort to a second or third option, thereby increasing their risk of injury as the engagement is prolonged (Hickman et al., 2021).

In terms of demographics, male officers were significantly *less likely* to be injured during use of force encounters compared to female officers. The inverted odds ratio $(-1.71 = 1/\exp(B))$ demonstrates that female officers were *1.7 times more likely* to be injured during use of force encounters compared to male officers, even after considering other factors including the maximum resistance shown. As was done previously, the results presented here were also assessed with a series of supplemental and sensitivity analyses, and the results were very similar regardless of model(s) estimated.¹⁵¹

¹⁵¹ Again, none of the structural neighborhood measures (including residential population percent White, Black, Hispanic, percent 15-24 years old, economic disadvantage, residential instability, and violent crime rates) corresponded with officer injuries. This suggests officers were equally likely to be injured in any of the 31 CSPD zone sectors.

Variables	B (SE)	Odds Ratio
Intercept	-3.16 (.368)	
Incident Characteristics		
Maximum resistance by any individual	.536* (.095)	1.71
Multiple force types used in event	.472* (.138)	1.60
Officer Characteristics		
Male	542* (.150)	.584
Age	.009 (.006)	
Black	204 (.299)	
Hispanic	.086 (.208)	
Other	.012 (.294)	

Table 5.5. Multivariate Logistic Regression Predicting Officer Injury During Force Incidents (n = 2,744)

*p < .05; only statistically significant odds ratios are presented (for parsimony)

To demonstrate more precisely the officer gender difference in injuries reported above, we present the predicted probability¹⁵² of injury based on whether the officer was female or male in Figure 5.14. As shown, all else being equal, the likelihood of officer injury was 18.3% for females compared to 11.6% for males.

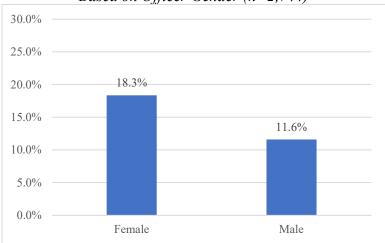
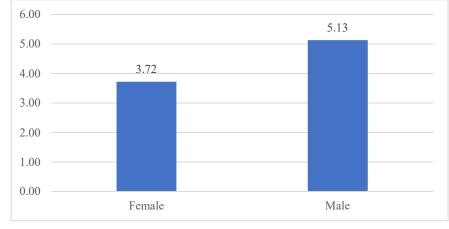


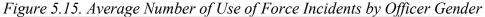
Figure 5.14. Predicted Probability of Officer Injury During Use of Force Incidents Based on Officer Gender (n=2,744)

 $^{^{152}}$ As described earlier in this section, predicted probabilities are a more precise estimation method that demonstrates the impact of the independent variables in a regression model. The "baseline" predicted probability is the foundation of the regression model, where all estimates are set to their average values. To determine the effect size of the various statistically significant independent variables, the average values are then changed to the low-to-high values of the measures – which can be interpreted as, "all else being equal, the likelihood that x is associated with y" is demonstrated by a given predicted probability.

5.4.3 Further Examination of Officer Gender Differences in Injuries

To further examine the gender differences in injuries reported above, we first examine the average number of use of force incidents in this 4-year study period that involve female vs. male officers. As shown in Figure 5.15 below, female officers are engaged in significantly fewer number or force incidents (average of 3.72 incidents per female officer) compared to male officers (average of 5.13 incidents per male officer). This is consistent with some previous research.¹⁵³ It is unknown why these gender differences exist for CSPD officers, although it may be related to the specific assignments, deployment area, or de-escalation skills of female officers.¹⁵⁴





We also explore the possibility that female officers experience more resistance during force incidents (although this variable is controlled in the multivariate model above). Nevertheless, we examine the bivariate relationship between officer gender and maximum resistance shown by individuals during force encounters in Figure 5.16 below. As shown, female officers are slightly less likely to experience active resistance and slightly more likely to experience active aggression compared to male officers, but these differences are not statistically significant, and further, resistance is considered in the multivariate models. Therefore, the level of resistance shown to female officers during use of force incidents does not appear to be an explanation for their increased likelihood of injuries.

¹⁵³ For example, see: Ba et al., 2021; Schuck & Rabe-Hemp, 2007.

¹⁵⁴ For example, see: Engel et al., 2021 who found male officers were significantly less receptive than female officers to ICAT (de-escalation) training; White et al., 2021 who found female officers were significantly more likely to use certain de-escalation tactics than male officers.

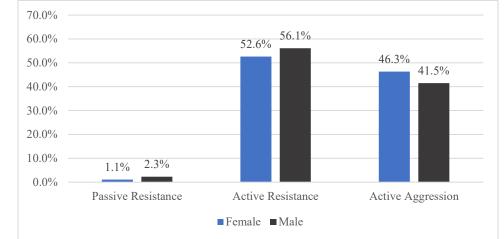
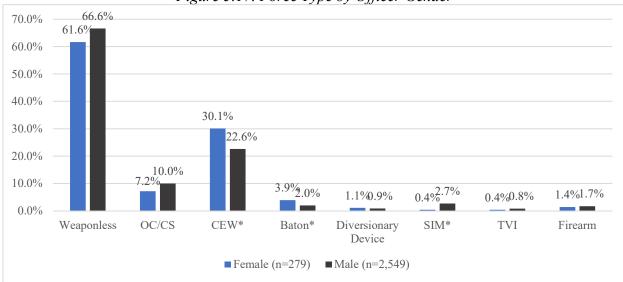


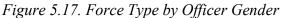
Figure 5.16. Maximum Resistance Encountered During Use of Force Incidents by Officer Gender

Next, we consider the injury rate, which is calculated as the number of injuries divided by the number of use of force incidents for each officer. Only slight differences in injury rates for female and male officers emerge (injury rate = 21% for female officers, 19% for male officers).

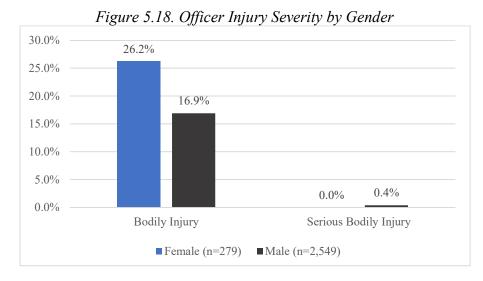
Once involved in a use of force incident, female officers are essentially equally likely to use more than one type of force in a single encounter. Therefore, having to use multiple types of force in a single incident cannot be an explanation for the higher likelihood of female officer injuries.

There are, however, statistically significant gender differences in the types of force employed (statistical significance is denoted by an asterisk on the force type). As shown in Figure 5.17 below, female officers are significantly more likely to deploy TASERS and batons but less likely to use SIM compared to male officers. It is possible that the higher percentage of TASER usage by female officers is what is driving more female injuries; as previously reported, TASER deployment was one of the least effective types of force used by officers (see Figure 5.2).





We also consider the severity of injuries across officer gender. While ten male officers experienced serious bodily injury during the 4-year study period, no female officers sustained serious bodily injury. As shown in Figure 5.18 below, however, female officers were significantly more likely than male officers to report bodily injuries (26.2% of female officers, compared to 16.9% of male officer); these differences are statistically significant (i.e., not due to chance).



5.5 Section Summary

In this section, we consider the frequency of types of use of force (excluding pointing of a firearm) and the factors that impact the likelihood of both citizen and officer injuries during use of force incidents.

5.5.1 Types/Effectiveness of Force

The three most common types of force used by the CSPD include: Weaponless (67%), CEW (29%) and OC/CS (13%). The use of these types of force varied somewhat across CSPD divisions, with officers in the Gold Hill Division being least likely to use weaponless physical force, but the most likely to use CEWs (TASERs). The effectiveness of types of force in gaining compliance from a resisting subject ranged from approximately 50% to 95%. Of the most frequently used types of force, CEWs were the least effective, with officers reporting effectiveness only 57% of the time they are used. Some differences in the types of force used against racial/ethnic and gender groups emerged. Black individuals were the least likely to have weaponless physical force used against them but most likely to have OC/CS used against them. In addition, female subjects were significantly more likely than men to have weaponless physical force used against them, and significantly less likely to have a CEW deployed.

5.5.2 Canines

The examination of canines as a type of force was considered separately because the information is collected differently than other use of force types. Our limited analyses suggest that canine bites are relatively rare, with 58 individuals in a four-year period that had a use of force incident involving a canine. Approximately 38% of individuals that had force involving a canine also had another type of force used during the incident. Only 46 of the 58 individuals that had a canine bite were included in CSPD's new canine-specific related use of force report (beginning in May 2018). Examining those

individuals showed that the reason the primary reasons a canine was deployed for felony suspect apprehension (47%), and suspect/area search (29.4%). Civilian bystanders and canine handlers were never bitten, but in two events a fellow officer was bitten. Of the subjects bitten by a canine, 96% were treated at the hospital.

5.5.3 Individual (Subject) Injuries

Of the individuals who had police force used against them, approximately 73% had reported injuries related to the incident. While the reported injury rate for individuals involved in force incidents is high, the injuries themselves are rarely classified as serious; only 1.5% of individuals had a reported serious bodily injury and 0.6% resulted in death.

The likelihood of individuals' injuries varied across the type of force used. Although rarely used, batons and firearms were among the highest injury rates. Weaponless physical force – which is the most common type of force – resulted in injury for nearly 70% of individuals who had that type of force used against them. CEW use also resulted in a high percentage of injuries (85%) although this is likely due to the classification as lacerations from the TASER probes as injuries. Of those with CEW-related injuries, over half (55%) of the injuries were limited to probe impact lacerations.

Multivariate statistical models were used to estimate the likelihood of use of force incidents resulting in subject injuries. As expected, the strongest predictors of subjects' injuries include multiple types of force used, subjects' level of resistance, intoxication, and emotional/mental health impairment.

Specifically, after controlling for other factors:

- Individuals who had two or more types of force used against them were 2.9 times more likely to be injured than individuals who had a single type of force used against them.
- Individuals who displayed higher levels of resistance were 1.3 times more likely to be injured than individuals who displayed lower levels of resistance. All else being equal, the likelihood of injury increases approximately 4 to 5% for each increase in the level of resistance shown.
- Individuals perceived to be under the influence of drugs or alcohol and individuals perceived to be emotionally disturbed were both approximately 1.3 times more likely to be injured in comparison to individuals who were not perceived to be impaired.
- Black individuals were significantly *less likely* to be injured than White individuals
- Males were 1.2 times more likely to be injured than females.

Characteristics of the neighborhood where the force incident occurred (including population demographics, poverty, crime rates, etc.) did not impact the likelihood of subjects being injured.

5.5.4 Officer Injuries

Using multiple measures, we generally find that officers are injured approximately 20% of the time during use of force incidents, and that 2% of these injuries are classified as "serious bodily injury." Nearly half of the 573 officers who used force at least once during the study period, were not injured during any incident. However, 30% of officers were injured once, 10.6% were injured twice, 5.8% were injured three times, and 3.9% were injured four or more times.

Officers were most likely to be injured during incidents when they employed weaponless force (21.8%), followed by when they discharged their firearm (11.1%), and CEW (10.2%).

Using multivariate statistical models, as expected, the strongest predictors of officer injuries were: (1) the maximum level of resistance encountered, and (2) the need to use more than one type of force to gain subject compliance. Specifically, after controlling for other factors:

- Officers who experienced a higher level of subject resistance were 1.7 times more likely to be injured
- Officers who used two or more types of force were 1.6 times more likely to be injured
- Female officers were *1.7 times more likely* to be injured during use of force encounters compared to male officers. All else being equal, the likelihood of officer injury was 18.3% for females compared to 11.6% for males.

The risk of officer injury was not impacted by any neighborhood characteristics (e.g., residential population demographics, poverty, or crime rates).

As noted, even after controlling for other factors, including subject resistance, female officers were at greater risk of injury during use of force incidents. Additional exploration of officer injuries by gender reveals that although female officers were less likely than male officers to be involved in use of force incidents, they were more likely to be injured during those incidents, and these injuries were more likely to be bodily injuries. These injuries cannot be explained by using multiple types of force or suspect resistance. That is, the increased risk of injury to female officers during force incidents is not due to female officers being more likely than male officers to use multiple types of force during an encounter or experiencing higher levels of resistance. We do know that female officers were more likely than males to deploy their CEWs, and this less lethal option is among the *least effective* force type to control suspect resistance. Recommendations regarding these findings are included in Section 9.

6. POINTING OF FIREARMS

One of the Police Executive Research Forum's *Guiding Principles on Use of Force* specifically recommends that police agencies document the pointing of firearms at individuals (PERF, 2016). Scholarly research examining this topic shows that police agencies with policies that require documenting the pointing of firearms have significantly lower rates of officer-involved shootings; furthermore, implementing this type of policy has *not* been shown to increase injury or death rates among officers.¹⁵⁵ As a result, the systematic capturing of the pointing of a firearm is considered a progressive law enforcement practice, however, is still infrequently adopted by agencies across the country. The CSPD is a leader in this regard; the agency has systematically captured incidents involving the pointing of a firearm for the last five years.

CSPD policy initiated the requirement to document pointing of a firearm at a person as a reportable use of force on February 3, 2017.¹⁵⁶ Currently, General Order 500.25 states that:

Pointing a firearm at a person is a reportable use of force under G.O. 510 Reporting Use of Force. Officers will also use the body worn camera classification "Use of Force Situation," in addition to any other applicable classifications. Officers may point a firearm at a person when an officer reasonably believes it is necessary for the safety of officers and/or others. Pointing a firearm will not be used for the purpose of intimidation absent the reasonable fear for the safety of officers and/or others. Once the safety concern is no longer present, officers must immediately cease pointing a firearm at a person.

As described in Section 3, the pointing of a firearm is documented on a separate report when used alone, and on the standard use of force report when used in conjunction with another form of force by the same officer. The information required to be collected regarding the pointing of a firearm report is more limited than the standard use of force report (see Appendix C for examples of both reports). While the report narrative often includes more detailed information, this information is not systematically captured, and is not readily available for quantitative analyses.

In this section, we first present the *quantitative analyses* that could be conducted to examine the pointing of firearm events from February 3, 2017 to December 31, 2020, including the overall trends, demographic characteristics of the individuals who had firearms pointed at them, the patterns associated with pointing of firearms by officers, and benchmark comparisons of rates of pointing of firearms for racial/ethnic groups similar to what was presented for use of force in Section 4. Note however, that unlike the use of force analyses in Section 4, multivariate statistical modeling could not be conducted because there is less information available for incidents involving only the pointing of a firearm. As a result, we rely more heavily on our *qualitative analyses* by examining randomly selected use of force incidents. We describe the methodology and findings from this review then conclude with an overall section summary.

¹⁵⁵ For example, see Jennings & Rubado, 2017; Shjarback et al., 2021.

¹⁵⁶ This policy change went into effect as part of CSPD General Order 710, Reporting Use of Force, which has since been renumbered and updated as General Order 510 (most recent effective date 11/2/2020). On June 19, 2020, with the enaction of SB 217, Colorado law enforcement agencies will begin reporting to the Division of Criminal Justice on January 1, 2023 whether a peace officer *unholstered* a weapon during contacts with the public.

6.1 Quantitative Analysis of Pointing of Firearms, February 3, 2017 – December 31, 2020

CSPD officers pointed firearms at 4,134 individuals over a roughly four-year period, from February 3, 2017 to December 31, 2020.¹⁵⁷ We begin by presenting information on the general trends of CSPD pointing of firearm events at the department and division levels over time.

6.1.1 Trends in Pointing of Firearms

Table 6.1 below shows the number of individuals who had firearms pointed at them overall, and by year, at the department and division levels.¹⁵⁸ Note that the data reported in Table 6.1 begins in February 2017, when General Order 500.25 was first implemented; therefore, yearly comparisons are complicated by only having 11-months of data reported for 2017. In Figures 6.1 and 6.2 below, we add the 2017 monthly average number of individuals who had firearms pointed at them (monthly average = 83) to the total number of individuals for 2017. Using this mean substitution to approximate non-recorded incidents from January 2017 allows for a more direct comparison of yearly trends over time.¹⁵⁹

 Table 6.1. Number of Individuals Who Had Firearms Pointed at Them: By Division and Year

 (February 3, 2017 – December 31, 2020; Mean Substitution for January 2017)

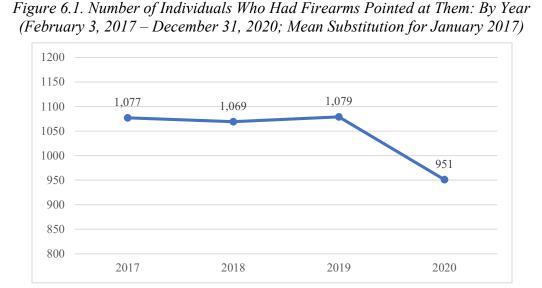
	Overall	2017	2018	2019	2020
CSPD	4,134	994	1,069	1,079	951
Falcon	710	127	212	194	176
Gold Hill	983	283	234	273	193
Sand Creek	1,700	414	456	433	397
Stetson Hills	632	162	146	161	160

As shown in Figure 6.1 below (with mean substitution for January 2017) at the department level, the number of individuals who had firearms pointed at them was relatively stable, before a considerable decline in 2020. Specifically, from 2019 to 2020, the number of individuals who had a firearm pointed at them by CSPD officers decreased 11.9%.

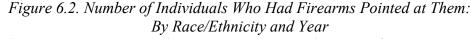
¹⁵⁷ This includes instances where an officer *only* pointed their firearm (reported on a Pointing of Firearm Report) and instances where an officer also used another type of force and reported the pointing of a firearm on the Use of Force Report.

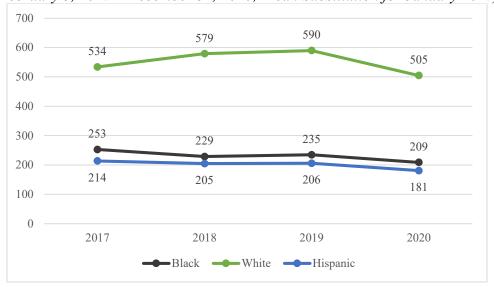
¹⁵⁸ There were 41 individuals whose event date was missing, therefore, the yearly column totals do not add to the overall column total. Additionally, there were 72 individuals whose event location could not be mapped to a division due to missing data. As a result, the division totals do not add to the overall department total.

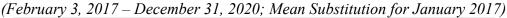
¹⁵⁹ Note that *for graphic display only*, 83 individuals were added to the CSPD total for 2017, while 11 individuals were added for Falcon Division, 18 individuals for Gold Hill Division, 35 individuals for Sand Creek Division, and 14 individuals for Stetson Hills Division. These additions represent the 2017 monthly average for each division. For all other analyses reported within this section, *mean substitution for January 2017 are not included*; that is, no additional data are added to the quantitative analyses reported.



Yearly trends are further explored by individuals' race/ethnicity in Figure 6.2 below. Among the 4,134 individuals who had firearms pointed at them by CSPD officers during this roughly 4-year period, 4,088 involve "known individuals," while the other 46 individuals are unknown. As shown, the majority of individuals who had firearms pointed at them were White, followed by Black and Hispanic. When mean substitution is included for January 2017, the yearly trends generally show some differences across race/ethnic groups. For example, there was an increase in the pointing of firearms at White individuals from 2017 to 2018, and another increase in 2019, followed by a large decrease in 2020. By comparison, the number of Black and Hispanic individuals involved in pointing of firearm incidents decreased from 2017 to 2018 and remained relatively stable until decreasing in 2020. It is important to note that the overall reduction in firearm pointing incidents experienced across the city in 2020 was led primarily by the reduction in pointing incidents involving White individuals (-14.4%), followed by Hispanic (-12.1%) and Black (-11.1%) individuals.



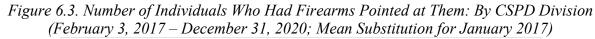




Yearly trends at the division level are graphically displayed in Figure 6.3 below. Again, note that mean substitution for January 2017 is included in this graphical display. As shown, Sand Creek Division had the highest number of reported individuals who had firearms pointed at them across all four years, while Stetson Hills had the lowest number for three of the four years reported.

Comparing trends over time, the number of individuals reported to have had a firearm pointed at them in Sand Creek Division steadily decreased from 2018 to 2020. Gold Hill Division experienced a decline from 2017 to 2018, a slight increase from 2018 to 2019, and was followed by a significant decrease in 2020. Overall, the number of persons who had a firearm pointed at them in Gold Hill Division declined by 35.9% over the roughly four-year period. Falcon Division experienced an increase in individuals who had firearms pointed at them from 2017 to 2018 (this might be due to increased compliance with new reporting requirements), followed by relative stability across 2018 to 2019, followed by a moderate decline (-9.3%) in 2020. After a decline from 2017 to 2018, Stetson Hills Division has generally experienced stability in the number of individuals reported to have firearms pointed at them across the remaining three-year period.

All divisions noted a decline in the number of individuals who had firearms pointed at them between 2019 and 2020; the magnitude of this change, however, varied widely from -0.6% in Stetson Hills to - 29.3% in Gold Hill. Collectively, the overall CSPD departmental decline in pointing of a firearm from 2019 to 2020 was larger driven by the decrease in Gold Hill Division.



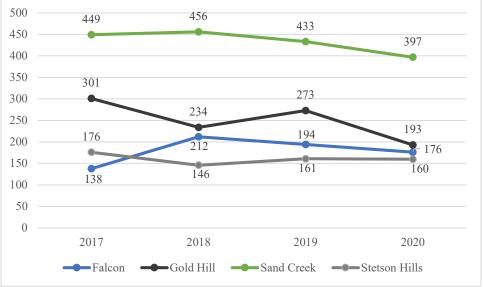


Figure 6.4 shows the number of individuals who had firearms pointed at them by month from February 3, 2017 to December 31, 2020. At the department level, considerable variation in the number of individuals who had firearms pointed at them was noted across months during this roughly 4-year period. As shown, firearm incidents abruptly increased in January 2019, followed by an immediate decline the following month. Also note that firearm pointing substantially declined in June 2020, and further dipped the following month (July 2020), representing the lowest number across the four-year period of individuals who had a firearm pointed at them. The number of individuals who had a firearm

pointed at them increased slightly in the remaining months of 2020, but never reached pre-May 2020 levels.

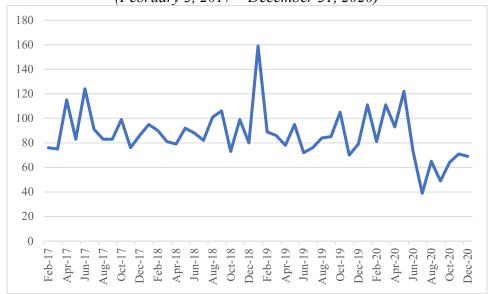
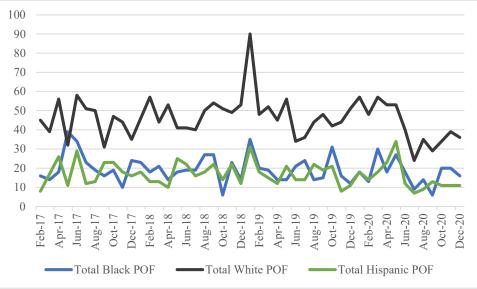


Figure 6.4. Number of Individuals Who Had Firearms Pointed at Them: By Month (February 3, 2017 – December 31, 2020)

The monthly fluctuations identified previously are roughly mimicked when examining the race/ethnicity of individuals who had firearms pointed at them. As shown in Figure 6.5 below, while the majority of firearm pointing incidents involved White individuals, the monthly patterns are roughly equivalent for both Black and Hispanic individuals.

Figure 6.5. Number of Individuals Who Had Firearms Pointed at Them: By Month and Race/Ethnicity (February 3, 2017 – December 31, 2020)



Interrupted Time Series Analyses

As with the use of force analyses presented in Section 4, we also consider if critical incidents or events had an impact on the pattern of the monthly reported pointing of a firearm. In particular, we determine if there were any changes in the pattern of pointing of firearms that changed directly following the following seminal events:

- 1) CSPD officer-involved shooting of De'Von Bailey (August 3, 2019)
- 2) Colorado Executive Order declaring COVID 19 Disaster Emergency (March 11, 2020)
- 3) Officer-involved death of George Floyd in Minneapolis (May 25, 2020)
- 4) Enactment of SB 20-217: Enhance Law Enforcement Integrity (July 1, 2020)

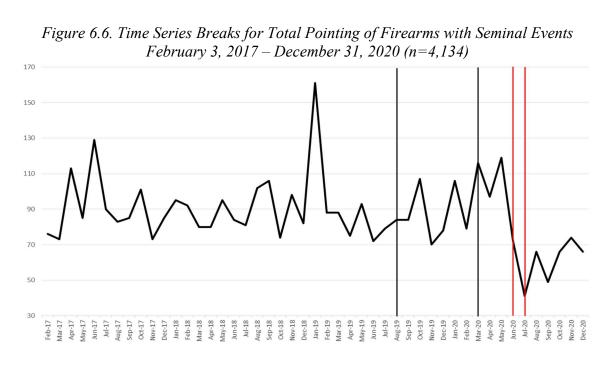
The interrupted time series analyses are conducted on the monthly totals of individuals who had a firearm pointed at them by CSPD officers. Again, we reiterate that the last two events (the killing of George Floyd and the enactment of SB-217) were close in time (within six weeks). As a result, we cannot fully disentangle the possible impact that these two events had on the frequency of pointing of a firearm.

To examine the impact of these events on the pointing of a firearm trend, we conducted four interrupted time series analyses.¹⁶⁰ The findings from the interrupted time series analyses examining the trends in pointing of a firearm show no impact directly following the Bailey shooting or the response to COVID-19. However, similar to the use of force trends reported in Section 4, the six month-time period following the death of George Floyd did result in statistically significant decreases in the number of individuals who had a firearm pointed at them by CSPD officers (declining by roughly 28%). In addition, the five-month period following the enactment of SB-217 also showed a slightly larger statistically significant decline in pointing of firearms (reduction of approximately 29%).¹⁶¹ The pointing of firearm monthly trends are graphically displayed in Figure 6.6, where the red vertical lines represent statistically significant interruptions, or in this case, reductions in the pre-existing trend of monthly pointing of firearm counts; the black vertical lines indicate non-significant events.

As raised in Section 4, using a time series approach with a short post-time period can lead to unstable statistical estimates. The findings show that a significant change in the pattern of the frequency that officers pointed their firearms at individuals starting in June 2020, and continued as a larger decline in July 2020, continuing until the end of the study period (December 2020). This same declining trend in the pointing of firearms was **not** observed directly following the officer-involved shooting of De'Von Bailey in August 2019 or the initiation of the stay-at-home orders associated with COVID-19 in March 2020.

¹⁶⁰ Breaks in the time series are as follows: August 2019 for the officer-involved shooting of De'Von Bailey, March 2020 for COVID-19 pandemic, June 2020 for responses to the death of George Floyd, and July 2020 for SB-217.

¹⁶¹ For the June and July 2020 breaks in the series, the majority of the reduction was for all racial/ethnic groups. The point estimates increased in size between June and July 2020, suggesting a greater reduction in July; although a longer follow-up period is desirable to better estimate the changes in trends.



We further examine if the monthly fluctuations in the frequency of pointing of a firearm differs across individuals' race/ethnicity. Again, time series analyses were conducted to examine the potential impact of four critical events on the patterns of CSPD pointing of firearms, including separate analyses by racial/ethnic groups (Black, Hispanic, and White). The findings demonstrate that, as with the overall analysis, the only significant reductions in the frequency of pointing of firearms for all racial/ethnic groups occurred after the death of George Floyd and SB-217. In terms of race-specific declines, the reductions for pointing of firearms involving Black individuals and White individuals were virtually identical across the significant time breaks (i.e., the June and July 2020 post-periods) in the series (ranging from -28% to -30%). For this same time period, the reductions in pointing of firearms involving Hispanic individuals was much greater (reductions of 50% and 49% for the June/July 2020 post-periods).¹⁶²

6.1.2 Characteristics of Individuals Who Had Firearms Pointed at Them

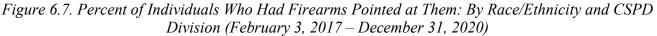
Table 6.2 below presents information on the gender and race/ethnicity of the individuals who had firearms pointed at them at the department and division level. Across the department, nearly 81% of individuals who had firearms pointed at them were males. The majority of individuals who had firearms pointed at them were White (52.6%), followed by Black (22.0%), Hispanic (19.2%), and other (1.5%). In almost 5% of pointing of firearm events, the individual's race/ethnicity was unknown.

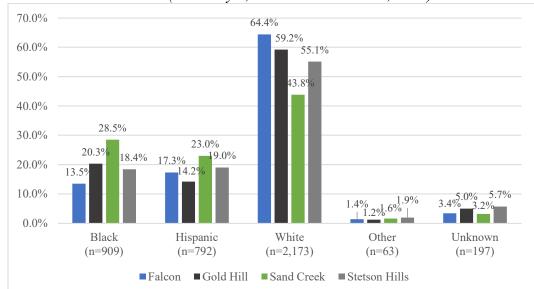
¹⁶² It is somewhat difficult to compare these trends given that the frequency of pointing of firearms at Hispanic individuals is half that of White individuals (throughout the entire series) and two-thirds of the frequency for Black individuals (in the post-June/July 2020 periods). Only a lengthier post-break period will provide additional confidence that the reduction in pointing of firearm events involving Hispanic individuals was a significant divergence relative to the declines also experienced in pointing of firearm events involving both White and Black individuals.

	Gender N (%)			Race/Ethnicity N (%)					
	Female	Male	Unknown	Black	Hispanic	White	Other	Unknown	
CSPD	738	3,342	54	909	792	2,173	63	197	
(n=4,134)	(17.9%)	(80.8%)	(1.3%)	(22.0%)	(19.2%)	(52.6%)	(1.5%)	(4.8%)	
Divisions									
Falcon	143	563	4	96	123	457	10	24	
(n=710)	(20.1%)	(79.3%)	(0.6%)	(13.5%)	(17.3%)	(64.4%)	(1.4%)	(3.4%)	
Gold Hill	183	796	4	200	140	582	12	49	
(n=983)	(18.6)	(81.0%)	(0.4%)	(20.3%)	(14.2%)	(59.2%)	(1.2%)	(5.0%)	
Sand Creek	288	1,403	9	484	391	744	27	54	
(n=1,700)	(16.9%)	(82.5%)	(0.5%)	(28.5%)	(23.0%)	(43.8%)	(1.6%)	(3.2%)	
Stetson Hills	113	510	9	116	120	348	12	36	
(n=632)	(17.9%)	(80.7%)	(1.4%)	(18.4%)	(19.0%)	(55.1%)	(1.9%)	(5.7%)	

Table 6.2. Number of Individuals Who Had Firearms Pointed at Them: By Race/Ethnicity and Gender(February 3, 2017 – December 31, 2020) (n=4,134)

Also displayed in Table 6.2 above, at the division level, the overall percent of pointing of firearm events that involved males was relatively consistent. Considerably more variation across divisions, however, was observed by individuals' race/ethnicity. For example, 64.4% of individuals who had firearms pointed at them were White in Falcon Division, compared to 43.8% of individuals in Sand Creek Division. Conversely, the percentages of Black and Hispanic individuals who had firearms pointed at them in Sand Creek Division were higher than in any other division. Some variation in racial/ethnicity across divisions should be expected, based in part on crime and population differences. The possible explanations for racial/ethnic differences are further explored in additional analyses later in this section. This information is also graphically displayed in Figure 6.7 below.





Of the 4,088 known individuals who had firearms pointed at them during this roughly four-year period, there were 3,636 distinct individuals, with 380 "repeat individuals" who had firearms pointed at them on more than one occasion. Of these 380 repeat individuals, 319 were involved in two distinct events, 51

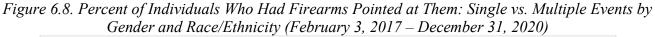
involved in three events, 9 involved in four events, and one individual involved in five separate incidents. In summary, 10.5% of the individuals that had firearms pointed at them were involved in this type of use of force more than once during this time period.

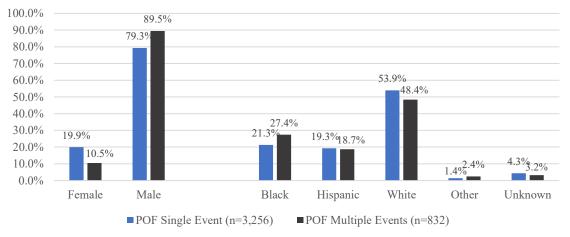
Table 6.3 presents information comparing the percentage of individuals who had firearms pointed at them in single vs. multiple events by gender and race/ethnicity. There are statistically significant differences by both gender and race/ethnicity based on a chi-square analysis. Although males were significantly more likely than females to have firearms pointed at them overall, this difference was significantly higher between single and multiple events (p value <.01); that is, the percent of males involved in multiple events was significantly higher than the percent of males involved in single events. Similarly, although White individuals represented the largest percentage of individuals who had firearms pointed at them overall, the percent of White individuals involved in multiple events was significantly lower than the percent of White individuals involved in single events. On the other hand, the percent of Black individuals involved in single events (p value < .01).

Table 6.3. Number of Individuals Who Had Firearms Pointed at Them: Single vs. Multiple Events byGender and Race/Ethnicity (February 3, 2017 – December 31, 2020

n=4,088 individuals	Ger	ıder	Race/Ethnicity					
	Female	Male	Black	Hispanic	White	Other	Unknown	
Single Event (n=3,256)	647	2,581	692	627	1,754	44	139	
	(19.9%)	(79.3%)	(21.3%)	(19.3%)	(53.9%)	(1.4%)	(4.3%)	
Multiple Event (n=832)	87	745	213	161	412	19	27	
	(10.5%)	(89.5%)	(27.4%)	(18.7%)	(48.4%)	(2.4%)	(3.2%)	

This comparison of single vs. multiple pointing of firearm events by gender and race/ethnicity is also presented graphically in Figure 6.8. Again, these results demonstrate a difference in the likelihood of experiencing the pointing of a firearm more than once across gender and racial/ethnic groups.





It is important to recognize, however, that bivariate chi-square analyses do not consider other variables when determining statistical significance. In other words, this analysis does not consider any other

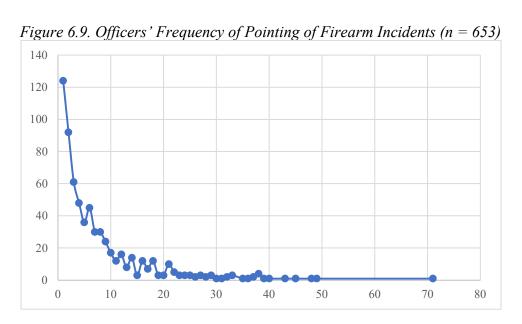
factors that may be associated with the likelihood of experiencing the pointing of a firearm more than once (e.g., seriousness of the offense; time, location, reason for the stop, etc.) that may also vary by gender and race/ethnicity. Unfortunately, as noted earlier in this section, the information required to be collected on the pointing of firearm report is limited and the more detailed information that may be captured in the report narrative is not systematically reported and not readily available for quantitative analyses. As a result, we cannot examine pointing of firearm outcomes with multivariate analyses as we did use of force in Section 4. Instead, following our examination of officers who pointed firearms and benchmark analyses of pointing of firearm rates, we examine in-depth a sample of randomly selected pointing of firearm reports to provide additional context for understanding these events.

6.1.3 Characteristics of Officers Who Pointed Firearms

Throughout the report, we examine the number of individuals who had reportable force used against them, however, for this portion of the report, we examine the *number of officers* who pointed their firearms during any incident across the roughly four-year review period. Note that multiple officers may point their firearms in a single incident at a single or multiple individuals. The purpose of the analyses that follow is to better understand the frequency of officers who point their firearms. We again note that it is unknown to the research team if the officers' assignment is not considered in these descriptive analyses. We would expect some variation in the frequency of pointing of a firearm based on the specific patrol area and/or assignment of officers; therefore, we cannot determine if the number of pointing of firearm incidents per officer is appropriate based on their work conditions. However, we note in our recommendations (see Section 9) that this information should be routinely reviewed by CSPD supervisors and added as a metric in the Early Intervention System.

Recall that each individual officer who points their firearm completes a Pointing of Firearm Report, even if multiple officers were involved with the same individual or the same group of individuals. In addition, if a firearm is pointed by the same officer who also uses at least one other type of reportable force, the pointing of firearm is instead documented on a Use of Force Report. From the initiation of the collection of pointing of a firearm data in February 2017 until December 2020, 653 unique officers completed 4,087 Pointing of Firearm Reports and 143 Use of Force Reports for a total of 4,950 reported pointing of firearms. For 4,087 of the 4,950 reports (97.1%), pointing of firearm was the only type of force used during the encounter.

Of the 653 officers who completed at least one Pointing of Firearm Report during the study period, the vast majority (81%) were involved in multiple events, ranging from 2 to 71 incidents per officer. Specifically, approximately 19% were involved in a single pointing of firearm incident (n = 124), while 58.7% (n = 383) were involved in two to ten pointing of firearm incidents, and the remaining 22.4% of officers (n=146) were involved in 11 or more (maximum = 71) pointing of firearm incidents. For our roughly four-year study period, the average number of pointing of firearm reports per officer was 7.6, which averages to about two pointing of firearm incidents per officer, per year. This variation is shown in Figure 6.9 below.



6.2 Pointing of Firearm Benchmark Analyses

The process of creating disproportionality indices and disparity ratios is described in detail in Section 3 and the explanation of the particular benchmark measures used is in Section 4 preceding the use of force benchmark analyses. Recall that the disproportionality index compares a racial/ethnic group's percentage of an observed outcome (i.e., pointing of firearm) with the same racial/ethnic group's percentage within an expected rate of the same outcome based on a comparison data source. The disproportionality index compares within group, while the disparity ratio compares between groups. Specifically, the disparity ratio compares the likelihood of an outcome for an individual in a racial/ethnic minority group (e.g., Black and Hispanic) to the likelihood of the outcome for an individual in the majority group (White).

For the analyses that follow, seven distinct benchmarks are compared:

- (1) Percent Residential Census Population
- (2) Percent Arrestee Population (all crimes)
- (3) Percent Arrestee Population (Part I crimes)
- (4) Percent Arrestee Population (Part I violent crime)
- (5) Percent Suspect Population (all crimes)
- (6) Percent Suspect Population (Part I crimes)
- (7) Percent Suspect Population (Part I violent crime)

6.2.1 Disparity Ratio Findings—CSPD Overall

For the analyses that follow, we return to examining the number of individuals who had force used against them (rather than the number of officers). Table 6.4 shows the percentages of individuals by race/ethnicity who had firearms pointed at them by CSPD, as well as their representation in each of the seven benchmarks. It also displays disproportionality indices for Black, Hispanic, and White individuals. Finally, disparity ratios comparing Black and Hispanic individuals' likelihood of having a firearm pointed at them in comparison to White individuals' likelihood of the same. Figure 6.10 graphically displays a comparison of the disparity ratios for Black and Hispanic individuals based on these seven

benchmarks. As shown in Table 6.4, the percent of White individuals who had a firearm pointed at them was 52.6%; for Black and Hispanic individuals, the percentages were 22.0% and 19.2%, respectively.

Table 0.4. CSPD	<u> </u>		Ethnicity		ortionali	Disparity Ratios		
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic
Pointing of Firearms $(N = 4,134)^{163}$	2,173	909	792					
% Pointing of Firearms	52.6%	22.0%	19.2%					
Benchmark 1: % Residential Population	65.3%	5.5%	18.4%	0.81	3.99	1.05	4.96	1.30
Benchmark 2: % Arrestee Population (All crimes)	63.4%	18.7%	15.5%	0.83	1.18	1.24	1.42	1.49
Benchmark 3: % Arrestee Population (Part I Crimes)	62.0%	20.0%	15.4%	0.85	1.10	1.25	1.29	1.47
Benchmark 4: % Arrestee Population (Part I Violent Crimes)	55.7%	24.5%	17.0%	0.95	0.90	1.13	0.95	1.20
Benchmark 5: % Suspect Population (All Crimes)	53.6%	17.1%	13.4%	0.98	1.29	1.44	1.31	1.47
Benchmark 6: % Suspect Population (Part I Crimes)	46.7%	16.9%	12.1%	1.13	1.30	1.59	1.16	1.41
Benchmark 7: % Suspect Population (Part I Violent Crime)	50.7%	25.0%	16.0%	1.04	0.89	1.2	0.85	1.16

For the first benchmark (residential Census population), the disparity ratio for Black individuals was 4.96 (4.96 = 3.99 Black Disproportionality Index / 0.81 White Disproportionality Index). This means that Black individuals had firearms pointed at them at a ratio that was nearly five times greater than White individuals, based on their representation in the residential population. By comparison, Hispanic individuals were 1.3 times more likely than White individuals to have firearms pointed at them based on their representation in the residential population. By comparison, Hispanic individuals were 1.3 times more likely than White individuals to have firearms pointed at them based on their representation in the residential population. In summary, when the residential population is used as a benchmark comparison (to estimate risk for police pointing of firearm), Black individuals, and to a lesser degree, Hispanic individuals, were significantly overrepresented in pointing of firearms incidents. As noted earlier, however, the residential population benchmark is fraught with several unsupported assumptions and limitations that do not withstand empirical scrutiny, and therefore these findings should not be interpreted as evidence of police bias. Comparing rates of pointing of firearms experienced by racial/ethnic groups to their representation in the residential census population is problematic because such comparisons fail to adequately consider legitimate differences across racial/ethnic groups in their *risks* of having a firearm pointed at them by the police.

Benchmarks 2 – 4 use some variation of the *arrestee population* to estimate the population at risk of having a firearm pointed at them. These analyses use the CSPD arrestee population, measured from arrest reported across a four-year period (January 1, 2017 – December 31, 2020). During this time

¹⁶³ Not displayed in tabular or graphic format are 260 cases of "other" or unknown race/ethnicity.

frame, 77,134 arrested individuals are included in the creation of the benchmarks.¹⁶⁴ When using race/ethnicity of arrestees as the benchmark to compare to the observed pointing of firearm counts, we are assessing how frequently individuals of different racial/ethnic groups have firearms pointed at them relative to their representation in the arrestee population. As shown above in Table 6.4 and below in Figure 6.10, the disparity ratio for Black individuals (i.e., the Black disproportionality index relative to White disproportionality index) drops from 4.96 (using residential census population), to 1.42 (using arrestee population). In contrast, the disparity ratio for Hispanic individuals (compared to White individuals) increases slightly using the arrest-based benchmark. This illustrates that using a different benchmark (arrestee population) produces a dramatically different interpretation of racial/ethnic disparity in pointing of a firearm.

When the arrestee benchmark is changed to only include those individuals arrested for Part 1 (most serious) crimes, the disparities are even further reduced for Black individuals (DR=1.29) but remain the same for Hispanic individuals. When we further examine the arrestee-based benchmark to include on those arrested for Part I *violent* crimes, the disparity ratio for Black individuals falls below 1.0, indicating *no disparities for Black individuals* in pointing of a firearm compared to White individuals, based on representation in the arrestee population for serious violent crimes. The disparity ratio for Hispanic individuals, is also reduced using this benchmark, although Hispanic individuals were still shown to be 1.2 times more likely than White individuals to have firearms pointed at them, based on their representation in the population arrested for serious violent criminal offenses.

An inherent problem, however, with using arrestees as a benchmark for pointing of firearm comparisons is that officers may be biased in who they arrest. This bias would go undetected because the analysis begins with arrests (based on the inherent assumption that this measure is unbiased). If officers have disproportionately over-arrested racial and ethnic minorities (due to overt or implicit bias), the use of arrest as a benchmark will underestimate the actual disparity between arrestees and rates of pointing of firearms.¹⁶⁵ Furthermore, some pointing of firearm situations do not result in arrest, including 61% of CSPD's pointing of firearms between February 3, 2017 and December 31, 2020, which suggests that this benchmark has important limitations as a proxy measure for the population at risk of having firearms pointed at them (assuming no police bias).¹⁶⁶

The third and final data set used to create benchmarks 5 - 7 is criminal suspects. Here, the race/ethnicity recorded for individuals reported as criminal suspects (by the public through reporting of criminal events) is used as a proxy measure to estimate individuals at risk of having a firearm pointed at them. Using all crime suspects as the benchmark, the likelihood of having a firearm pointed is higher for Black and Hispanic individuals compared to White individuals. Specifically, based on the population of known criminal suspects for all crimes, Black and Hispanic individuals were *1.3 and 1.5 times more likely*, respectively, than White individuals to have a firearm pointed at them. These disparity ratios decrease slightly when the criminal suspects benchmark is limited to suspects of Part I (most serious) crimes (DR =1.2 for Black individuals, DR=1.4 for Hispanic individuals). Finally, when comparing to the

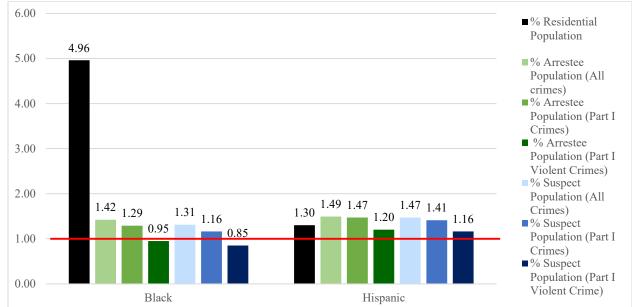
¹⁶⁴ There were 77,134 total arrests in Colorado Springs from 2017 to 2020. Each arrestee is person-event specific. That is, each person-event is one arrest, regardless of how many officers are included on the arrest report, how many charges are levied against the arrestee, or whether the arrestee appears more than once in the arrestee data.

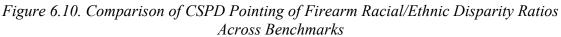
¹⁶⁵ For example, see Cesario et al., 2019; Geller et al., 2021; Knox et al., 2020; Knox & Mummolo, 2020.

¹⁶⁶ For example, see Fryer, 2020; Shjarback & Nix, 2020; Tregle et al., 2019.

population of known Part I *violent* criminal suspects, the likelihood of having a firearm pointed at individuals is no longer disparate for Black and Hispanic individuals. Rather, Black individuals were 1.2 times *less likely* than White individuals to have firearms pointed at them (DR = 0.85), while Hispanic individuals were only marginally more likely (1.1 times) than White individuals to have firearms pointed at them.

Figure 6.10 below visually displays the differences across the pointing of firearm disparity ratios for Black and Hispanic individuals for the seven benchmarks reported in Table 6.4. The red line indicates no racial/ethnic disparities detected (DR = 1.0). Bars that are above the 1.0 threshold show that Black and Hispanic individuals were more likely than White individuals to have firearms pointed at them more than would be expected based on their representation in the selected benchmark population. Bars that fall under the red line demonstrate fewer pointing of firearms for these racial/ethnic groups compared to White individuals than would be expected.





As noted in previous sections, of the three types of benchmarks (i.e., residential Census data, arrestbased data, and criminal suspect-based data), using the criminal suspect population as a benchmark likely produces findings with the strongest validity. Alternatively, as previously described, the residential population benchmark can provide insight about how different groups within a given jurisdiction experience police outcomes, they cannot provide reliable information regarding the reasons for these differences.

As shown in the graph above, the disparity ratio is the highest when based on the residential Census data for Black individuals. As illustrated, the remaining disparity ratios range from 0.85 to 1.42. This is consistent with other research that compared population-based benchmarks to benchmarks that better

account for "risk" of firearm pointing and typically show dramatic reductions.¹⁶⁷ For the disparity ratios that are more than 1.0, Black individuals are between 1.16 and 1.42 times more likely to have a firearm pointed at them compared to White individuals, depending on which arrestee or suspect benchmark is used. The disparity ratios that are less than 1.0 indicate that White individuals were more likely to have firearms pointed at them compared to Black individuals, given their representation in the violent arrestee and violent criminal suspect populations. The disparity ratios for Hispanic individuals range from 1.16 to 1.49 depending on the benchmark used, indicating that regardless of benchmark, Hispanic individuals were slightly to moderately more likely to have firearms pointed at them compared to be have firearms pointed at them compared to have a subscription of the benchmark used.

6.2.2 Disparity Ratios by CSPD Divisions

The benchmark analyses below examine pointing of firearm trends by CSPD's four organizational divisions.¹⁶⁸ Table 6.5 below shows the counts of individuals who had a firearm pointed at them by division during the four-year study period, along with the percent by racial/ethnic groups. The divisions varied in their percentages of pointing of firearms across individuals' race/ethnicity (e.g., Falcon had the highest percentages of pointing of firearms against White individuals; Sand Creek had the highest percentages of pointing of firearms against Black and Hispanic individuals).

For the benchmark analyses at the division level that follow, we examine only three benchmarks:

- (1) Percent Residential Census Population
- (2) Percent Arrestee Population (all crimes)
- (3) Percent Suspect Population (all crimes)

We were unable to examine the arrestee and suspect populations for only Part I and Part I violent crimes because of the smaller base population when examined by division. The reduced number of cases limits the statistical power for the analyses.

Table 6.5 below reports the pointing of firearm disparity ratios for Black and Hispanic individuals compared to White individuals, based on these three benchmarks. A visual comparison of the three benchmarks is also graphically displayed in Figures 6.11 and 6.12. When measuring disparity ratios based on residential population across the four CSPD divisions, each shows racial/ethnic disparities in pointing of firearms for Black individuals compared to White individuals. For example, within the Gold Hill Division, Black individuals comprise only 4.2% of the residential population but account for approximately 20.3% of all pointing of firearms (DR = 5.8 when compared to the disproportionality index for White individuals). This is roughly interpreted as Black individuals in Gold Hill being 5.8 times more likely than White individuals to have a firearm pointed at them, when compared to their representation in the residential population. Falcon and Stetson Hills have similar disparity ratios of 5.3 and 4.7, while Sand Creek, with the largest percentage of Black residential population across divisions, has the lowest (but still large) pointing of firearm disparity ratio across divisions (DR = 2.5).

¹⁶⁷ For example, see Cesario et al., 2019; Fryer, 2016; Geller et al., 2021; Ross et al., 2020; Smith et al., 2019; Tregle et al., 2019.

¹⁶⁸ As noted previously, 109 pointing of firearm incidents could not be mapped to CSPD divisions due to missing or invalid location information.

The pointing of firearm disparity ratios based on residential population for Hispanic individuals are lower than the disparity ratios for Black individuals across all divisions. Nevertheless, disparities are still noted, with Hispanic individuals *1.7 times more likely* than White individuals in Falcon Division, *1.4 times more likely* in Stetson Hills Division, and *1.2 times more likely* in Gold Hill Division to have firearms pointed at them, based on their representation in the residential population. Note, however than the disparity ratio for Hispanic individuals is less than one in Sand Creek, indicating Hispanic individuals were *less likely* than White individuals to have firearms pointed at them in comparison to their proportion of residential population in that division. As described in detail in Section 3, disparity ratios based on disproportionality indices using residential Census population as benchmarks fail to account for the likelihood of contact with police that would lead to a greater risk of the pointing of firearms. *To reiterate, the purpose of including benchmark comparisons based on residential Census population is solely to consider them in comparison to other potentially more valid benchmarks to see if the observed patterns remain.*

The next examination of disparity ratios uses all arrestees (by race/ethnicity and division) as the benchmark. Using this comparison, as shown in Table 6.5, the divisions' disparity ratios range from 1.18 in Falcon to 1.45 in Sand Creek, with Gold Hill (DR = 1.35) and Stetson Hills (DR = 1.28) in the middle. As shown in Figure 6.11, when using arrestee population as the benchmark, the pointing of firearm disparity ratios for Black individuals compared to White individuals are more similar across divisions, and smaller overall, than the disparity ratios produced with the residential population benchmark. The disparity ratios for Hispanic individuals based on the arrestee benchmark are also consistent across all divisions, ranging between 1.3 and 1.5 (Falcon DR = 1.49, Gold Hill DR = 1.29, Sand Creek DR = 1.4, and Stetson Hills DR = 1.44). With the exception of Falcon Division, these disparity ratios for Hispanic individuals are actually slightly higher than the residential population-based benchmark previously reported.

The final comparison for pointing of firearms uses the criminal suspect population as a benchmark. As noted previously, while the residential population benchmark likely overestimates racial/ethnic disproportionality, the arrestee benchmark possibly underestimates it. Examining disparity ratios in the pointing of firearms across racial/ethnic groups while using the criminal suspect population as a benchmark likely produces findings with the strongest validity. The results of the disparity ratio analysis based on all criminal suspects are described below and displayed in Figures 6.11 and 6.12. Using criminal suspects as the benchmark, the disparity ratios demonstrate that pointing of firearms at Black individuals was equivalent to 1.0 in Falcon Division, slightly greater than 1.0 in two divisions (DR = 1.16 in both Sand Creek and Stetson Hills), and 1.25 in Gold Hill. This demonstrates that little to no racial/ethnic disparities were detected in pointing of firearms for Black individuals relative to White individuals when using criminal suspects as a proxy measure for measuring the population at risk of the pointing of firearms by police. As was evident in the arrest benchmark comparisons for Hispanic individuals, the disparity ratios for Hispanic individuals are slightly higher than the disparity ratios for Black individuals. The disparity ratios range from 1.25 to 1.48 across divisions, with the highest being in Stetson Hills Division.

			0 1	Firearm Racial/Ethnic Disparit					
Falcon		t Race/E				·	Disparity Ratios		
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic	
% Pointing of Firearm (N=710)	64.4% (457)	13.5% (96)	17.3% (123)						
Benchmark 1: Residential Population	74.3%	2.9%	12.1%	0.87	4.61	1.43	5.32	1.65	
Benchmark 2: Arrestee Population (all crimes)	71.9%	12.8%	13.0%	0.90	106	1.33	1.18	1.49	
Benchmark 3: Suspects Population (all crimes)	55.0%	11.4%	10.9%	1.17	1.19	1.59	1.01	1.36	
Gold Hill	Percer	t Race/E	thnicity	Dispro	portional	ity Indices	Dispar	ity Ratios	
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic	
% Pointing of Firearm (N=983)	59.2% (582)	20.3% (200)	14.2% (140)						
Benchmark 1: Residential Population	71.2%	4.2%	14.9%	0.83	4.82	0.95	5.80	1.15	
Benchmark 2: Arrestee Population (all crimes)	68.0%	17.3%	12.6%	0.87	1.18	1.13	1.35	1.29	
Benchmark 3: Suspects Population (all crimes)	58.1%	15.9%	11.1%	1.02	1.27	1.28	1.25	1.26	
Sand Creek	Percer	t Race/E	thnicity	Disproportionality Indices			Disparity Ratios		
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic	
% Pointing of Firearm (N=1,700)	43.8% (744)	28.5% (484)	23.0% (391)						
Benchmark 1: Residential Population	44.0%	11.3%	33.8%	1.00	2.51	0.68	2.52	0.68	
Benchmark 2: Arrestee Population (all crimes)	53.4%	23.9%	20.1%	0.82	1.19	1.15	1.45	1.40	
Benchmark 3: Suspects Population (all crimes)	40.2%	22.5%	16.9%	1.09	1.27	1.36	1.16	1.25	
Stetson Hills	Percent Race/Ethnicity		Disproportionality Indices			Disparity Ratios			
	1 (1((1		-						
	White	Black	Hispanic	White	Black	Hispanic	Black	Hispanic	
% Pointing of Firearm (N=632)			Hispanic 19.0% (120)	White 	Black	Hispanic 	Black	Hispanic 	
% Pointing of Firearm	White 55.1%	Black 18.4%	19.0%					-	
% Pointing of Firearm (N=632) Benchmark 1: Residential	White 55.1% (348)	Black 18.4% (116)	19.0% (120)						

Table 6.5. CPSD Division Level Pointing of Firearm Racial/Ethnic Disparity Ratios

Again, Figures 6.11 and 6.12 display the pointing of firearm disparity ratios for Black and Hispanic individuals, respectively, based on each of the three benchmarks examined at the CSPD division level. The red line indicates no racial/ethnic disparities detected (disparity ratio = 1.0). Bars that are above the

1.0 threshold show that Black and Hispanic individuals have firearms pointed at them more than expected (compared to the respective benchmark), while bars that fall under the red line demonstrate fewer pointing of firearms for these racial/ethnic groups than would be expected.

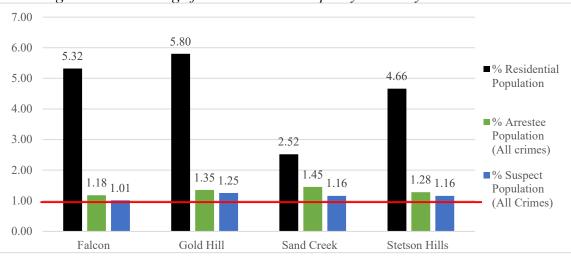


Figure 6.11. Pointing of Firearm Black Disparity Ratios by CSPD Division

As shown in Figure 6.12, the pointing of firearm disparity ratios for Black individuals are the highest across all divisions when based on the residential census data but are much closer to 1.0 (no disparities) when based on arrestee or criminal suspect comparison data. This is consistent with the trend at the department level and with previous research.

The disparity ratios for Hispanic individuals (see Figure 6.12 below) range from 1.15 to 1.65 depending on the benchmark used (with the exception of the Census benchmark for Sand Creek), indicating that regardless of benchmark, Hispanic individuals were slightly to moderately more likely to have firearms pointed at them than White individuals across divisions. As noted in Section 9 (Recommendations), the *CSPD leadership should further examine these racial disparities for Hispanic individuals related to the* pointing of a firearm, and consider the necessary changes to policy, training, reporting, and supervision to reduce these disparities that are particularly evident for the Hispanic population.

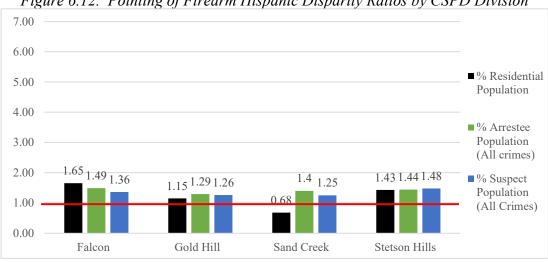


Figure 6.12. Pointing of Firearm Hispanic Disparity Ratios by CSPD Division

6.3 Review of CSPD Pointing of Firearm Incidents

Given the limitations of the quantitative analyses that can be conducted to examine pointing of a firearm specifically, the CSPD requested a more in-depth review of a sample of pointing of firearm events. The TMLLC team qualitatively reviewed and assessed a random sample of CSPD incident reports specifically limited to pointing of firearms from February 3, 2017 to December 31, 2020. Our review of these cases was designed to determine whether CSPD's pointing of firearms incidents over this four-year period were appropriate or warranted further supervisory action.

The advantage of this type of mixed-methods research is to maximize the strengths of particular methods, while minimizing the overall weaknesses.¹⁶⁹ In this case, the quantitative data that is available for analysis to predict pointing of firearm is limited. Although qualitative data does not produce the same type of knowledge as quantitative data, it can provide additional context and deeper understanding of our outcome of interest—pointing of firearms—that can both supplement and inform the interpretation of the aggregate quantitative analyses.¹⁷⁰ In our study, this in-depth qualitative review specifically meets the "expansion" purpose of mixed-methods research to provide answers to different components of the same question.¹⁷¹ It specifically addresses the final research question of our study, which is *what improvements should be made to CSPD's use of force policies, training, and data collection and analysis*.

6.3.1 Methodology

Pointing of firearm incidents identified for in-depth review were randomly selected using the following methodology. First, we drew upon a stratified random sample, by year, of all Pointing of Firearm Reports from February 3, 2017 – December 31, 2020 (n=4,897).¹⁷² We randomly selected 35 cases per year for each of the four years, equating to 140 total pointing of firearm reports, which involved 217 individuals, since in many cases an officer pointed their firearm at more than one person per report.

Our random sample, collected at the officer-event (report) level, included 140 incidents where officers drew and pointed their firearms at 217 individuals. It is important to note that in the call for service event where these pointing of firearms took place, other officers may have pointed firearms at the same individuals in the sample, or other individuals not in the sample; these are additional actions and individuals not included in this analysis. Rather, the qualitative review documented below only focuses on officer reports, which were randomly selected. The incidents reviewed here-in involved a single officer, who may have pointed their firearm at multiple people; in cases that involved multiple people, all are included in the single report.

One member of the TMLLC team reviewed each incident by examining the CSPD Pointing of Firearm Reports, Offense Reports, and Computer Aid Dispatch (CAD) records containing the officers'

¹⁶⁹ For example, see Brent & Kraska, 2010.

¹⁷⁰ For example, see Trahan & Stewart, 2013; Worrall, 2000.

¹⁷¹ For example, see Green et al., 1989.

¹⁷² This is the number of IA Pointing of Firearm Reports. It exceeds the 4,134 individuals who had a firearm pointed at them identified for the quantitative analyses because each officer who points their firearm is required to fill out an individual report. For example, if two officers point their firearms at a single individual, there would be two IA Pointing of Firearm Reports, but the individual would only appear once in our person-event data.

description of events, any resulting charges, and whether supervisory review or approval was indicated. Relevant body worn camera (BWC) video footage to independently assess whether the force used was necessary under the circumstances was also reviewed.

It is important to consider whether the randomly selected cases for review appropriately represent the larger population of cases from which they were drawn. To consider this, we conducted a comparisons of means test using independent sample t-tests.¹⁷³ Table 6.6 provides a comparison of the individuals who had firearms pointed at them across the two different samples: (1) Total population of pointing of firearm reports from February 3, 2017 – December 31, 2020, and (2) pointing of firearm stratified random sample (selected for qualitative review). As shown, when compared to the population of individual-case events (N = 4,134), we found the random sample of cases at the person-event level (N = 217) were more likely to involve Black individuals, less likely to involve White individuals, and were more likely to come from the Stetson Hills Division. Therefore, it is important to note the qualitative analyses reported below do not necessarily represent the population of cases for review are slightly more likely to involve Black individuals and less likely to involve White individuals, and more likely to involve Black individuals and less likely to involve White individuals, and more likely to involve Black individuals and less likely to involve White individuals, and more likely to involve Black individuals and less likely to involve White individuals, and more likely to include incidents from Stetson Hills Division and fewer from Gold Hill.

	Total Population	POF Sample
Indicator Variables	N = 4,134	N = 217
Average Age	30.3 years	29.7 years
Percent Black	22.1%	30.0%*
Percent Hispanic	19.2%	14.7%*
Percent White	53.2%	46.5%*
Percent Male	83.2%	79.1%
Falcon Division	17.6%	17.2%
Gold Hill Division	24.4%	20.9%*
Sand Creek Division	41.1%	40.5%
Stetson Hills Division	15.3%	21.4%*

Table 6.6. Total Pointing of Firearm Reports Compared to Random Sample for Review¹⁷⁴

* p < .05 p-value T-Test

6.3.2 Qualitative Review Findings

Our review of the randomly selected sample of pointing of firearm incidents found officers' actions were, by and large, appropriate in the majority of cases. Indeed, our review confirmed that CSPD officers are often involved in appropriate proactive police work and responses to calls for service. Most

¹⁷³ Independent sample t-test is a statistical technique that is used to analyze the mean comparison of two independent groups to assess whether the distribution of our random sample of individuals who had firearms pointed at them is significantly different than the overall distribution of individuals who had a firearm pointed at them. If the groups' means do not significantly differ from one another, we can be confident the sample and population mirror one another. However, where there are mean differences in percentages (e.g., race) this suggests there is a deviation of the sample of individuals from the population of individuals who had firearms pointed at them.

¹⁷⁴ Individuals of other races/ethnicities are excluded from this comparison of samples due to limited statistical power.

of the incidents that involved additional police action also suggested that CSPD officers were making lawful arrests in responses to both dispatched calls and self-initiated activity. Previous research notes that pointing a firearm is reasonable for a number of purposes, including circumstances when there is no resistance displayed.¹⁷⁵ As a rule, an officer that points a firearm and/or actively targets a person initiates a seizure under the 4th Amendment of the United States Constitution. Within these established rights, individuals have a right to be free from unreasonable seizures and excessive force. A person is not free to leave when a police firearm is pointed at them. The most salient United States Supreme Court standard regarding whether a particular use of force is objectively reasonable is *Graham v. Connor (1989)*. In this case, the court stated there are three factors that should be considered when evaluating whether a use of force is objectively reasonable: (1) the severity of the crime at issue; (2) whether the subject poses an immediate threat to the safety of the officer and others; and (3) whether the subject is actively resisting arrest or attempting to evade arrest by flight.

During review of the randomly selected sample of pointing of firearms incidents, TMLLC's assessment revealed a gap in CSPD policy where it appears this constitutional standard, regarding the pointing of a firearm, has not been consistently used to analyze the appropriateness of pointing of firearm incidents to determine whether the pointing was an "objectively reasonable" use of force. After conducting a thorough review of the 140 randomly selected pointing of firearm cases (involving 217 individuals), 19 incidents (13.6% of cases) involving firearms pointed at 24 individuals (11.1% of individuals) were deemed inappropriate for reasons described in detail below.

Equally concerning is the approval of these reports (and the officers' actions) by CSPD supervisors, without any documented corrective measures. In addition, supervisory oversight issues were identified in thirteen additional justified pointing of firearms events, or roughly 9%, of the incidents assessed. These issues should be addressed through training and demanding supervisory accountability for quality determinations regarding the objectively reasonableness standard associated with pointing of a firearm.

Since a qualitative analysis cannot solely rely upon statistical information, some assumptions were necessary in order to reach a conclusion in each instance in which an officer chose to point a firearm.

- 1. In incidents in which there was a question as to whether an officer's action in pointing a firearm was appropriate, we gave the benefit of doubt to the involved officer.
- 2. In cases in which officers were responding to a burglary or criminal trespass involving a building or residence search, or searching areas such as alleys or yards, or being dispatched to active shootings, and felony crimes against persons in progress (e.g., robbery) that the pointing of firearms was deemed appropriate on its face.
- 3. Similarly, in situations involving a suspected or confirmed stolen vehicle, we assumed that a high-risk vehicle stop was justified.

Inappropriate Pointing of Firearm Incidents (n=19, 13.6%)

In the descriptions that follow, we document the 19 incidents (13.6% of randomly selected incidents) where the circumstances reported did not appear to support officers' pointing of firearms. Officers gave no information to support their actions that these subjects may have been armed and dangerous or presented an imminent threat that would authorize the use of deadly force, other than to indicate "out of

¹⁷⁵ For example, see Mourtgos & Adams, 2021; Smith et al., 2021.

concern for officer safety." A general claim of officer safety, without specific and articulated information to indicate danger, will not justify an officer(s) using a lethal weapon to affect a seizure or detention. In these situations, the pointing of a CEW likely would have had the same deterrent effect, and if required, could have been deployed; whereas, the discharge of a firearm, with lethal consequences, would not have been justified.

Also noted were examples of apparent over-response by officers. While the pointing of firearms may have been justified, the number of officers pointing firearms and the type of weapons (often a combination of handguns, shotguns, and patrol rifles), in some incidents, may have been considered excessive. Five incidents involved from three to six officers, with most officers involved, including cover officers also deploying their weapons. This type of response poses a safety risk to both police personnel and members of the public, particularly if gunfire occurs because of an intentional or accidental discharge by one of the officers on the scene. In one incident reviewed, the supervisor identified and documented an officer safety concern in which the pointing of firearms involved officers supervisors and officers are sensitive to officer safety concerns and, as illustrated here, the same emphasis should be placed on citizen or bystander safety when evaluating officers' potential use of lethal force through the pointing of a firearm.

An additional concern appears to be failure to utilize de-escalation techniques. Since December 2017, CSPD's Use of Force policy requires officers to de-escalate potential force encounters. Within the roughly 14% of pointing of firearm incidents that were identified as inappropriate, we also noted in six of the 19 incidents, officers failed to de-escalate encounters, contrary to the provisions of CSPD policy.

Supervisory Issues in Justified Pointing of Firearm Incidents (n=13, 9.3%)

Our qualitative review also found CSPD supervisory oversight and review (of both inappropriate and justified firearm incidents) to be insufficient in roughly 9% of the randomly selected incidents for review. In some cases, officers' incident reports conflicted directly with other reports or video footage that should have been reviewed by supervisors. Pointing of firearm incidents need to be thoroughly reviewed by the supervisory chain of command and problem areas immediately addressed with the involved officers.

As an observation, the CSPD pointing of a firearm review process appears to involve routine reporting but superficial review. Overall, we found little evidence that supervisors sufficiently addressed the appropriateness of the pointing of a firearm, including whether the tactics employed were justified or whether the reported facts conflicted with other documentation or video footage. In each of the cases for which we determined use of force was not appropriate or that the encounter was unnecessarily escalated by CSPD officers, supervisors approved the use of force as "objectively reasonable."

Additional issues noted that were related to insufficient supervisory review of pointing of firearm incidents included the following:

Use of Boilerplate Language: Involved officers and reviewing supervisors should not make conclusory statements including the use of "boilerplate" or "pat language" (e.g., suspect took a fighting stance, or the suspect made a furtive movement) in reports or statements documenting the pointing of a firearm. A specific description of an individual's behavior that led to the perceived need for a potential use of lethal force by officer(s) must be clearly articulated. It is important for the supervisor to indicate that the use of force is either "objectively reasonable" or not and to provide reasoning.

Timeliness of Reviews: Our review identified five incidents (3.6%) that were significantly delayed in CSPD's pointing of a firearm review process. The incidents ranged from 102 days to 403 days in the review process until a final determination was made by the responsible supervisor and the involved officer's shift or section lieutenant. CSPD policy requires the complete use of force report to be routed to the division commander within 20 days of the use of force incident.

Subsequent Levels of Review Required: We also identified five incidents (3.6%) in which only one supervisory level of review was conducted of the Pointing of Firearm Report. Enforcing CSPD policy is the responsibility of supervisors at all levels, as articulated in General Order 510 (documented previously in Section 2). Supervisors should be held accountable for the timely, accurate, complete, and thorough investigation and documentation of all use of force incidents including the pointing of a firearm by officers under their command or assigned to them for review. Supervisors also have the responsibility for ensuring the provisions of all policies and procedures are consistently and appropriately applied.

6.4 Section Summary

CSPD officers pointed firearms at 4,134 individuals over a roughly four-year period, from February 3, 2017 to December 31, 2020. Our quantitative analyses were limited by the amount of information that is systematically captured on the pointing of firearm report in a format that is readily available for analysis. Nevertheless, our analyses revealed the following primary findings:

6.4.1 Descriptive and Bivariate Analyses

- The number of individuals who had firearms pointed at them was relatively stable from 2017 to 2019, before a considerable decline of 11.9% at the department level in 2020.
- The overall departmental decline in pointing of a firearm from 2019 to 2020 was larger driven by the decrease specifically in Gold Hill Division (-29.3%) and by the reduction in pointing incidents involving White individuals (-14.4%) as compared to -12.1% and -11.1% for Hispanic and Black individuals, respectively.
- Sand Creek Division had the highest number of reported individuals who had firearms pointed at them across all four years, while Stetson Hills had the lowest number for three of the four years reported.
- Nearly 81% of individuals who had firearms pointed at them were male.
- The majority of individuals who had firearms pointed at them were White (52.6%), followed by Black (22.0%), Hispanic (19.2%), and other (1.5%). Considerably more variation in individuals' race/ethnicity was observed across CSPD divisions.
- Of the 4,088 known individuals who had firearms pointed at them, there were 3,636 distinct individuals, with 380 "repeat individuals" who had firearms pointed at them on more than one occasion (10.5%).
 - Repeat individuals who had firearms pointed at them more than once during this time period were significantly more likely to be male compared to female and significantly more likely to be Black compared to White.

• It is important to note that bivariate chi-square analyses do not consider other variables that may be associated with the likelihood of experiencing pointing of a firearm (e.g., seriousness of the offense; time, location, reason for the stop, etc.).

6.4.2 Benchmark Analyses

- We also utilized benchmark analyses to compare the percent of individuals who had firearms pointed at them to an "expected" percent of individuals based on external data sources: including residential Census data, arrest-based data, and criminal suspect-based data. Of these, the criminal suspect population benchmark likely provides the most valid proxy measure of individuals' relative *risk* of coercive interactions with police, while the residential population benchmark is likely the least valid proxy measure.
 - Blacks were 1.3 times more likely than Whites to have firearms pointed at them in comparison to the racial/ethnic percentages of all criminal suspects, 1.2 times more time more likely in comparison to criminal suspects for Part I crimes, and 1.2 times *less likely* than Whites to have firearms pointed at them in comparison to the racial/ethnic percentages of criminal suspects for Part I violent crimes (disparity ratio=0.85).
 - The pattern for disparity ratios based on arrest-related benchmarks is similar to that noted above.
 - The highest disparity ratios were found for the residential population benchmark.
- For Hispanic individuals, the disparity ratios range from 1.16 to 1.49 depending on the benchmark used, indicating that regardless of benchmark, Hispanic individuals were slightly to moderately more likely to have firearms pointed at them compared to White individuals.
- Similar trends in disparity ratios for Black and Hispanic individuals are evident for each of the CSPD divisions.

6.4.3 Qualitative Review

The qualitative review of a randomly selected sample of 140 pointing of firearm reports from February 3, 2017 through December 31, 2020 highlighted that, while the majority, or 77%, of pointing of firearm incidents were appropriate and justified consistent with the facts described in CSPD reports, there is still room for improvement. In roughly 14% of the reviewed cases, officers unnecessarily escalated encounters and/or applied inappropriate or unnecessary uses of force. Moreover, meaningful supervisory review was extremely limited in an additional 9% of these flagged incidents. Supervisors in each case approved all pointing of firearm incidents. It is precisely these types of unnecessary and inappropriate police actions that contribute to issues of public mistrust and a breakdown of community relations. Reducing the likelihood of these types of encounters, and holding officers accountable when they do occur, will require more oversight and enhanced supervisory practices related to incidents involving the pointing of a firearm.

7. COMMUNITY PERSPECTIVES

In this section, we consider community members' perspectives of the police generally, and the CSPD specifically, including their use of force. The perceptions of Colorado Spring residents are critical to consider for multiple reasons. First, an assessment of police use force would be incomplete if relying solely upon police-reported use of force incidents. While official reports provide important information regarding the frequency, severity, and legality of force, they often omit important context regarding these events, and further are reported through the lens of responding officers. It is important to consider other perspectives regarding the frequency, severity, and *perceived necessity* of force. Second, a large component of establishing healthy police-community relationships is receiving feedback from the community regarding their priorities for public safety and how community members want to be policed. There are many ways for police to positively engage with community members, but actively soliciting feedback, listening to concerns, and giving voice to those with lived experiences is especially important. Third, police executives must recognize that even if analyses of their use of force data, policies, and training suggest that they are meeting best practices, if community members perceive officers are biased in their treatment of the public or use excessive force, these concerns need to be identified and addressed. For example, if the public questions the legitimacy of police – e.g., perceives that police treatment lacks respect and outcomes lack fairness – officers are less likely to obtain voluntary compliance,¹⁷⁶ which may increase the likelihood that an encounter results in force.¹⁷⁷ In this section, we briefly review previous research on importance of community perceptions of the police and use of force; then we describe the development, administration, and findings of a community survey; finally, we summarize the overarching themes from a community focus group. These findings provide additional context for the quantitative analyses of use of force data reported previously and help to inform the recommendations provided in Section 9.

7.1 Previous Research

Considerable scholarly attention has focused on understanding what factors influence people's perceptions of the police. Previous research establishes that general perceptions of legitimacy and trust in police are the product of an accumulation of previous personal and vicarious experiences (i.e., friends and family), neighborhood context, and news and entertainment media consumption among others.¹⁷⁸ Research suggests that individuals' perceptions of police are shaped by their level of confidence that: 1) outcomes are equal across groups, and 2) treatment during interactions with police is fair.¹⁷⁹ In addition,

¹⁷⁶ For example, see: Jackson et al., 2012; Jackson et al., 2013; Papachristos et al., 2012; Sunshine & Tyler, 2003; Tyler & Huo, 2002; Tyler & Jackson, 2014; Walters & Bolger, 2019; Weitzer & Tuch, 2006; Worden & McLean, 2017; 2018.
¹⁷⁷ See Section 3 for a review of the literature that shows resistance (e.g., lack of compliance) toward an officer is the

strongest predictor of use of force.

¹⁷⁸ For example, see: Bolger et al., 2021; Brunson, 2007; Gau, 2014; Graziano, 2019; Nagin & Telep, 2017; Pickett et al., 2018; Reisig & Parks, 2000; Rosenbaum et al., 2005; Sahin et al., 2017; Skogan, 2006; Trinkner et al., 2019; Weitzer & Tuch, 2005.

¹⁷⁹ For example, see: Bottoms & Tankebe, 2012; Engel, 2005; Jackson et al., 2013; Reisig et al., 2018; Tyler, 1990; Tyler & Huo, 2002.

research consistently demonstrates that community perceptions of the police are significantly different by race/ethnicity, with people of color routinely holding more negative perceptions of the police compared to White individuals.¹⁸⁰

Community members' perceptions of police use of force specifically are also critical to consider. Research examining public perceptions of police use of force generally reveals a disconnect between legal standards and community expectations.¹⁸¹ For example, a 2018 General Social Survey reports that 34% of respondents could not imagine *any* situation where they would approve of police striking an adult male.¹⁸² Other studies show that public knowledge of the "reasonable officer" standards within *Graham v. Connor* is quite limited.¹⁸³

The gap between the legal requirements guiding officer use of force and community expectations regarding the use of force was highlighted in the 2016 release of the Police Executive Research Forum's (PERF) *Guiding Principles on Use of Force*. The report, produced in the wake of a series of highly controversial police encounters involving the use of deadly force, outlined the latest thinking on use-of-force issues informed by the perspectives of many of the nation's leading police executives. In essence, the *30 Principles* called for changes in use-of-force policies, training, tactics, and equipment to provide officers with better tools for managing difficult situations and to move policing to a higher standard in terms of how and when officers use force.¹⁸⁴ Particularly relevant was PERF's recommendation that police use of force meet the "test of proportionality" rather than the legal reasonableness standard. The proportionality test is based on three questions, the last of which specifically considers the public perspective on appropriate force:

- (1) Am I using only the level of force necessary to mitigate the threat and safely achieve a lawful objective?
- (2) Is there another, less injurious option available that will allow me to achieve the same objective as effectively and safely?
- (3) Will my actions be viewed as appropriate—by my agency and by the general public—given the severity of the threat and totality of the circumstances? ¹⁸⁵

While many of the recommendations offered by PERF resonate with calls for policy reform in law enforcement today, when first released in 2016, the *30 Guiding Principles* were met with skepticism if not altogether opposition by many police organizations.¹⁸⁶ The controversy was fueled in part by concerns regarding the lack of research to support the efficacy of the policy recommendations and the perceived failure to consider the safety of police officers in carrying out their work.¹⁸⁷ In particular, the

¹⁸⁰ For example, see: Engel, 2005; Hurst & Frank, 2000; Peck, 2015.

¹⁸¹ For example, see PERF, 2016.

¹⁸² For example, see Mourtgos & Adams, 2020.

¹⁸³ For example, see Klinger & Brunson, 2009; Novak, 2009.

¹⁸⁴ Among PERF's 30 principles, 13 address use of force policy matters, 11 relate to training and tactics, four pertain to equipment and less lethal weapons, and two involve call-takers and dispatchers.

¹⁸⁵ See: PERF, 2016, p. 38.

¹⁸⁶ For example, see Jackman, 2016.

¹⁸⁷ For example, see Fairburn, 2016.

proposed proportionality test – as a replacement for the legal standards established through *Graham v*. *Connor* – was very controversial among law enforcement executives.

In partial reaction to the PERF Principles – and to provide additional guidance to the law enforcement field – in 2017, the International Association of Chiefs of Police (IACP) partnered with the Fraternal Order of Police (FOP) and twice convened executive leadership from national law enforcement organizations to develop a national model use of force policy. Following these sessions, 13 national law enforcement organizations endorsed the release of the *National Consensus Policy and Discussion Paper on Use of Force* that provided agencies with recommendations on policy language, practices, and standards.¹⁸⁸ This model policy did not include PERF's proposed proportionality test. However, in the years following the publication of the *30 Guiding Principles*, many police agencies across the country have critically examined their use of force and related policies, and continue to highlight the importance of the proportionality principles to enhance police-community relations – including improving public trust and perceptions of police legitimacy – and to improve the safety of citizens and police officers alike.

7.2 Community Survey Methodology

The TMLLC team presented two primary options for gathering information on community perceptions to CSPD leadership for consideration. A random sample of community members (via phone, online, or mail) to enhance representativeness is the scientific standard, but it is more cost-prohibitive, time-intensive, and can be difficult to obtain an acceptable response rate. The difficulties of this approach were compounded by the onset of the COVID-19 pandemic, and overall decline in responses rates experienced across all types of survey administration. The second option proposed by the TMLLC team was to conduct a community survey based on a convenience sample and obtain more in-depth information from a focus group interview with community members (described in Section 7.3). In summary, the community survey would be publicized by the CSPD, community partners, and local media, and would be open to all respondents. This is the approach that was recommended by the TMLCC team, and ultimately selected by the CSPD.

The rationale behind the selection of a community survey administered through convenience sampling was that this option best supported the needs of the CSPD and the Colorado Springs community. The administration of the survey was not dependent on a representative sample of community members, but rather contingent upon understanding the issues of those that are the most invested and therefore willing, to complete a survey. It is important to recognize that a survey based on a convenience sample cannot be used to approximate citizens' perceptions across the City of Colorado Springs, or even specific neighborhoods within the city; it is **not** a representative sample. Further, it is likely that this non-representative sample of survey respondents are more predisposed to have either strongly negative or strongly positive views of the police. Therefore, this survey cannot be used to estimate perceptions held by the general public because of the high possibility of response bias. What the community survey can do, however, is provide an opportunity for community members to be heard, and their individual

¹⁸⁸ Dziejma & De Sousa, 2017.

experiences be given voice. The responses can also be used to help the CSPD identify ways to improve and highlight the additional outreach that is needed to improve community relations and enhance public trust. Finally, community survey responses can provide context to interpret the findings from statistical analyses of official police data provided in Sections 4-6.

7.2.1 Survey Development, Administration, and Analysis

The survey instrument was created by the research team in consultation with CSPD officials and members of the community. Prior to the development of the community survey instrument, in February 2021 members of the TMLLC team met virtually with five community members, including some members of the City of Colorado Springs' Law Enforcement Transparency and Accountability Commission, to gain further insight into the topics and issues they thought would be important to include. Where possible, the survey items were adopted from questions that were validated on survey instruments from previous research measuring the public's attitudes toward police, police-community-relations, use of force, and interactions with police.¹⁸⁹ To be consistent with previous survey research, most of the questions are measured using variations of a Likert scale (e.g., agreement, satisfaction, frequency) allowing the assessment of the nature and intensity of respondents' attitudes. A draft of the survey was submitted to the CSPD and selected community members for additional feedback, which led to some clarifications and increased specificity of questions.

The final survey included 34 close-ended questions and eight open-ended questions to allow respondents to provide more detailed information. The survey questions were designed to better understand community perceptions related to three primary topics: 1) general attitudes toward and perceptions of the CSPD, 2) police use of force, and 3) personal interactions with the CSPD, including perceptions about how they were treated and the outcome of any contacts. We did not limit our questions to only those with actual experiences with the CSPD because research shows that individuals' perceptions of police are typically based on a compilation of factors other than strictly personal experiences. Finally, the survey gathered information regarding respondents' demographic characteristics to examine whether perceptions of the CSPD significantly vary across groups. A copy of the survey is included in Appendix D.

The final survey instrument was available electronically on mobile and desktop browsers (via a link or QR code) and via paper copy. The majority of respondents completed the survey online (96.2%), while 3.5% of respondents completed paper copies. All paper copies were collected by CSPD officials and mailed directly to TMLLC team members. The survey was open for approximately four weeks in May – June 2021. The link to complete the survey was publicized on CSPD's website, social media accounts, and at regular community group meetings; paper copies were also available at all CSPD substations. The availability of the survey was also covered by local print and television media.

¹⁸⁹ In the interest of minimizing the length of the survey, questions were narrowly focused on respondents' perceptions of CSPD rather than on assessing both global and local perceptions of the police. Previous research indicates the two are highly correlated (Brandl et al, 1994).

Due to the nature of the survey administration, a response rate cannot be calculated. The TMLLC team received 1,195 surveys, however 27.8% (n=332) were completely missing (i.e., not a single recorded response). This is likely the result of respondents opening the survey but electing not to complete it. As a result, the final maximum useable sample size was 863 respondents, although not all questions were answered by all respondents.¹⁹⁰ Appendix E includes the number of valid responses for all survey items.

Throughout this section, we present descriptive analyses of the responses to survey items. We often collapse the two negative response options on the five-point Likert scale (e.g., strongly disagree and disagree) into a single "disagreement" measure and the two positive response options on the Likert scale (e.g., strongly agree and agree) into a single "agreement" measure to compare the overall percentages between, for example, agreement and disagreement or satisfaction and dissatisfaction. The percentages of each of the five Likert scale responses to the questions are provided in Appendix E. We also examined through bivariate association statistical tests whether there were statistically significant differences in survey responses by respondent race/ethnicity.¹⁹¹

7.3 Description of Survey Respondents

In this section, we first describe the characteristics of the community survey respondents and compare this information to the U.S. Census data on similar measures for the population of Colorado Springs. We then examine respondents' self-reported interactions with the CSPD.

7.3.1 Respondents' Demographic Characteristics

Table 7.1 presents descriptive information about the 863 community survey respondents, although not all demographic questions were answered by all respondents.¹⁹² The valid number of responses for each demographic category is also included in Table 7.1. Of those with completed demographic information, approximately 68% of the respondents were White, nearly 20% identified as belonging to two or more racial groups, and 9.7% of respondents were Black. Approximately 9% of respondents identified as

¹⁹⁰ Of the 34 close-ended questions, there are a total of 26 questions to which all respondents were eligible to respond. All these questions had less than 10% missing responses (at least 777 responses) and 11 of the questions had less than 5% missing responses (at least 820 responses). Throughout the findings section, the valid percent of responses is reported (i.e., of the respondents who answered that question, what percent selected each of the available responses).

¹⁹¹ For categorical variables (e.g., yes/no), we used chi-square analyses for these statistical comparisons. The majority of our response variables, however, are ordinal. To properly account for the ordinal nature of these response variables, we used nonparametric bivariate association statistical tests. When comparing binary groups (i.e., White/Non-White), the Mann-Whitney/Wilcoxon rank-sum test for statistical significance is used. This test compares the variable's actual distribution of responses, rather than the comparison of means typically associated with parametric tests. For example, a finding of statistically significant differences by race/ethnicity would be interpreted as: "A statistically significantly higher percentage of Non-White respondents agreed with this statement than White respondents." As described in Section 4, in this report the research team considers tests with p-values lower than the convention 0.05 level to be statistically meaningful, indicating 95% confidence that there is a difference in that item across the two groups.

¹⁹² Of the 34 close-ended questions, there are a total of 26 questions to which all respondents were eligible to respond. All these questions had less than 10% missing responses (at least 777 responses) and 11 of the questions had less than 5% missing responses (at least 820 responses). Throughout the findings section, the valid percent of responses is reported (i.e., of the respondents who answered that question, what percent selected each of the available responses).

being of Hispanic ethnicity.¹⁹³ Given the small percentage of individual racial/ethnic groups (beyond White), all Non-White respondents were collapsed into a single group and compared directly to White respondents.

Roughly half of the respondents were female, while 43% were male; 1.7% reported non-binary gender identity and 5.1% preferred not to say. Over half of the respondents were at least 50 years old, while only 9.3% were aged 18 - 29 years old.¹⁹⁴ A majority of the respondents had a Bachelor's degree or higher (63%), were employed full time (54.0%), were married or cohabitating (65.7%), and were homeowners (77.6%). The household income category selected by the largest percentage of respondents (38.1%) was \$50,001-\$100,000. Approximately two-thirds of the respondents indicated they had lived in Colorado Springs for 20 years or more.

A series of comparative analyses with the U.S. Census data from Colorado Springs indicates the current composition of survey responses are a moderately representative sample, although there are deviations above and below Colorado Springs averages on some measure's worth noting. As is the case in most surveys, older respondents were overrepresented in Colorado Springs.¹⁹⁵ Individuals aged 18 to 29 were significantly underrepresented (9.3% of the sample compared to 25.4% of the Colorado Springs adult population).¹⁹⁶ For race, there were no significant differences between the Colorado Springs sample and the estimated census measures on race. In terms of ethnicity, Hispanic individuals were significantly underrepresented in this sample relative to the population (9.3% of the sample compared to 17.6% in the population). The sample was also slightly higher for females (49.9%) compared to males (43.2%) relative to the population (roughly 50%/50% in the population).¹⁹⁷

The sample had a higher level of education relative to the population, and this percentage difference (63.0% for the sample compared to 39.9% of the population) was statistically significant. Also, given the age differences established previously, it is highly likely the sample had more retirees than does the city population.¹⁹⁸ The median income in Colorado Springs is roughly \$64,700, which is roughly in the range of the median salary of the current sample (50th percentile is between \$50K and \$100K). Likewise, currently married individuals were significantly higher in the sample (65.7%) relative to the population of Colorado Springs (51%). Homeownership was also significantly higher for the sample (77.6%) than the population average (59.0%). We do not have any consistent measures collecting residential longevity in the population to compare to the sample.

¹⁹³ 22 respondents selected White for race and Hispanic for ethnicity; these individuals have been coded as Non-White.

 $^{^{194}}$ A small percentage of respondents (0.6%) were 17 years or younger.

¹⁹⁵ Using the 2019 US Census population by age estimates, the percent of people in Colorado Springs who are 60+ years old is 26.7% (100,335/375,085). The total of 375,085 are people who were 18 years or older (adult population in Colorado Springs). In the survey, over 37% of all respondents were 60+ years old.

¹⁹⁶ We used proportional (p) analyses to compare percentages in the age-blocked populations of comparison, p < .05. We used the following site to guide the analyses: <u>https://online.stat.psu.edu/statprogram/reviews/statistical-concepts/proportions</u> ¹⁹⁷ There were 6.8% of respondents who did not give a response or noted a non-binary/third gender dimension which is not currently collected via the U.S. Census data.

¹⁹⁸ The comparisons between 'in civilian labor force' collected by labor statistics was roughly the same in the population (64.7%) compared to the sample (61.5% combined full and part-time employees), but we specifically cannot disentangle retirees from these data.

In summary, as often happens with most surveys, the percentage of retirees and older individuals, homeowners, college-educated individuals, and married individuals were significantly higher in the sample relative to the population of Colorado Springs. In contrast, Hispanic individuals and those aged 18 to 29 were underrepresented in the sample, though these individuals are still reflected in the data. For race and household income distributions, there were no significant differences in the sample compared to the population of Colorado Springs. Thus, we conclude that the sample, while reflective of the Colorado Springs population via many of the measures collected, contained too much divergence in other areas to consider this a representative sample. We recommend the interpretation of survey results with these limitations in mind.

Variable	Number and Percent of Survey Respondents
Age (n=708)	
18-29 years	66 (9.3%)
30-39 years	102 (14.4%)
40-49 years	139 (19.6%)
50-59 years	133 (18.8%)
60-69 years	162 (22.9%)
70 years & older	104 (14.7%)
Race (n=693)	
White	473 (68.3%)
Black or African American	67 (9.7%)
Asian	4 (0.6%)
American Indian or Alaskan Native	10 (1.4%)
Native Hawaiian or Pacific Islander	3 (0.4%)
Other (2 or more races)	136 (19.6%)
Ethnicity (n=686)	
Hispanic	64 (9.3%)
Gender (n=701)	
Male	303 (43.2%)
Female	350 (49.9%)
Non-binary/Third Gender	12 (1.7%)
Prefer not to say	36 (5.1%)
Education (n=705)	
Some High school	5 (0.7%)
High School diploma or equivalent	103 (14.6%)
Trade School or Associates Degree	38 (5.9%)
Bachelor's Degree	226 (32.1%)
Graduate Degree	218 (30.9%)
Employment (n=705)	
Full time	381 (54.0%)
Part time	53 (7.5%)
Student	13 (1.8%)
Retired	202 (28.7%)
Unemployed or Unable to work	56 (8.0%)
Annual Household Income (n=659)	
Less than \$25,000	44 (6.7%)
\$25,001-\$50,000	115 (17.5%)
\$50,001-\$100,000	251 (38.1%)
\$100,001-\$250,000	210 (31.9%)
\$250,001 or higher	39 (5.9%)
Marital Status (n=699)	
Single, never married	88 (12.6%)
Married or cohabitating	459 (65.7%)
Divorced or separated	91 (14.6%)
Widow or widower	35 (5.0%)
Other	15 (2.2%)
Type of Residence (n=692)	
Homeowner	537 (77.6%)
Renter	128 (18.5%)
Occupied without payment of rent	27 (3.9%)
Years of Residence in Colorado Springs	(11-093)
Years of Residence in Colorado Springs 0-9 years	121 (17.4%)
0-9 years	121 (17.4%)
0-9 years 10-19 years	121 (17.4%) 108 (15.5%)

Table 7.1. CSPD Community Survey Respondent Characteristics

7.3.2 Respondents' Experiences with the CSPD

To describe the sample of survey participants more fully, it is important to consider the types and frequency of interactions with the CSPD that respondents self-reported. Specifically, respondents were asked whether they had ever had experiences with the CSPD that resulted in force, whether they perceived they had ever been stopped based on their race/ethnicity, and whether they had contact with the CSPD in the past 12 months.

First, survey respondents were asked about their personal experiences having forced used against them by the CSPD, including:

- (1) Have you ever experienced the use of force by a CSPD officer?
- (2) Has anyone in your immediate family ever told you they experienced the use of force by a CSPD officer?
- (3) Have you ever witnessed the use of force by a CSPD officer?

As shown in Figure 7.1 below, reported use of force by CSPD was somewhat infrequent among respondents (87 out of 790 respondents, or 11%), but this is still much higher than the actual percentage of CSPD arrestees who had force used against them (2.2%) and further, much higher than the national estimates of police-citizen encounters that result in force (typically ranging from 1 - 5%).¹⁹⁹ This provides further evidence that respondents of this survey are not representative of the general public in Colorado Springs, but rather are skewed toward those that had more coercive encounters with the CSPD. The likely unrepresentative nature of this sample is further confirmed by the nearly 20% of respondents who stated that an immediate family member had told them they had experienced a CSPD officer using force. In addition, approximately 44% of respondents reported they had witnessed the use of force by a CSPD officer, which may be related to their participation in protests occurring after the death of George Floyd in 2020.

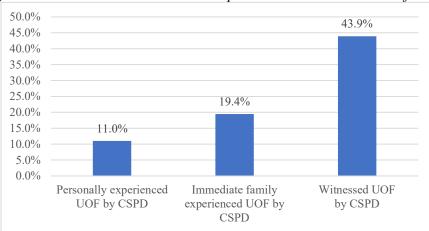
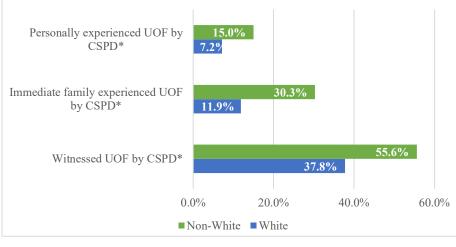


Figure 7.1. Personal and Vicarious Experiences with CSPD Use of Force

¹⁹⁹ For example, see Harrell & Davis, 2020; Davis et al., 2018.

As shown in Figure 7.2, Non-White respondents were significantly more likely than White respondents to report having force used against them by a CSPD officer, to have had immediate family tell them they experienced force by a CSPD officer, and to have witnessed use of force by a CSPD officer.





Survey respondents were also asked about their perceptions of whether they had personally been stopped based on their race/ethnicity or whether immediate family members had told them about such experiences. These questions included:

- (1) Have you ever felt that you were stopped by a CSPD officer just because of your race or ethnicity? If yes, did this happen to you in the past 12 months?
- (2) Has anyone in your immediate family ever told you they were stopped by a CSPD officer just because of their race or ethnicity?

As shown in Figure 7.3, approximately 15% of respondents (n=123) perceived that they had been stopped by a CSPD officer just because of their race/ethnicity and roughly one-third of these reported that it had happened within the past 12 months. Similarly, 19% of respondents (n=164) reported that someone in their immediate family had told them they were stopped just because of their race/ethnicity. As would be expected, Non-White individuals were significantly more likely to report both personal and vicarious experiences were based on race/ethnicity.

^{*} p-value < .05

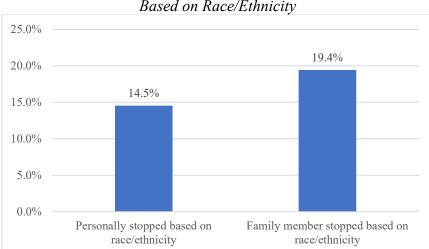


Figure 7.3. Perceptions of Stops Based on Race/Ethnicity

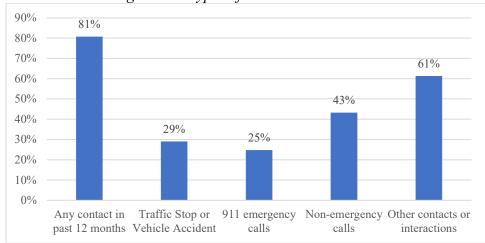
Questions designed to gather more detailed information about personal interactions with CSPD were narrowly limited to self-reported contacts within the past 12 months to minimize the effects of respondent recall.²⁰⁰ Respondents were asked about whether they had at least one contact with the CSPD in the last 12 months, and if yes, to estimate the number of times they had specific types of contacts, including 1) traffic stop or vehicle accident, 2) 911 emergency call, 3) non-emergency call, and 4) other contacts or interactions.

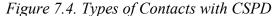
As shown in Figure 7.4, 643 of the 796 respondents (81%) who answered this question said they had at least one contact with the CSPD in the last 12 months. Again, this frequency of interaction with police is much higher than most national surveys of police-citizen interactions, indicating that the respondents to this survey likely do not represent the experiences of the general public.²⁰¹ The most frequent type of interaction (61%) was for "other contacts or interactions," like attending community meetings or talking to an officer on patrol. The next most common type of interaction was a non-emergency call (43%), followed by 29% for a traffic stop or vehicle accident, and 25% for a 911 emergency call.²⁰² Non-White respondents reported significantly more traffic stops/accidents and 911 emergency calls than White respondents, but no significant racial/ethnic differences were evident in non-emergency calls or other contacts and interactions

²⁰⁰ The 12- month period preceding the survey administration was from approximately May or June 2020 to May or June 2021, depending on when the respondent completed the survey.

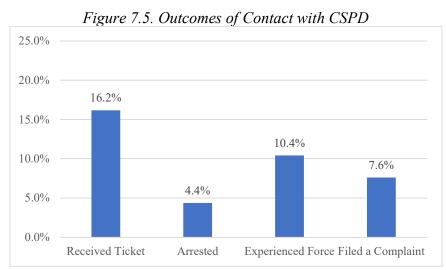
²⁰¹ The randomized and weighted national Police Public Contacts Survey generally estimates that 24% of the population has contact with the police, and that of the police-initiated contacts, 30% were for a traffic stop (Harrell & Davis, 2020).

²⁰² Respondents were able to select as many interaction types as they had experienced in the past 12 months; as a result, the percentage of respondents who reported each type of interaction exceeds 100%.





Additional survey questions asked respondents about the outcomes of their encounters with CSPD officers in the past 12 months. As shown in Figure 7.5, most respondents did not self-report any official enforcement outcome related to their contacts in the last 12 months; 16.2% of respondents reported they received at least one ticket, 4.4% of the respondents reported they had been arrested at least once, and 10.4% indicated they had experienced force. As noted above, however, only 29% of respondents indicated having traffic stop or accident interactions with the police; of the interaction types measured, these were probably the most likely to result in an official enforcement outcome (e.g., citation, arrest, force).



Non-White respondents were significantly more likely than White respondents to self-report receiving at least one ticket and having force used against them. Differences in self-reported arrests between White and Non-White respondents were not statistically significant. It is important to note that we do not know the circumstances that led to officers issuing tickets, and there may have been differences in legally relevant behavior by respondents that explain these statistically significant racial/ethnic differences.

An open-ended follow-up question gave respondents the opportunity to provide additional information regarding the use of force, including the type of incident, type of force experienced, and whether any

injuries resulted. Twenty respondents provided additional information. Many indicated the force occurred in a protest setting, and most alleged the force was excessive from their perspective.

Finally, 7.6 of respondents (n=49) reported they had filed at least one complaint to the CSPD about the interaction in the last 12 months. Non-White respondents were significantly more likely than White respondents to report filing at least one complaint. An open-ended follow-up question gave respondents the opportunity to provide additional details regarding the nature of the complaint and how it was resolved. A little more than half (n=26) of the respondents who reported filing complaints included a written response. Most did not provide details of the nature of the complaint, but almost all indicated they had not been contacted or that there was no follow up regarding the outcome of the investigation. The validity of self-reported claims regarding the lack of CSPD contact or follow-up when a complaint was filed cannot be independently verified by the TMLLC team, however, CSPD officials should review their internal processes to ensure their policy is being followed.²⁰³

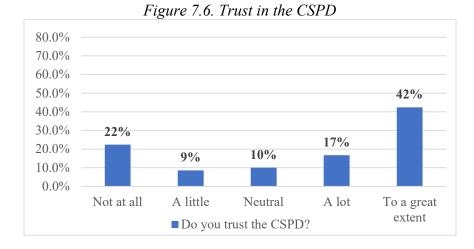
7.4 Survey Findings (General Perceptions and Police-Community Relations)

While the sample completing the community survey does not appear to be representative of the general public, there is still much that can be learned from their responses – as long as no attempts are made to generalize these findings to the larger Colorado Springs community. Rather the findings reported should be viewed within the context that the respondents are more likely than the general public to have had direct contact with CSPD officers, and often these interactions resulted in coercive outcomes.

As noted above, the survey tapped respondents' general attitudes and perceptions of the CSPD, perceptions about police use of force, and perceptions about treatment during interactions with the CSPD. This section (and sections 7.5 and 7.6) highlights some overall trends in findings and explores the extent to which respondents' answers significantly varied by race/ethnicity. For most of the graphics displayed below, the five-category responses for each item are collapsed into two categories, with the middle (neutral) category omitted from the graphics.

Several survey items examined respondents' general opinions about the CSPD. Although a majority of respondents voiced positive opinions in response to each of these survey items, there were significant racial/ethnic differences in the extent to which respondents agreed with these statements. Beginning with a question about the extent to which respondents trust the CSPD, Figure 7.6 shows that 59% of respondents indicated they trust the CSPD a lot or to a great extent, while 31% indicated they did not trust the CSPD at all or only a little.

²⁰³ CSPD General Order 600 requires that complainants are: 1) notified in writing to acknowledge receipt of the complaint, 2) updated every 30 days about the status of the investigation, and 3) notified in writing of the final disposition of the investigation within 10 days of the completion of the investigation. All complaint notifications are to be documented as part of the investigation file.



More revealing, however, are the racial/ethnic differences in reported trust of the CSPD illustrated in Figure 7.7. White respondents (68%) were significantly more likely than Non-White respondents (49%) to indicate they trusted the CSPD a lot or to a great extent. Conversely, 42% of Non-White respondents reported that they did not trust the CSPD at all or only a little, compared to only 23% of White respondents.

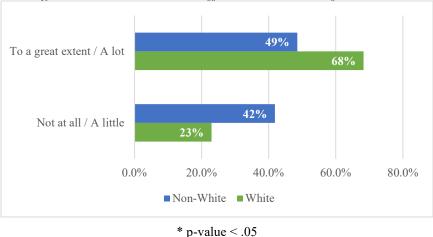


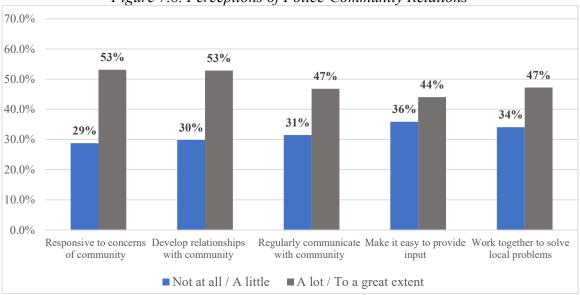
Figure 7.7. Racial/Ethnic Differences in Trust of the CSPD

Figure 7.8 displays respondents' perceptions of the performance of the CSPD on a variety of measures related to police-community relations, including:

- Is the CSPD responsive to the concerns of community members?
- Does the CSPD develop relationships with community members (e.g., residents, organizations, and groups)?
- Does the CSPD regularly communicate with community members (e.g., websites, e-mails, or public meetings)?
- Does the CSPD make it easy for community members to provide input (e.g., comments, complaints, etc.)?
- Does the CSPD work together with community members to solve local problems?

Again, responses are collapsed into three comparison categories: 1) "a lot" or "to a great extent" are combined, 2) "a little" or "not at all" are combined, and 3) the neutral category (which is omitted from the graphics but included in Appendix E).

A slight majority of respondents said the CSPD is responsive to the concerns of community members (53%) and develops relationships with community members (53%). Perceptions of whether the CSPD works with community members to solve local problems were somewhat lower (47% agreement). Nearly two-thirds of the 34% who disagreed with this statement indicated that the CSPD did not work with community members to solve local problems at all. Both questions related to communication between the police and the community also received less than 50% positive responses; only 47% said the CSPD regularly communicates with community members, and 44% thought the CSPD makes it easy for community members to provide input to CSPD. This suggests that the weakest area in police-community relations is regarding the lack of direct communication with community residents.





Respondents were asked about specific components related to police-community relations. As shown in Figure 7.9, across all these survey items, significantly higher percentages of White respondents compared to Non-White respondents agreed with positive statements about police-community relations in Colorado Springs (p-value <.001). More specifically, positive responses for White respondents ranged from roughly 51% to 60%, while positive responses for Non-White respondents ranged from approximately 37% to 47%. That is, less than half of Non-White respondents agreed with any of these statements about CSPD relations with the community. The difference between White and Non-White respondents ranged between 12% and 15% across these questions.

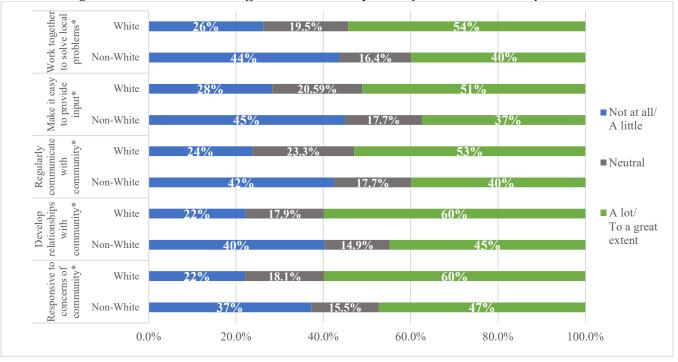


Figure 7.9. Racial/Ethnic Differences in Perceptions of Police-Community Relations

*p-value <.001

Community members were asked a series of questions regarding their perceptions of the CSPD's performance, including:

- Do CSPD officers treat people fairly?
- Are CSPD officers respectful during interactions with members of the public?
- Does the CSPD treat people of color in your neighborhood just as fairly as White people?
- Is CSPD protection about the same for neighborhoods predominantly composed of people of color as in neighborhoods predominantly composed of White people?
- Does the CSPD hold officers accountable for misconduct when it occurs?
- Are you satisfied with the overall performance of the CSPD?

The findings, graphically displayed in Figure 7.10, show that over 60% of respondents believe that CSPD officers treat people fairly and are respectful during interactions with the public, while less than 25% indicated CSPD officers do not exhibit these behaviors at all or only a little. The responses to other survey questions demonstrate a more bifurcated response, where most respondents were either highly positive or highly negative in their perceptions of CSPD's performance. For example, while over half of the respondents (56.5%) are satisfied with CSPD's performance (with 40% reporting they are satisfied with the performance of CSPD "to a great extent"), over 30% report no or very little satisfaction with the CSPD. Likewise, a majority of respondents (51%) indicate that the CSPD either holds officers accountable for misconduct "a lot" or "to a great extent" (combined 51%); however, nearly 40% report the CSPD held officers accountable for misconduct "not at all" or only "a little."

Finally, regarding questions related to perceived racial/ethnic disparities, slightly over half (52%) of respondents believed that the CSPD provides the same protection in neighborhoods regardless of the racial compositions of residents and that people of color are treated the same in their own neighborhoods

as White individuals (56.5% agree "a lot" or to a "great extent"). Conversely, well over one-third of respondents indicated the opposite for each item.

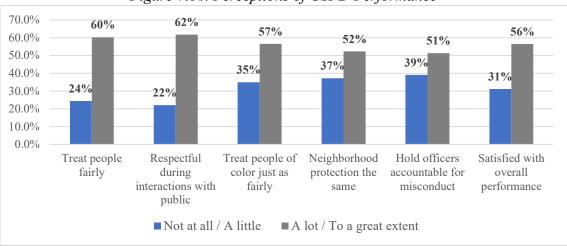


Figure 7.10. Perceptions of CSPD Performance

We further explore the demographic differences in these polarized responses. As shown in Figure 7.11 below, for every survey item regarding the overall performance of CSPD officers, and perceptions of police bias, White respondents were significantly more positive, while Non-White respondents were decidedly more negative. These racial/ethnic differences were found to be statistically significantly different for every survey item. Overall, Non-White respondents reported less favorable views compared to White respondents regarding the equality of CSPD treatment overall, the equality of protection provided across neighborhoods, and accountability for officers when misconduct occurs.

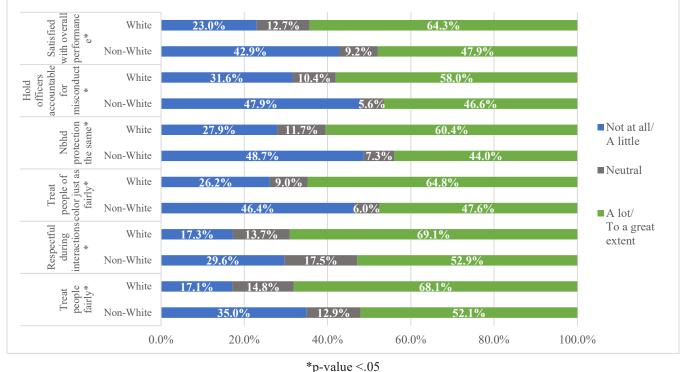


Figure 7.11 Racial/Ethnic Differences in Perceptions of CSPD Performance

7.5 Survey Findings (Perceptions of Use of Force)

Community members were also asked about their perceptions regarding police use of force.²⁰⁴ To first establish a baseline of overall comfort with police use of force, respondents were asked their level of agreement with the following statement: "There are situations where a CSPD officer would be justified in physically striking a person resisting their authority." The findings are displayed in Figure 7.12. Importantly –and mirroring responses in national surveys – almost a quarter of respondents (24%) disagreed.²⁰⁵ That is, a quarter of survey respondents in Colorado Springs do not believe weaponless force should ever be used by police to gain compliance from a resisting subject; Non-White respondents were significantly more likely than White respondents to hold this belief. Therefore, the remainder of responses reported regarding perceptions of police use of force should be viewed with consideration of this baseline.

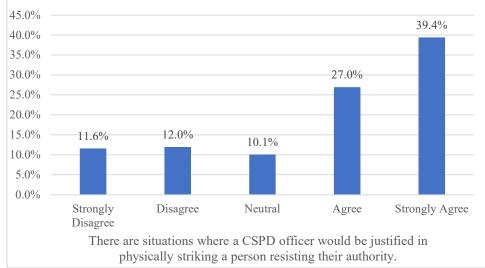




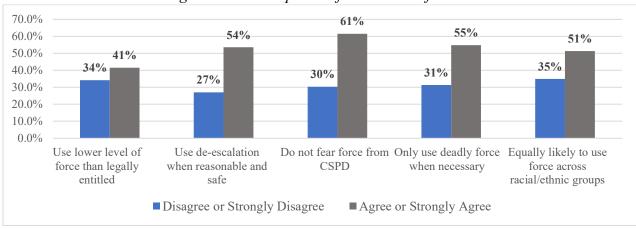
Figure 7.13 displays responses to a series of questions regarding police use of force that are positively framed; that is, agreement with the statement indicates approval of CSPD approaches. Respondents were asked about how strongly they agreed with the following statements:

- The police generally use a lower level of force than they are legally entitled to in order to avoid or minimize injury.
- The majority of CSPD officers use de-escalation tactics to avoid or minimize force when it is reasonable and safe to do so.
- When interacting with a CSPD officer, I do not fear being subject to police use of force.
- CSPD officers only use deadly force when it is necessary.
- CSPD officers are equally likely to use force on White people and people of color.

²⁰⁴ Police use of force was defined for participants as including "actions such as physical techniques or tactics, chemical agents, or weapons such as a Taser or firearm."

²⁰⁵ For example, see Mourtgos & Adams, 2020.

The findings generally show a range of agreement from a low of 42% of respondents (police use lower level of force than legally entitled to minimize injury) to a high of 62% (do not fear being subject to force during interaction with CSPD). Generally, about half of the respondents approve of CSPD force practices across survey items, with approximately 30% of respondents showing disapproval. Similarly, when asked a question regarding police bias - "CSPD officers are equally likely to use force on White people and people of color" -51% of respondents strongly agreed or agreed, while 35% strongly disagreed or disagreed.



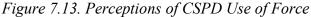
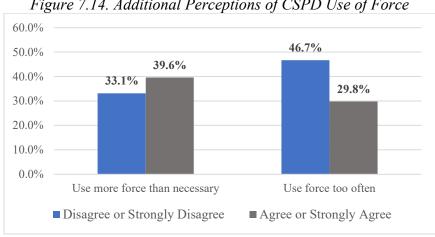
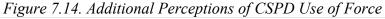


Figure 7.14 displays responses to two questions that frame the use of force in a negative manner – here agreement with the statement indicates dissatisfaction with the CSPD. Nearly 40% of respondents reported that CSPD officers sometimes use more force than is necessary to make an arrest, and 30% believe the CSPD uses force too often. Again recall, however, that these responses are based on a sample where nearly a quarter of respondents do not believe there are situations when the CSPD should use weaponless force to control a resistant subject. Nevertheless, when combined with other responses for example, that 30% of respondents are fearful of being subject to CSPD use of force and 35% believe that CSPD officers are not equal in their use of force across racial/ethnic groups - demonstrates that a substantial percentage of individuals responding to this survey have strong negative perceptions of force used by CSPD officers.





Also, following national trends and previous research, the responses to these survey questions are bifurcated along racial lines. Figure 7.15 shows the dramatic differences between the percent of White and Non-White respondents who agreed with each of these statements. There were statistically significant racial/ethnic differences in agreement for each of the survey questions related to use of force (p-value <.05). As shown, there are significantly higher percentages of White respondents than Non-White respondents who strongly agreed or agreed with the following statements about CSPD use of force:

- The police generally use a lower level of force than they are legally entitled to in order to avoid or minimize injury.
- CSPD officers only use deadly force when it is necessary.
- When interacting with a CSPD officer, I do not fear being subject to police use of force.
- The majority of CSPD officers use de-escalation tactics to avoid or minimize force when it is reasonable and safe to do so.
- CSPD officers are equally likely to use force on White people and people of color.

Of note, 70% of White respondents indicated no fear of being subject to use of force compared to 52% of Non-White respondents. Although this is still more than half of Non-White respondents, there is a difference of nearly 20 percentage points between White and Non-White respondents on this survey question. Furthermore, 42% of Non-White respondents disagreed or strongly disagreed with this statement, compared to 21% of White respondents. Non-White respondents also expressed significantly less agreement compared to the White respondents regarding the equality of use of force across racial/ethnic groups.

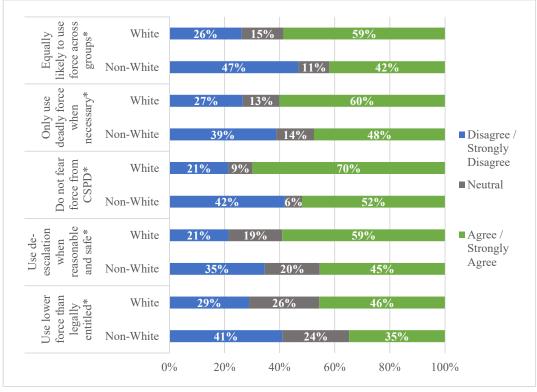


Figure 7.15. Racial/Ethnic Differences in Perceptions of CSPD Use of Force

^{*}p-value <.05

Figure 7.16 shows that Non-White respondents were statistically significantly more likely to agree or strongly agree with statements that showed disapproval with CSPD use of force, including:

- The CSPD sometimes uses more force than necessary to make an arrest.
- CSPD officers use force too often.

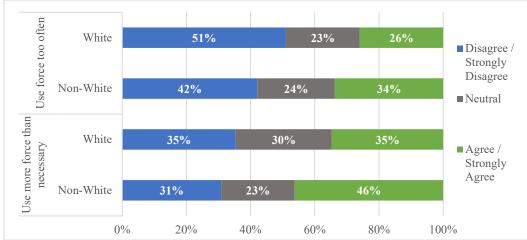


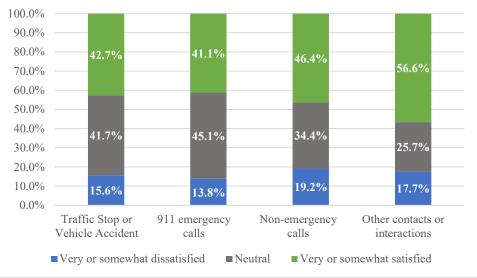
Figure 7.16 Racial/Ethnic Differences in Perceptions of CSPD Use of Force

7.6 Survey Findings (Perceptions of Personal Interactions with CSPD)

Research cited in Section 7.1 shows that individuals' perceptions of police are at least partially shaped by their belief that outcomes are equal across groups and treatment during interactions with police is fair, which is known as procedural justice. Therefore, the survey included the following questions designed to tap these perceptions:

- In the past 12 months, to what extent are you satisfied with the **outcomes** of your interaction(s) with the CSPD for...
 - o ... traffic stops or vehicle accidents as a driver or passenger?
 -911 emergency calls?
 - o ...non-emergency calls?
 - ...other contacts or interactions (e.g., attend a community meeting, talk to officer on patrol, etc.)?
- In the past 12 months, to what extent are you satisfied with the **treatment** you received during interaction(s) with the CSPD for...
 - o ... traffic stops or vehicle accidents as a driver or passenger?
 - ...911 emergency calls?
 - ...non-emergency calls?
 - ...other contacts or interactions (e.g., attend a community meeting, talk to officer on patrol, etc.)?
- Please indicate how strongly you agree with each of these statements regarding only your most recent contact with the CSPD.
 - The CSPD officer(s) explained their actions and procedures.
 - The CSPD officer(s) treated me fairly.

Figure 7.17 shows the percentages of respondents who were very or somewhat dissatisfied with outcomes compared to those who were very or somewhat satisfied. As shown, there was a large percentage of neutral responses, particularly for traffic contacts, 911 calls, and non-emergency calls. Examining just satisfied compared to dissatisfied responses, however, larger percentages were satisfied than dissatisfied with outcomes across all types of interactions. Respondents reported the most satisfaction with outcomes of other contacts or interactions and the least satisfaction with outcomes of 911 emergency calls. Interestingly, because of the large number of neutral responses (45.1%), 911 emergency calls also had the lowest percent of dissatisfied respondents.





Similar results are shown in Figure 7.18. Again, a large percentage of respondents provided neutral responses to the question about whether they were satisfied with treatment during interactions with CSPD. Examining just satisfied compared to dissatisfied responses, however, larger percentages of respondents were satisfied than dissatisfied with treatment by CSPD officers across all types of interactions. As shown, respondents reported the most satisfaction with treatment during other contacts or interactions and the least satisfaction with 911 emergency calls. Due to the large percentage of neutral responses for traffic contacts, 911 calls, and non-emergency calls, the percent of respondents who were dissatisfied with treatment and outcomes were highly correlated across all contact types.²⁰⁶

²⁰⁶ All correlations are statistically significant (p=.001) using Spearman's Rank-Order Correlation: Traffic stops/vehicle accidents (correlation of .84); 911 emergency calls (correlation=.86); non-emergency call (correlation=.87); and other interactions (correlation=.91).

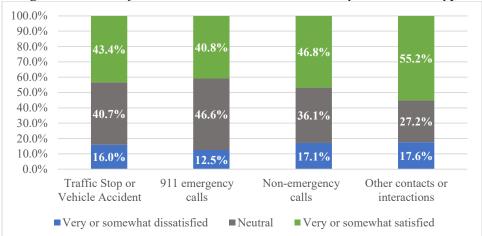
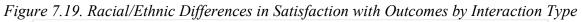
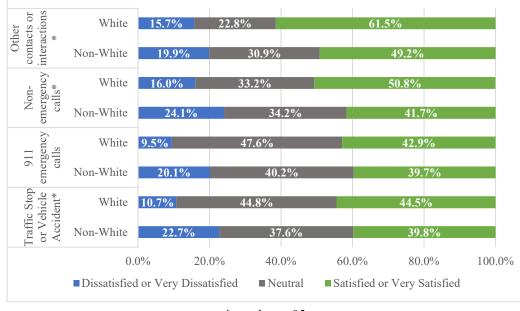


Figure 7.18. Satisfaction with Treatment Received by Interaction Type

In addition to differences in satisfaction with outcomes and treatment by interaction type, there were statistically significant differences in satisfaction by race/ethnicity. These results are displayed in Figures 7.19 (outcomes) and 7.20 (treatment). Across three of the four interaction types, Non-White respondents were significantly more likely (denoted with an asterisk) than White respondents to report dissatisfaction with outcomes and significantly less likely than White respondents to report satisfaction with outcomes. White respondents were particularly more likely than Non-White respondents to be satisfied with other contacts or interactions.





^{*} p-value < .05

Non-White respondents were significantly less likely than White respondents to report satisfaction with treatment by CSPD officers and significantly more likely to report dissatisfaction with treatment during non-emergency calls and other contacts these types of interactions. Although Non-White respondents

were also more likely than White respondents to report dissatisfaction with treatment during traffic stops/accidents and 911 emergency calls, these differences were not statistically significant.

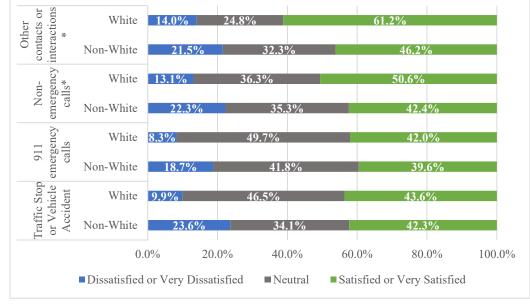


Figure 7.20. Racial/Ethnic Differences in Satisfaction with Treatment by Interaction Type

Finally, respondents were asked to consider just their most recent contact with CSPD in the past 12 months and indicate their level of agreement with statements regarding whether the CSPD officers explained their actions and procedures and whether they were treated fairly. Figure 7.21 displays the types of contacts respondents reported for their most recent contact with the CSPD. As shown, the most frequent type of contact in the past 12 months was "other contacts or interactions," followed by nonemergency calls (28.5%), traffic stops/accidents (12.3%), and 911 emergency calls (10.7%).

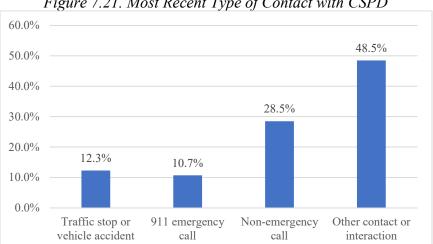


Figure 7.21. Most Recent Type of Contact with CSPD

Nearly 61% of respondents agreed that the CSPD officer(s) explained their actions and procedures during their most recent contact, and approximately 65% agreed that officers treated them fairly, as

^{*} p-value < .05

shown in Figure 7.22. Interestingly, there were no significant differences across the four types of contact in respondents' agreement on these two measures.

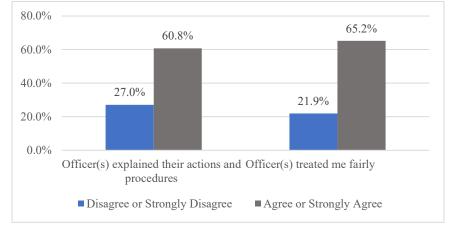


Figure 7.22. Perceptions about Officers' Actions During Most Recent Contact

There were, however, statistically significant differences by respondents' race/ethnicity. As shown in Figure 7.23, White respondents reported significantly more agreement with these statements than Non-White respondents. Approximately 66% of White respondents agreed that officers explained their actions and procedures compared to 55% of Non-White respondents. Similarly, over 70% of White respondents agreed that officers treated them fairly compared to 59% of Non-White respondents. Note, however, that the percentage of Non-White respondents who responded positively to these two questions about a specific interaction with the CSPD are considerably higher in comparison to the percentages of Non-White respondents who responded positively to most previous survey items. This is consistent with previous research that shows that individuals may hold generally negative attitudes about police, but this does not necessarily translate to an individual having a negative assessment of a specific encounter.²⁰⁷

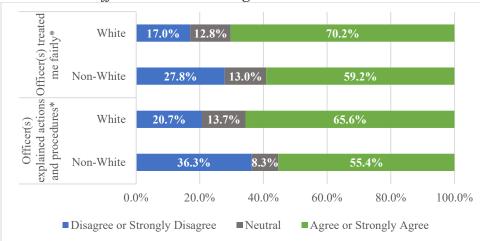


Figure 7.23. Racial/Ethnic Differences in Perceptions about Officers' Actions During Most Recent Contact

²⁰⁷ For example, see Gau, 2014.

Open-ended questions asked respondents to elaborate on why they agreed or did not agree with the statements "The CSPD officer(s) explained their actions and procedures" and "The CSPD officer(s) treated me fairly." Additional written comments explained why respondents both agreed and disagreed with these statements. For example, respondents who agreed that officers explained their actions and procedures gave examples of officers listening and explaining policy, law, procedures, safety hazards, reason for traffic stop, and reason for officer presence. Respondents also mentioned officers displaying professionalism, concern, compassion, respect, and courtesy in support of their agreement with the "officer treated me fairly" question. Respondents who disagreed with the statement that officers explained their actions and procedures reported perceiving officers to be vague, unresponsive, dismissive, and disrespectful. Respondents who disagreed that they had been treated fairly indicated they felt officers did not listen to them, did not take their situation seriously or were unwarranted in stopping them or using force against them.

7.7 Survey Findings (Open Ended Question Responses)

In addition to the open-ended survey responses already described, the community survey included three open-ended questions to allow respondents to provide more detailed information and feedback to be shared with the CSPD. Additional open-ended questions included:

- (1) Please share details of your most impactful experience with CSPD (if any) that may not have been addressed by previous survey questions.
- (2) Please share your general perceptions about policing in the U.S. that may not have been addressed by previous survey questions.
- (3) Please share comments regarding specific ways you think that the CSPD could foster transparency, build trust, or improve interactions with the community.

The complete open-ended responses have been compiled and will be provided to CSPD in a supplemental addendum to this report with any potentially identifying information redacted to preserve respondents' anonymity. In this report, we specifically focus on the last of these three questions to provide a community voice to frame the recommendations provided in Section 9. When asked to provide additional details regarding the ways that the CSPD could foster transparency, build trust, or improve interactions with the community, roughly 41% of respondents provided open-ended (narrative) responses. These 350 individual responses were reviewed by members of the TMLLC team. Based on this initial review, 19 themes were identified.²⁰⁸ The narratives were then re-read and coded thematically. Note that a single narrative response could be coded under multiple themes.

Below we provide examples of the most commonly mentioned themes, in order of frequency in the open-ended responses:

²⁰⁸ These themes were: 1) General positive comments; 2) Release of body camera footage; 3) More proactive with media; 4) Less use of force; 5) Increase community programs and interactions; 6) Educate public about police work; 7) Less reliance on firearms; 8) Increase hiring standards and diversity; 9) More publicly available data and reports; 10) Increase number of officers, response time, proactive policing; 11) Continue participation in LETAC Committee; 12) Increase funding for department; 13) Improve complaint process; 14) Increase response to certain calls by non-police agencies; 15) Defund police; 16) Negative comments; 17) Increase training; 18) Demilitarize/change culture of department; 19) Greater accountability and more severe punishment for misconduct.

- Positive comments and support for the CSPD (n=76; 9% of respondents, 22% of respondents who answered open-ended question). For example:
 - "I already think there is a lot of transparency within the department."
 - "They are pulled in so many directions but appear to be very responsive to the needs of the community."
 - "CSPD goes to great efforts to be community oriented."
 - "I think the CSPD are very respectful of the people they serve."
- Increase non-enforcement interactions with the community (n = 64; 7% of respondents, 18% answering this question). Examples include:
 - Neighborhood Watch, Coffee with a Cop
 - Participation in school programs, PALS
 - Informational sessions for public
 - o Attendance at community events
 - One respondent noted that these types of interactions were particularly important in the areas of the city with higher crime rates: "I think the more positive, non-crime infraction interactions, especially in those areas that experience more crime, will eventually change those people with negative experiences perspectives."
- Increase CSPD training (n = 49; 64% of respondents, 14% answering this question). Examples include:
 - "Require REAL continuing education in issues of race, culture, etc., not a three-hour class once a year, or a computer class without engagement and assessment"
 - Communication skills
 - De-escalation, conflict resolution
 - Mental health and/or intellectual and developmental disabilities
 - o Diversity, equity, and inclusion; implicit bias; anti-bias
- Increase accountability/more severely punish officers who engage in misconduct (n = 43; 5% of respondents, 12% answering this question)
 - "If the community was aware that the officers were held accountable for their actions, both positive and negative there will be trust in the agency."
 - "Speak out against rogue cops, don't let them bring a stigma to all law enforcement. Do away with the blue wall of silence!"
 - "Fire any officer who engages in conduct that results in excessive force."
 - "Call on an agency OTHER than El Paso County Sheriff's office to investigate officer misconduct, because there is enough crossover and relationship to constitute a conflict of interest; share in detail the process of investigating officer misconduct and impose harsh penalties."
- Negative attitudes about CSPD (n = 42; 5% of respondents, 12% answering this question).
 - Some of these comments were general in nature (e.g., stop being racially biased, stop using excessive violence, stop hiring unqualified people), while others were more specifically focused. Some examples of the general comments include:
 - "There is no building trust between the police and the communities they terrorize with violence."
 - "Stop harming people."
 - "Don't stop black people for being black."

- "Stop acting like tyrants."
- "Stop attacking citizens."
- Thirty respondents (4% of respondents, 9% answering this question) felt there was a cultural problem within the CSPD, where the public was perceived by some officers as the enemy. Respondents noted:
 - "They need to stop being trained as if they are in the military and in combat."
 - "Stop viewing the community as the enemy."
 - "It is my observation that the CSPD views all citizens as if they are criminals."
- Defunding or disbanding the police was mentioned by 17 respondents (2% of respondents, 5% answering this question).
 - "They need to be defunded and replaced with services that don't rely on violence and actually help the people who live here."
 - "Defund them and send them out only for very specific situations. They are not trained to deal with most situations they are sent on, thus often making the issue worse instead of better."
- Finally, 14 respondents (2% of respondents, 4% answering this question) suggested less reliance on firearms. Examples include:
 - "When they stop people and come to the car, is it necessary to have their hand on their gun? That happened to me. I don't own a gun nor was I speeding."
 - "Take guns off cops' hips and out of their hands."
 - "Use TASER before always reaching for a gun."
 - "That's the main problem police are quick to pull their weapons."
- Increase staffing. (n=40; 5% respondents, 11% answering this question) Recommendations included:
 - increasing the number of officers and/or patrols
 - more proactive policing
 - decrease response time
 - make dispatch process more efficient
 - "We need to get sworn officers out of their cars and interacting with residents more in noncall-for-service settings."
- Proactive media strategy. (n=31; 4% of respondents, 9% answering this question) This theme included recommendations to:
 - "Get out front of any questionable situation. Answer the media upright."
 - "Communicate frequently through all media, printed and online, the successes of CSPD!"
 - "I encourage CSPD and other law enforcement agencies to do what they can to publicize their accomplishments - news stories about closing major cases, participation in community events, blog posts or social media on the student program, etc. It will take a lot of positive messages to overcome the negative ones that are flooding our current news cycle.
- Increase hiring standards (n=25; 3% of respondents, 7% answering this question)
 - "Police officers have one of the toughest jobs out there by far. We need to focus on the hiring & training process more so that only qualified, and mentally balanced people are given the tremendous responsibility and power that police officers hold."
 - "Hire more officers of color." "Hire more women."
 - o "Before hiring have the individual go through extreme mental health testing."

- o "Require a college education, as most career fields do."
- "Why are there few people of color on the force? The force should be a reflection of the community."
- Educate the public about what being a police officer entails, share more about the training they complete (n = 24; 3% of respondents, 7% answering this question)
 - "Share in detail the kinds of trainings officers undergo and who provides them"
 - "What I have experienced is that the more you know about the workings and daily responsibilities of the CSPD, the more you respect what they do and the professionalism that is required."
 - "CSPD can always do more to ensure the public knows what they see, do, accomplish in the line of duty. People don't realize how difficult their jobs are, what they encounter on any given day/night, and they need to know. Citizens also need to understand the current trainings and education our police officers are required to take."
- Less use of force (n = 21; 3% of respondents, 7% answering this question)
 - o "Change when force is allowed (less force, not more)"
 - o "Less use of deadly force"
 - o "Change how they interpret fleeing felon law."
 - "Use less lethal more often."
- Quicker release of body camera footage (n = 20)
 - "If there is situation where a force was used occurs, and body camera video is available. DON'T sit on it, the longer you delay the more distrust you foster."
 - "Have a staff that can release contextualized body camera video within 4-24 hours of a high visibility event."
 - "Release body worn camera video much sooner and not wait for the completion of an IA investigation. The longer you wait to release the video it gives the perception to the public that you've got something to hide."
- Increase response by non-police agencies to certain types of calls (n = 17; 2% of respondents, 5% answering this question)
 - "I think there must be a better focus on getting policing out of interacting with people with mental health needs and people with disabilities."
 - "We also need to drastically reduce the number of calls the police respond to. Police don't need to be responding to mental health calls."
 - "CSPD should make permanent cooperative arrangements with social workers, psychologists."
 - "Police are not needed for every call."
 - "Stop sending an officer with a gun as a matter of policy."
- Release more public information (n = 14; 2% of respondents, 4% answering this question)
 - o "Website and data hub could be vastly improved."
 - "Public information office could be more responsive to inquiries."
 - o "Publish more revealing data: use of force, racial and demographic numbers, etc."
- Improve complaint process (n = 9; 1% of respondents, 3% answering this question)
 - \circ "They should make it easier to file and follow a complaint to its resolution."

7.8 Community Focus Group

After the community survey was administered, members of the TMLCC team traveled to Colorado Springs to conduct in-person focus groups with various stakeholders. On July 20, 2021, we met with eight members from the Chief's Community Leaders Group for roughly 2.5 hours. The focus group participants included three White males, two White females, one Latina female, and two Black males. The focus groups were facilitated by TMLLC team members with experience in conducting focus group sessions. We loosely followed a pre-established discussion protocol (designed to elicit information related to specific topics) and then asked clarifying or follow-up questions after the participants gave responses to initial questions.²⁰⁹ To ensure that everyone participated in the discussion, the moderators occasionally directed questions to specific participants who had not made many comments up to that point. To encourage candor, the focus group session was not recorded; instead, a member of the research team took written notes. Participants were advised that their participation in this focus group was voluntary, their comments would be reported anonymously, and that they could leave the session at any time for any reason. The findings in this report reflect our best attempt to produce a comprehensive and accurate description of the issues consistently raised by focus group participants.

Based on the approach, we identified several general themes and salient issues that were voiced by participants. These themes – (1) the state of police-community relations in Colorado Springs, (2) need for more transparency, (3) perceptions regarding policing and bias, (4) responses to the officer-involved shooting of De'Von Bailey and protests following the death of George Floyd, (5) community engagement, and (6) data collection and research – largely mirror the findings from the community survey, and the topics raised by survey respondents in the open-ended responses. This focus group provided an opportunity for TMLLC team members to probe more specifically and gather additional details regarding community perceptions of the CSPD.

The use of qualitative methods such as focus groups can provide rich and insightful data on the topic of interest that are simply beyond the capability of purely statistical analyses. There are, however, limitations associated with these methods that are important to consider in the interpretation of this type of data. To properly interpret these findings, the following three main limitations of focus group research must be highlighted:

- (1) *Groupthink*: Concern that information gathered during group sessions will be adversely affected by the group dynamics. Ideas, opinions, and answers provided in the group are heavily influenced by what others in the group are saying. Those with dissenting opinions may not express them due to a desire to avoid conflict.
- (2) *External validity*²¹⁰: Concern that research findings cannot be generalized or applied to the larger group or population (i.e., all Colorado Springs residents). Participants were selected based on their pre-existing participation in Chief's Community Leaders Group, and their comments are reflective of their perspective only and may not necessarily represent the beliefs or opinions of others not participating in the focus groups.

²⁰⁹ For example, see Krueger, 1998; Morgan, 1988, 1996.

²¹⁰ For example, see Maxfield & Babbie, 2001; Shadish et al., 2002

(3) Reliability: Reflects the idea that an event or information is viewed in similar ways by two or more individuals or across more than one time period. Consequently, individual understanding may affect the interpretation of an event, leading to diverse recollections of the same event among multiple participants. Participants' comments reflect their perceptions of the events or circumstances, but their accuracy cannot be confirmed or denied.

7.8.1 State of Police-Community Relations

The focus group opened with a broad discussion of the state of police-community relations in the Colorado Springs community. Focus group participants explain the creation of the Chief's Community Leaders Group and their respective roles as members representing various community perspectives. Most participants agreed with the sentiment that initial discussions among the group were defensive and challenging, but that open communication and dialogue is increasing across members. Interactions with the CSPD leadership and officers are improving as the group raises and works through problematic issues. They also noted that the group expanded in February 2020 to increase diversity and provide better representation of community members.

Participants noted that the officer-involved shooting of De'Von Bailey was a watershed moment, provoking an initial "awakening" of the community to issues regarding police-race relations and use of force. The death of George Floyd less than a year later solidified these concerns among a growing number of community members. During initial attempts to work with the CSPD, focus group participants noted that people felt misunderstood and not heard, especially in discussions involving race. They did indicate, however, that the listening is increasing, and communication is better than when the group first began.

Focus group participants also noted the great support the CSPD enjoys among some members of the public, particularly in certain areas of the city. They described the Colorado Springs community as more conservative than most cities, with a heavy presence of military personnel and first responders that increase the positive perceptions of law enforcement. They suggested that most residents of Colorado Springs are supportive of law enforcement – or at a minimum, indifferent – but that positive sentiments are not universally shared. They further noted that individuals' interactions with CSPD officers vary across communities (and by race/ethnicity), likely shaping individual perceptions.

Participants acknowledged the growth of the Colorado Springs community and hoped that new residents would work to understand the history of the city, especially how the Black community has changed over time. They also expressed a need for the city's growth to be accompanied by an increase in the percentage of minority officers, as they perceive that minorities are significantly underrepresented in the CSPD.

Some participants voiced the perspective that community initiatives are underfunded but that the police department is well-funded. Others suggested that schools are the root of the rising crime problem, and further, that police are disconnected from social service providers. It was noted, however, that solutions for homeless were good / above average in their community compared to others.

One focus group participant expressed a belief that progress is being made, that police-community relations are improving, and hoped that others would recognize this progress and not get discouraged with the pace of change, "because real change cannot occur overnight." Other participants

acknowledged the good intentions of CSPD leadership but noted that residents were still concerned with how change is being implemented and the perceived delay in action.

7.8.2 Transparency

Focus group participants described the general lack of transparency between the CSPD and the public. Much of this discussion revolved around perceived failures in public relations, communication, and handling of media. Focus group participants generally agreed that the community wants more transparency, and further that in their view, more transparency was absolutely needed.

There were also concerns raised that the community perceives that "CSPD's words and actions do not match." Participants suggested that many in the community perceived there were routine public relations failures within police department. They also noted several examples of the mishandling of officer misconduct and the lack of punishment – or at a minimum, the lack of communication regarding accountability. One participant suggested that steps are routinely "skipped" by officers in the use of force continuum, and that this needs to be corrected.²¹¹

In summary, one of the largest concerns voiced by focus group members was that while the CSPD leadership (and their advisory group specifically) are trying to be progressive, the lack of transparency and good public relations places their efforts "at a standstill." A variation of this same theme – the need for more transparency from the CSPD leadership – was also noted by CSPD officers during their focus groups and within survey responses (detailed in Section 8).

7.8.3 Community Perceptions Regarding Police Bias

When discussing community perceptions regarding police bias, the participants noted that the areas within the city differ in terms of political affiliation, military presence, and attitudes toward police. As a result, perceptions regarding trust of police, police-community engagement, and police bias also different dramatically across geographic areas.

Despite the differences in perceptions identified across neighborhoods, focus group participants suggested that the general perception that the actions of the CSPD are racially motivated is more widespread than many realize. As examples of this, they cited the fact that the CSPD are more prevalent in minority neighborhoods, but that residents in these communities do not trust the police. As a result, some community members have adopted a "we can help ourselves" attitude, suggesting they do not want to rely on police for public safety.²¹²

Community perceptions of police bias in Colorado Springs are clearly intertwined with views regarding the officer-involved shooting of De'Von Bailey in August 2019, followed by the death of George Floyd

²¹¹ This citizens' reference to CSPD's use of force continuum (which is not how CSPD officers are trained) exemplifies the general lack of understanding of the CSPD's training, policies, and practices related to the use of force. This issue is revisited in the discussion of recommendations provided in Section 9.

²¹² This sentiment, however, is in direct contrast to feedback gleaned from some open-ended responses on the community survey where survey respondents recommended increases in the number of police officers, police presence in high crime areas, proactive patrol strategies, and more non-enforcement interactions with police. These differences in perceptions exemplify the challenges for police executives working to meet community expectations when these expectations vary widely.

in May 2020. Focus group participants noted that prior to the death of Bailey, most people in Colorado Springs were relatively neutral in their perceptions of the police, but after that incident, people quickly became more polarized on issues related to policing and public safety. The killing of George Floyd nine months later further changed perceptions. According to one focus group participant, the deaths of De'Von Bailey and George Floyd "were like an unveiling of what's been happening, as people became aware of what has been happening for years."

Focus group participants reiterated that the CSPD did not handle the aftermath of the De'Von Bailey shooting very well. A constant theme throughout the focus group was that the CSPD leadership and city officials mishandled the aftermath of this critical incident, leading to deteriorating community perceptions regarding the police and eroding public trust and confidence in the CSPD. Specifically, they suggested that the community did not understand what happened in the steps leading to Bailey's death. One participant suggested that the mayor acted without sympathy and "took the side of the law instead of a side of compassion." Group participants suggested that there remains a lingering perception that "De'Von Bailey did not get justice." This perception is perpetuated by concerns regarding a corrupt and politically influenced investigation of the incident. Further, some suggested that the CSPD was insensitive to the community and pastors after the incident and were unable to have a productive dialogue. The communication, they believe, was one-sided and the community did not feel heard. One focus group member suggested that members of the CSPD were dismissive, and that the community perceives the CSPD acted with a racial bias against black church communities in the aftermath of the shooting. It was also indicated that the police response to the death of Bailey demonstrated their failure to see the importance of systemic inequality versus individual officer choices. Several additional incidents - including the CSPD response to the George Floyd protests with the use of teargas - added to the community's distrust of the police.

7.8.4 Community Engagement

Some community focus group participants reported that CSPD are invited to, but rarely attend community events, which worsens the disconnect between the community and the police. Other participants suggested that community engagement is actually increasing and the CSPD is doing a good job in this area, reaching out to engage in activities, despite the restrictions created by the pandemic.

Much of the concerns regarding community engagement was focused on how to sustain the positive work that has been occurring. With the city population expanding, focus group participants indicated some concern regarding how to implement sustainable change. The growth of Colorado Springs will make this a more difficult challenge because new people must also be involved. Yet some people who are new and entering the community are still impacted by the past (negative) experiences with the police, leading to distrust and trauma. It is only through more community events and constant engagement that focus group participants believed the CSPD could continue to rebuild (and then maintain) community trust.

7.8.5 Data Collection and Next Steps

One final topic of discussion for this focus group included questions about the data collection process, analyses of data, initial findings from the community survey, etc., along with next steps for the Chief's Community Leaders Group. First, participants noted the importance of making police data available to

the public; one participant, however, raised a concern regarding the inappropriate analyzing and reporting of these data by the media that may increase the public's mistrust. Participants asked the TMLLC team members about the problems associated with comparisons of police data to residential census population, and the importance of providing the public with alternatives to the flawed analyses often produced by the media. In summary, participants agreed that CSPD needs good data collection processes, appropriate statistical analysis, and data transparency by sharing with the public – but must simultaneously better educate the media (and the public) regarding these data and protect officers from unfair comparisons and inappropriate analyses.

The focus group concluded with a discussion of next steps (and opportunities) for the Chief's Community Leaders Group. They indicated that this group serves as the liaison between the police and community, and that they are a catalyst for change. They noted that this group (with police officers involved) is trending positively, moving from being initially defensive toward listening and understanding. Overall, the community wants (and needs) the police, but also wants to ensure that the police are "doing it right." It was noted that some groups or individuals are so anti-police, or so afraid to participate, that they would not accept an invitation to join this group; as a result, their views become underrepresented. In summation, this group of participants sees their role as valuable, and as contributing to the progress being made to improve police-community relations in Colorado Springs.

7.9 Section Summary

This section described the perceptions of the CSPD provided by community members who either completed a survey or participated in the TMLLC-moderated focus group. Both were designed to assess general attitudes and perceptions of the CSPD, perceptions about CSPD use of force, and perceptions about fairness and treatment during personal interactions with the CSPD. These findings provide additional context for the quantitative analyses of use of force data reported in earlier sections of this report and help to inform the recommendations provided in Section 9.

It is important to note that the community survey was not a random sampling of the Colorado Springs community, where the findings can be easily generalized to the population. Rather, this was a convenience sampling, where all residents were able to and encouraged to participate anonymously. Typically, this type of sampling method results in respondents who feel more strongly – either positively or negatively – regarding the survey topic. The survey asked individuals about their frequency and severity of interactions with the CSPD; their responses demonstrate this sample is likely not representative of the general public. Specifically, survey respondents were more likely to report having contact with the CSPD in the previous 12-month period, with more coercive outcomes, than results from other national randomized surveys have demonstrated. While these survey findings cannot be generalized to the larger Colorado Springs community, they are valuable perspectives that provide additional insight and recommendations for improvement in police-community relations.

Overall, a slight majority of survey respondents voiced positive opinions in response to most of the survey items; the responses to many survey questions, however, demonstrate a bifurcated response, where most respondents were either highly positive or highly negative in their perceptions of the CSPD. Furthermore, White respondents were significantly more likely than Non-White respondents to report positive responses across nearly all survey items.

Specific findings regarding general perceptions of the CSPD include:

- Over 60% of respondents believe that CSPD officers treat people fairly and are respectful during interactions with the public. Similar percentages of individuals also agreed with statements about fairness and treatment during their most recent contact with CSPD.
 - These results, however, varied dramatically by respondents' race/ethnicity, with Non-White respondents reporting significantly less favorable opinions regarding fairness in treatment.
- Trust in the CSPD also demonstrated polarized responses, with 59% of respondents indicated they trust the CSPD a lot or to a great extent, but 31% indicated they did not trust the CSPD at all or only a little.
- Slightly more than half (53%) of respondents said the CSPD is responsive to the concerns of community members and develops relationships with community members.
- Less than half of survey respondents reported positive responses to the following statements, which suggests that the area most in need of improvement in police-community relations is direct communication with community residents.
 - The CSPD works with community members to solve local problems (47%).
 - The CSPD regularly communicates with community members (47%).
 - The CSPD makes it easy for community members to provide input to CSPD (44%).
- Over half of the respondents (56.5%) are satisfied with CSPD's performance, while over 30% report no or very little satisfaction with the CSPD. Again, this bifurcated response regarding overall satisfaction with the CSPD demonstrated differences across racial/ethnic groups.
- Regarding perceived racial/ethnic disparities, slightly over half of the respondents believed that the CSPD provides the same protection in neighborhoods regardless of the racial compositions of residents, and that people of color are treated the same as White individuals, while approximately one-third of respondents disagreed.
- A slightly larger percentage of respondents was satisfied than dissatisfied with outcomes and treatment by CSPD officers across all types of interactions.
- The percentage of Non-White respondents who responded positively to statements about CSPD's officers' behavior during their most recent contact was considerably higher in comparison to the percentages of Non-White respondents who responded positively to most general survey items.

Specific findings related to use of force include:

- A quarter of survey respondents in Colorado Springs do not believe weaponless force should ever be used by police to gain compliance from a resisting subject; Non-White respondents were significantly more likely than White respondents to hold this belief.
- About half of the respondents approve of CSPD force practices across survey items, with approximately 30% of respondents showing disapproval.
- Approximately one-third of respondents consistently have strong negative perceptions of force used by CSPD officers (e.g., 30% are fearful of being subject to CSPD use of force; 35% believe that CSPD officers are not equal in use of force across racial/ethnic groups).

Roughly 41% of respondents took the opportunity to answer open-ended survey questions and provide additional details regarding the ways that the CSPD could foster transparency, build trust, or improve interactions with the community. Some of the most common recommendations included:

- Increase transparency with the public through faster release of body camera footage, a more proactive media strategy, more publicly available data and reports, improve complaint process, and greater accountability for misconduct.
- Less use of force, more reliance on less lethal weapons instead of firearms, and de-militarize the culture of the department.
- Increase community programs and interactions, public education about police work.
- Increase hiring standards and diversity; increase number of officers, response time, and proactive policing; increase response to certain calls by non-police agencies.
- Increase training (e.g., de-escalation, crisis response, cultural diversity).

The focus group conducted with community members centered around discussion of several general themes, including (1) the state of police-community relations in Colorado Springs, (2) need for more transparency, (3) perceptions regarding policing and bias, (4) responses to the officer-involved shooting of De'Von Bailey and protests following the death of George Floyd, (5) community engagement, and (6) data collection and research. Participants' comments during the focus group generally reflect the quantitative descriptive findings from the community survey, and the topics raised by survey respondents in the qualitative open-ended responses.

In summary, although there are clearly opportunities for improvement for the CSPD, many survey respondents and focus group participants were optimistic that progress is being made and that police-community relations are improving. As stated by one survey respondent:

"The role of a police officer is very difficult. Continuing to provide opportunity for public feedback and then addressing concerns will help over time. A person's perceptions are his reality. It takes time to change a person's perceptions."

8. CSPD PERSPECTIVES

Although research on community perceptions of the police (and specifically, use of force) is plentiful, considerably less study has focused on police officers' perceptions. Our mixed-methodology approach considers officers' perspectives – through focus group interviews and a quantitative survey – to provide context around the statistical analyses of official data and better inform the research team's recommendations. In this section, we first highlight some of the existing research on police officers' perceptions that served as a base for our current work. Thereafter, we describe the methodology used for the focus groups with CSPD officers and supervisors. The themes that emerged from the focus groups were then used to develop the officer survey. Finally, we detail the findings from the officer survey, including a description of the survey respondents and the core officer perspectives that emerged.

8.1 Previous Research

Research on police officers' perceptions has generally focused on how they view their role, perceptions of the community and the state of police-community relations, and perceptions of use of force. Recent study findings shows that police trust in the public does affect officer behavior, particularly behaviors that may put them personally at risk but that serve the broader goal of public safety.²¹³ For example, police trust in the public is predicted by officers' perceptions of: 1) the extent to which they believe the public understands the nature of police work, 2) public views of the police, and 3) public integrity (i.e., officers believe they will be treated fairly and not falsely accused).

The Pew Research Center conducted a national survey in 2017 of approximately 8,000 police officers from 54 departments on an expansive number of topics, including officers' perceptions of police-community relations, satisfaction with their job, use of force and fear for their safety.²¹⁴ Their findings provide a mixed picture of police officers' perspectives. For example, most officers reported being satisfied with their department and were committed to law enforcement as a career but were troubled by the lack of accountability for peer officers that are not performing well or engaged in misconduct, and have serious concerns about resource constraints (e.g., not enough officers, need more training).

Most officers in this survey also reported feeling respected by the public and trusting most members of the community, but they also perceive that the public does not understand the risks of police work (despite a large percentage of the public who believe they do). Pew also found that high-profile use of force incidents nationally increased tensions with the public, particularly with people of color; resulting in officers being hesitant to engage in stops or use force even when legally justified and increased concern about their personal safety.

Other research has shown that officers generally view force as a means to ensure their own safety, the safety of fellow officers and public safety.²¹⁵ One study examined how police formed their attitudes about the use of force from the beginning of academy training through their first three years of service. They found most officers in the academy view the use of force as necessary but are less likely to view it

²¹³ For example, see Mourtgos et al., 2020.

²¹⁴ See Morin et al., 2017.

²¹⁵ For example, see Oberfield, 2012.

as an effective response after more time on the job.²¹⁶ Other research has found that officers' support for aggressive tactics (and what may be perceived as unnecessary force) varies widely. These perceptions are often related to crime rates where officers are assigned.²¹⁷ With regard to police agencies' use of force policies, research shows that officers want clear guidance regarding when force can and cannot be used, but they prefer not to have their discretion tightly restricted.²¹⁸

8.2 Focus Groups with CSPD Officers and Supervisors

One of the primary goals of conducting focus groups with the CSPD was to better understand the impediments and constraints felt by those working in the organization. Officers and first-line supervisors may not feel comfortable disclosing this information directly to command staff or others within the organization. Therefore, while it is important for the external research team to establish credibility and rapport to obtain valid information, it is likely that this type of external review will result in more candid information than if the research were conducted internally. Furthermore, although researchers and outside experts are sometimes poorly received by officers, participation in "best practices" research actually enhances officer morale and produces more valid findings. Officers who are identified as exhibiting practices that the department wishes to learn from and model are often very willing to share their experiences. In addition, officers perceive that the administration cares about changing the impediments they encounter in their work environment when asked for individual feedback to guide policy and training decisions. Finally, most officers recognize the importance of providing context around the statistical analyses conducted – particularly for a report focused on the use of force.

8.2.1 Methodology

As with the community-based focus group, the focus groups conducted with CSPD officers and supervisors were facilitated by TMLLC team members with experience in conducting focus groups. We loosely followed a pre-established discussion protocol (designed to elicit information related to specific topics). We then asked clarifying or follow-up questions after the participants gave responses to initial questions.²¹⁹ To ensure that everyone participated in the discussion, the moderators occasionally directed questions to specific participants who had not made many comments up to that point. To encourage candor, the focus group session was not recorded; instead, a member of the research team took notes. Participants were advised that their participation in this focus group was voluntary, their comments would be reported anonymously (i.e., not attributed to any individual participant or focus group), and that they could leave the session at any time for any reason. The findings in this report reflect our best attempt to produce a comprehensive and accurate description of the issues consistently raised by focus group participants.

Based on the approach, we directed conversations regarding police use of force by using prompts about: 1) community perceptions of the CSPD – including discussions of the recently administered community survey, 2) recent changes in state legislation (specifically SB 20-217), 3) CSPD training, 4) racial and

²¹⁶ See Oberfield, 2012.

²¹⁷ For example, see Morin et al., 2017; Oberfield, 2012; Phillips & Sobol, 2011.

²¹⁸ For example, see Morin et al., 2017; Terrill & Paoline, 2013.

²¹⁹ For example, see Krueger, 1998; Morgan, 1988, 1996.

ethnic disparities in police outcomes, and 5) management-related issues. At the conclusion of each focus group, we asked participants if they could be "chief for the day" – with the goal of making police-citizen encounters safer, reducing police use of force, and reducing racial/ethnic disparities in the use of force – what changes would they make and why. These emerging themes, and the detailed discussions around them, assisted the TMLLC team in the development of the officer survey that was administered several months after the focus group sessions. The themes identified in the focus groups were largely mirrored in officers' survey responses.

As described in Section 7, the use of qualitative methods such as focus groups can provide rich and invaluable context on the topics of interest that are simply beyond the capability of purely statistical analyses. The strength of this type of research is that officers' behavior is being explained by the very research subjects themselves. This is also, however, one of the limitations of focus group findings that are potentially more subjective in nature. The limitations associated with these methods – groupthink, external validity, and reliability – were summarized in Section 7.3.1.

A cross-section of officers and first-line supervisors were selected to participate by CSPD administrators. We asked for a sample of officers that would provide: 1) representation across the various patrol divisions and specialized units in the department; 2) diversity with respect to officer age, gender, race/ethnicity, and experience; and 3) best practices related to use of force. The purpose of the focus groups was to provide some initial findings from the community survey results and our analyses of use of force data quantitative analyses, and allow an opportunity for reactions, comments, and questions. We also gathered contextual information known to the officers that we believed would be relevant for the interpretation of the quantitative findings.

On July 21 - 22, 2021, two separate focus groups with a total of 24 officers were facilitated by TMLLC team members. The first group contained mostly patrol officers, while the second group was comprised of mostly officers assigned to specialized units. Of the 24 officers included in the focus groups, 19 were men, 5 were women, and at least 6 were Non-White officers. A third focus group was conducted with 12 first-line supervisors on August 25, 2021; these sergeants were all males, and one was Non-White. Each focus group was approximately two hours in duration.

8.2.2 General Perceptions of the CSPD

Prior to reporting the findings from the focus group sessions, we begin with a summary of the positive things that officers reported about their agency. We routinely heard that there were many career opportunities within the CSPD that were readily attainable for officers. This allowed officers the chance to find "where they fit" organizationally, and to tailor their career based on individual interests. They also noted that based on the number of retirements and staffing shortages, there were plenty of opportunities to advance into supervisory or managerial roles within the department.

Despite the negative climate for police officers nationally – noted by many officers – there were still sentiments expressed that policing is a rewarding career where officers have daily opportunities to save lives and improve conditions for the residents of Colorado Springs. Many spoke with pride as they described the value of their work and described the deep appreciation of many residents who continue to support their efforts. Officers also explained that the challenging conditions for law enforcement across the country had solidified their camaraderie within the CSPD; these challenges have reminded them to look out for one another and support their fellow officers and their families.

It was the perception of some officers that the racial tension and political divide experienced across the country is not really an issue within the department. No comments were made by participants regarding experiencing racial tensions *within* the department. It was also generally recognized that the CSPD has more trust and support from the community than most police agencies nationally, and that it was a good place to work. In summary, while we certainly detected some frustrations with the current environment, along with specific issues related to the management of the CSPD, overall, the officers projected a sense of optimism and higher morale than we have witnessed in some other agencies across the country.

8.3 Focus Group Findings

The content of the focus groups was centered around police use of force, and how to make police-citizen encounters safer. Below we summarize these focus group discussions grouped within the following seven themes that emerged:

- (1) Perceptions of Police-Community Relations
- (2) Transparency and Communications
- (3) Staffing
- (4) Impact of SB 20-217
- (5) Training
- (6) Technology
- (7) Dispatch

8.3.1 Perceptions of Police-Community Relations

Each of the focus group sessions included discussions on the state of police-community relations within Colorado Springs. Focus group participants generally agreed that community perceptions of the police are mixed and that it varies across areas of the city. Participants felt strongly supported by many residents but acknowledged relations with other groups are strained.

First, participants reiterated that Colorado Springs has a lot of retirees and military bases, and these groups tend to be more supportive of CSPD officers. They also noted that, for the most part, residents were kinder and more appreciative of the police since the COVID-19 pandemic began in March 2020 and these sentiments continued through the protests associated with the killing of George Floyd. They suggested that while the State of Colorado tends to be more liberal (and therefore is interpreted by officers as more anti-police), Colorado Springs is more conservative (and therefore interpreted as more pro-police).

However, as the findings from the community survey suggest, officers noted that community members are very polarized, with a not-insignificant segment of the population that is very critical of police. Their descriptions of their interactions with these other residents are decidedly more negative. Officers recounted that in some areas of the city, the relations with the community are "very poor" and that residents are often discourteous or rude, and sometimes non-compliant or resistant. They suggest that interactions are sometimes worse in group situations, where people tend to be ruder or more abusive than they would be individually.

Officers noted that the community protests following the death of De'Von Bailey were peaceful, but that civil unrest and more dangerous conditions were experienced in the aftermath of the killing of George

Floyd. Officers believed that many of these protestors were not Colorado Springs residents. They also indicated that they felt strongly supported by other members of the community during the protests, with many food deliveries and expressions of gratitude and appreciation of their work.

Officers also expressed concern about how the local and national media highlights negative interactions between the police and citizens, and that this misleading portrayal of police-citizen encounters sways public perception in a negative direction. They noted that in part because of these media accounts, most members of the public do not understand the complexities of policing, nor do they understand specifically how little force is actually being used during police contacts. This sentiment was summarized by one participant as: "The public does not understand cops, and cops do not understand the public."

Some officers did recognize the role that the history of policing has played in shaping these negative perceptions of the police and the challenging legacy this has left for current officers. They also noted, however, that many officers do not fully understand these cultural differences and that more cultural competency training is needed within the CSPD. Specifically, it was suggested that the majority of officers do not understand the history of law enforcement with different minority communities and that teaching this could help expand empathy.

Interestingly, officers suggested that the CSPD's significant staffing issues (described in Section 8.3.3) have led to slower response time for calls for service, which they believe has reduced trust in police. They also note that officers do not have additional time to build community relationships because they are running from call-to-call. This also manifests itself as lacking time during contacts with citizens to use the opportunity to build rapport and be more personal. Some believe that citizens want fast answers, but when officers cannot increase their speed or do not have the answers, it leads to mistrust. Officers do not believe they have the time to build community relationships/engage in community outreach programs due to the understaffing, and as a result, miss opportunities for positive interactions. While officers are not opposed to engaging in community-building projects, they do not believe they have enough time during their shifts to engage fully.

Some officers noted that the CSPD does not focus on training officers to build community relationships. They suggested that because this is not emphasized in the academy, younger officers, in particular, do not have the skills to engage in building trust and improving community relations. One officer noted that more experience leads to more confidence in dealing with negative encounters with citizens – especially if those negative interactions are racial in nature. It was also suggested that talking about race allows officers to address it appropriately, but that the training academy is not appropriately focused on this critical issue.

There was an acknowledgment that a level of miscommunication exists between the police and communities of color. It was recommended by one focus group participant that community leaders and officers just need to "sit down and hash it out." Other officers noted that the format of previous town hall meetings has not been effective or productive. Rather, it would be better to have community members engage in training exercises like simulation training, for example, to create better understanding, and engage community members to be more interactive with police.

8.3.2 Transparency & Communication

Discussions regarding the use of force often focused on the need for more transparency from the CSPD. This concept was particularly interesting coming from the police perspective. Although many community members raise issues related to the need for more transparency, particularly as it relates to use of force incidents, the same comments are rarely echoed by law enforcement personnel. However, within the focus groups with CSPD officers, there was much conversation about the *immediate need* for the CSPD leadership to be more transparent, particularly in the aftermath of critical incidents.

Officers reported their frustration that the CSPD is not more transparent with the public. Participants suggested that "little to no information" is released to the public, that "barely any details on incidents are released," or that "by the time information is released months later it is not relevant or is perceived as a cover-up." Some officers directly blame the CSPD leadership for allowing the media to "tell a one-sided narrative" by not engaging more directly with the media and community members. They suggest the lack of timely information released makes their job more difficult and the situations they encounter more dangerous.

Officers cited additional examples of the media taking videos during protests that were unflattering of the police, but that the CSPD leadership did not engage reporters in order to provide additional context or perspective. Officers were especially critical of what they described as the lack of effective public relations within the department, suggesting that because the CSPD is not more proactive, positive police-related stories are underrepresented; thereby leading to one-sided reporting.

Officers indicated that because information is not released in a timely manner, rumors grow within the community – and that this situation is now worse than before the protests in the summer of 2020. Although the CSPD has bodycam footage on police contacts, they do not readily release information, which adds to the negative public perception of officers and the department. They suggested that it takes the CSPD nine months to a year to release body camera footage for critical incidents (compare this to some agencies that release footage within 48 hours). Several officers noted that the CSPD should follow the more progressive approaches of the Las Vegas Metro Police Department, Los Angeles Police Department, or Phoenix Police Department, where information is released to the media in a routine, packaged format.

While the information on critical or controversial incidents – including body camera footage – is ultimately released to the public, officers participating in the focus groups could not understand why the information is purposefully delayed. Some officers speculated that the hold-up might be with the CSPD administration, the District Attorney's Office, or the Sheriff's Office (responsible for investigating officer-involved shootings). Regardless, officers agreed that if they were "chief for the day" this is a situation that they would remedy, with more immediate transparency and readily sharing information with the public. Relatedly, some officers advocated for the public release of data and summary reports to demonstrate they are not engaging in bias-based policing. Officers generally agreed that more information provided to the public is good for the police because it disproves the narrative that officers are engaged in inappropriate behavior.

Both officers and sergeants also indicated that CSPD's lack of effective communication with the public is also experienced internally. For example, one concern raised during the sergeant focus group was that internal communications need to improve because there is often a "disconnect." The sergeants perceive

that sometimes the department makes decisions without including the "real stakeholders" (sergeants and patrol officers) working in the field. They expressed concerns that good ideas brought from the field are "shot down" without discussion and that the department's many committees are ineffective at communicating their results.

8.3.3 Staffing

Staffing shortages were recognized across focus groups as a major challenge facing the CSPD, as they are experiencing the same staffing shortages as other agencies across the country. These staffing shortages were attributed to problems with officer retention, as some of their peers are leaving CSPD to go to other departments with qualified immunity or leaving law enforcement entirely. They indicated that more officers are also retiring earlier, and fewer are entering the profession (which is also related to the COVID-19 disruptions across the entire workforce). In addition, because the pool of job candidates is smaller, there is some concern that less qualified candidates will be selected. Participants indicated that the CSPD does not allow lateral transfers or for state-certified officers to have less time at the CSPD academy, so there is little incentive for more experienced officers to move to CSPD. And finally, in Colorado Springs, this officer shortage is exacerbated by the large growth in the residential population that is requiring an increase in the complement of officers to serve the community.

These staffing issues are then extended to supervisory issues. It is not just that there is a lack of officers, but the officers remaining lack experience; most officers are younger, and many supervisors have less experience as well. Several officers expressed concerns about the effect that staffing shortages have had on officer safety and potential use of force situations. They suggest that having at least two officers respond to calls makes these situations safer, and further will *reduce* the amount of force used. One participant, when prompted about "being chief for a day" said that to reduce the use of force, he would send more officers to respond to each call, because sending one or two officers "is not enough to keep everyone safe."

Some participants also indicated that while staffing is stagnant or decreasing, the amount of work the CSPD requires officers to do is increasing. Some participants also raised concerns that they are being dispatched to "dumb calls" that take up significant time, including calls involving juveniles, mental health issues, and suicidal people. It was noted that there is a CRT mental health team to respond to some of these calls, but most do not fit within the specific criteria to be diverted (e.g., if there is drug use involved or danger). This was a theme of the community survey open-ended responses as well; community members agreed that not all calls require a law enforcement response.

Officers spoke in detail about strategies to increase staffing. They suggested that officers would rather have increased staffing than a raise. When asked what they would do if they were "chief for the day," some indicated they would immediately address staffing. Officers and sergeants spoke about the following possibilities:

- Develop a national recruiting campaign
- Create two academies, one at night and one during the day to increase flexibility for potential recruits
- Develop more infrastructure to recruit more officers (i.e., more academy staff/trainers to allow for increased class sizes)
- Allow people with a current state certification to attend a shorter training academy

- Reconsider lateral hires. Previously this approach was not well received, but with modifications, it may help recruit more experienced officers. Participants emphasized that these officers must be properly vetted.
- Reduce the police academy to less than six months for lateral transfers
- To assist with officer retention (so officers do not become burned out in patrol), spread out senior officers across different shifts to help train/mentor newer officers, incentivizing different shifts
- Use callbacks on overtime to address staffing shortage until the department can get more hires through the academy and onto the streets.

In summary, nearly every participant indicated that the shortage of officers was among the most critical issues impacting the CSPD and that it negatively impacts officer safety, use of force incidents, and police-community relations.

8.3.4 Impact of SB 20-217

Much of the discussion regarding the use of force specifically was focused on officers' concerns regarding SB 20-217, the Enhance Law Enforcement Integrity Act passed in Colorado in June 2020. As it relates to use of force, SB 20-217 *requires use of non-violent means, when possible, before utilizing force* and minimization of injury; specifies the justification for deadly force, imposes a penalty for failure to intervene in cases of excessive force; and bans chokeholds.

There was widespread agreement across focus group participants that the implementation of SB 20-217 makes officers reluctant to use force and will, as a result, increase their risk of injury or death. Specifically, officers said that this change in state statute "creates dangerous situations and puts officers at increased risk because officers are hesitating to use the appropriate level of force initially." It was suggested by officers that this situation is also jeopardizing the safety of victims (especially in domestic violence situations) because officers are looking to avoid the use of force.

Several officers indicated that using effective force "early and properly" reduces the need for higher levels of force later during the interaction. When officers are reluctant to use force early, it can often create a more dangerous situation later. As stated directly by one focus group participant: "Due to the political climate and SB-217, there is more hesitation in officers, specifically newer or younger officers, and this is creating potentially more dangerous situations."

Participants in the sergeants' focus group supported officers' perceptions. Specifically, they indicated that they believe SB 20-217 is making officers hesitant to use force and that this was a serious officer safety concern. Both officers and sergeants suggested that this change is negatively impacting officer morale and that officers are confused about when they can use force. These and other issues impacting officer morale are believed to be causing some good officers to leave the profession.

Some participants reported that the CSPD use of force policy "changes a lot" but that it follows the Constitution and state laws. It was suggested by one participant that officers needed to provide more articulation on body cameras, to explain what they are doing due to the changes associated with SB 20-217. This is consistent with the CSPD training on SB 20-217 provided in July 2020 where officers were

trained to verbally articulate how they are addressing the statutory requirements²²⁰ on body-worn cameras. Overall, some officers suggested that the changes in agency use of force policy are not very substantial "if you were already doing the right thing," but that younger officers with less experience are struggling to make decisions in the field regarding the appropriate levels of force.

8.3.5 Training

Much of the conversation regarding use of force revolved around officers' concerns about the CSPD training. First, multiple officers were very critical of the amount and quality of training provided regarding the use of force. Many focus group participants suggested there is not enough hand-to-hand training and in-person training. They indicated that the online training was insufficient and created an officer safety issue. They also noted very specifically that they did not feel they had been effectively trained on de-escalation. Officers perceive that de-escalation tactics are being used in the field, but more training is needed to enhance these skills.

One of the reasons officers believe there is insufficient de-escalation or hand-to-hand force training is because the blocks for mandatory training take too much time, and there is little to no time remaining for any other training. They suggested that while they are held to a new state standard requiring de-escalation, they are not trained for it; one participant suggested they received less than two hours of hands-on use of force training over a two-year period. Some officers articulated their desire for more training that was "useful" rather than outdated or irrelevant (e.g., POST requirements, baton, etc.). Others said the training they receive is "not realistic" or "not helpful" in their daily work and that what is taught is not applicable to real situations.

The perception that CSPD officers are undertrained in hands-on use of force tactics was pervasive. Participants recognized that there is plenty of online training regarding constitutional requirements, but that hands-on training in use of force is "embarrassingly lacking" within their agency. Another participant said that de-escalation training was provided as a video training, but that videos are "dumb" and "redundant." Other participants added that the videos are exactly the same and do not reflect reality, leading one participant to say there is "no realistic training" within the CSPD. Some participants indicated that they completed a day of ICAT training but want more hands-on training. A few officers suggested that officers are hesitating in the field because of the political climate, the increase in de-escalation training, and a reduction in hands-on force training; this will create "potentially deadly situations."

Importantly, several focus group participants reported that they do not know what their coworkers will do in crisis situations because physical training is not standardized. Some officers train outside of the agency to improve their skills – but again, this means there is little standardization across officers, possibly creating safety concerns. Officers reiterated that this is problematic, especially during "team takedowns" or crisis intervention situations.

Part of the concern raised with training is the perception that the loss of experienced officers, combined with the lack of incentives to become a trainer, has resulted in training staff with less experience in both

²²⁰ CSPD trainers used three of the statutory requirements as a consistent theme throughout the training: What is your legal authority? How do you know non-violent means would be ineffective? How can you minimize injury?

training and field situations. This, coupled with concerns regarding the lack of experience of younger field supervisors, has sent the message to officers that "nobody pays attention to training."

Focus group participants did indicate that debriefing after critical incidents is "normal" and is often led by senior officers on the scene or field sergeants. While this opportunity for coaching and mentoring after an incident does seem to be the informal norm for the CSPD – and that officers believed this is a good and useful practice – debriefing also depends on the supervisor. That is, this supervisory practice is not standardized or required.

If appointed "chief for the day," several officers indicated they would increase the amount of hands-on force training and eliminate virtual training that they perceive to be ineffective. They indicated this is a major concern among officers and an officer safety issue that needs immediate attention.

8.3.6 Technology

Some officers expressed frustration with the aging and inefficient technology used within the CSPD. They noted that their reporting procedures are often redundant; several sergeants also noted the problems associated with getting information out of the systems once collected. As staffing issues worsen for the CSPD, the inefficiencies associated with aging technology are perceived by officers as getting worse over time. Likewise, supervisors expressed that the CSPD "uses 20 different programs that don't talk to one another' and that it is difficult for supervisors to advise officers making "real time" decisions without the benefit of readily available information.

As related to use of force reporting, officers stated they did not find the documentation requirements for pointing of a firearm problematic; rather, they indicated that it was "a pain" because the BlueTeam data collection system makes it redundant. Officer and sergeants both noted that because BlueTeam is not streamlined, it creates additional administrative burdens for officers within an agency that is severely understaffed.

8.3.7 Dispatch

When prompted about issues surrounding the use of force, many officers focused heavily on the perceived problems with dispatchers and call takers, and how these issues created officer safety issues in the field.

First, officers noted that call takers are – they believe inappropriately – required to follow a script when receiving calls. Some officers believe that the use of this script results in an inability to provide responding officers with pertinent information in a timely manner, and this increases the danger associated with these calls. Officers reported that call takers have too many questions in their required protocol, and they are "graded" based on their verbatim regurgitation of these items, which can take from 8-10 minutes per call. In short, officers believe they do not have enough information about the specific situations when they respond to a call for service. For example, the weapon description is one of the last items on the script – but from an officer's perceptive, one of the most important details. And while officers can ask specific questions, they report that the call taker often does not provide responses

in a timely manner, so most officers no longer bother to ask. As summarized by one participant: "Dispatchers need the ability to skip dumb questions so that police can have accurate information."²²¹

One participant shared that the Seattle Police Department provides a livestream of the call for service and noted this is a good idea because it provides additional tone and context for the call. Officers noted that while most dispatchers give the necessary basic information, it is just too slow to be helpful, and that there are additional details that are needed. As described by a participant, "dispatch does not give enough detail – for example 'gun' vs. 'gun in the house' are two different scenarios." Other officers added that they never receive a weapon description, only if a weapon is involved, "so officers have no clue what they are dealing with."

Other officers reported that citizens calling for service are sometimes put on hold for long periods resulting in individuals becoming agitated, and then officers must deal with these negative reactions when they arrive on scene. Organizationally, focus group participants report that field supervisors cannot raise concerns to dispatch directly, resulting in little or no communication between officers and dispatchers on possible improvements. It was also noted that there is no Commander overseeing the dispatchers, again suggesting to officers that there is little opportunity for corrective action.²²² Officers were quick to note that the lack of communication between the call taker, dispatcher, and officer is symptomatic of a more systematic problem related to understaffing and lack of comprehensive training for all parties. Officers report that the Communication Center – like the police department – is understaffed, has a high turnover rate, and lacks the time and opportunities for good training. Dispatchers and call takers do not ride with officers to better understand the environment in which they work because they are too short-staffed. As a result, individuals in the call centers do not understand the needs of officers. Further, the dispatch technology is outdated and not user-friendly.

Participants in the sergeant focus group verified officers' perceptions regarding the problems with dispatch. These supervisors reiterated that the call center needed to provide additional training for dispatchers and there was a high turnover rate. Sergeants also agreed that while some dispatchers are better at getting the appropriate details to officers quickly, the system is problematic. Sergeants shared officers' frustrations about not getting the information needed to handle calls for service in a safe and effective manner.

8.4 Officer Survey

On July 22, 2021, three members of the TMLLC team met with seven members of the CSPD Police Protective Association (PPA). While this convening was originally planned as a facilitated focus group session, the leadership of the PPA had several questions about the larger use of force study being conducted by TMLLC. We, therefore, transitioned the planned focus group into a meeting with the PPA to exchange information and answer questions. The TMLLC team spent some time at the onset of the meeting to introduce the team members, describe the larger work being conducted, and develop trust.

²²¹ At times during the focus groups, participants may have used call taker and dispatcher interchangeably although they perform different roles within the Communications Center.

²²² Note that there is a CSPD civilian manager of the Communications Center that is the organizational equivalent of a Commander.

PPA members asked questions regarding the specific components of the study, including how use of force would be studied, how the report would be released, how officers' perspectives would be incorporated into the work, etc. In addition, members of the PPA raised questions and concerns regarding the administration of the community survey. Once they better understood the research methodology – and further, that the TMLLC team understood the limitations associated with a non-randomized community survey – PPA members indicated they felt more confident explaining the purpose of the survey (and the larger research study) to their membership.

Discussions with the PPA during this meeting ultimately led to the inclusion of a new component of the current study: the officer survey. The PPA supported the use of focus groups to provide additional context for our research findings but noted that more systematic feedback from officers would be desirable. The TMLLC agreed that a systematic survey of officers that was supported by the PPA (to enhance response rates) would be a valuable addition to our examination of use of force. A request was made by the PPA to the CSPD leadership to add an officer survey component to the TMLLC scope of work – including a thorough statistical analysis and reporting of the findings. The development, administration, and findings from that survey are reported below.

The survey instrument was created by the research team in consultation with CSPD officials. Findings from the focus groups provided the research team insight into topics and issues that were important to include in the survey. The survey questions were designed to better understand officers' perceptions of community relations, use of force, and training. Where possible, the survey items were adopted from questions that were validated on survey instruments from relevant previous research. The survey also gathered information regarding officers' demographic characteristics to examine whether perceptions vary across different types of officers. To be consistent with previous survey research, most of the questions are measured using variations of a Likert scale (e.g., agreement, frequency), allowing the assessment of the nature and intensity of respondents' attitudes. The CSPD command staff reviewed a draft of the survey and provided feedback that led to minor clarifications and increased specificity of questions. A copy of the final survey is included in Appendix F.

The final survey instrument was available electronically on mobile and desktop browsers (via a link or QR code). The survey was open for approximately three weeks, from December 2, 2021 until December 24, 2021. A CSPD Commander sent an initial email notifying officers about the survey and sent reminders about the survey through another internal web-based platform. A link to the survey was located on CSPD's intranet homepage. The co-principal investigator recorded a video that accompanied the survey link, which explained:

- (1) Officers' responses would be sent directly to the research team; CSPD will not have access to the individual responses at any time (including at the conclusion of the research project).
- (2) Responses would be kept confidential. The survey asked respondents to self-report demographic information, experiences with the community, experiences with using force, and relevant training experiences. To ensure officers are not identified, this information is analyzed and reported only at the aggregate level (e.g., comparing responses by officers' race, gender, rank, or years of experience).
- (3) The purpose of collecting a unique officer identifier on the survey was for research integrity purposes only (i.e., to ensure that only one survey was completed per officer).

8.5 Officer Survey Respondents

The TMLLC team received 360 surveys via the online Qualtrics software. Of these, however, 25 (6.9%) were missing responses on every question. Therefore, all analyses are based on the 335 usable surveys. The filled complement of the CSPD was 694 officers on 12/2/2021 when the survey administration began, not including academy recruits. Therefore, our final response rate based on the usable surveys was 48.3% (335/694) of sworn officers. Of the 335 completed surveys, 82.5% of officers completed all survey items and had no missing information, while 6.4% were missing information on at least one of the questions. Just under 10% of officer responses were missing data on at least 50% of the survey questions. The valid number of responses for each question is available in Appendix F.

One of the initial dimensions of an analysis of the survey is to determine if the CSPD officers who responded to the survey are representative of the population of CSPD sworn personnel. Table 8.1 provides a comparison of the demographic, experience, and rank characteristics of CSPD sworn officers who completed the survey to the overall population of CSPD sworn personnel. The results below show that the survey respondents are a representative sample of CSPD sworn personnel on the majority of these measured characteristics.

The age distribution of the survey respondents (collected in specific age groups to ensure survey respondent anonymity) was virtually identical to the CSPD population (within +/- 2% of each other). A similar +/- 2% difference was observed for respondents' race/ethnicity relative to the CSPD population for White, Black/African American, Hispanic, Asian, American Indian/Alaska Native, and Native Hawaiian/Pacific Islander categories. The lone area where there was some degree of deviation was that survey respondents were more likely to self-identify as "other" and "two or more races" (4.4% of the respondent total) compared with the CSPD population total (0.9%). For gender, male officers were under-represented by roughly 7% among respondents relative to the CSPD population, while female officers were overrepresented by roughly 3%. It is also important to note that 3.5% of respondents chose not to identify their gender.

Police officers with less than two years of college were underrepresented among respondents (by roughly 18%) compared to the population of sworn CSPD personnel. Officers with undergraduate (Associates and Bachelor's degrees) and graduate degrees were overrepresented (by 5%, 7%, and 9%, respectively).²²³ For years of service at CSPD, almost all groups of respondents reflected those in the CSPD population (again by +/- 2%) among officers with less than one year of experience, 1-4 years of experience, 10-14 years of experience, 15-19 years of experience, and 20+ years of experience. Officers on the job at CSPD for 5-9 years were overrepresented by roughly 5% when compared to the CSPD population. For rank, respondents at the Lieutenant and Commander and above levels were within +/- 2% of the CSPD population. Those at the rank of officer were underrepresented in the sample (by roughly 7%), while Sergeants were overrepresented (by roughly 5%). Military experience comparisons

²²³ CSPD captures highest education level in slightly different categories than the survey used. Not reported in the table is the 2% of personnel with "some graduate-level education," and 1.2% with "technical school." Furthermore, those listed as having "some college" are reflected in the table row that reflects "less than 2 years of college" as listed on the survey. It is unknown, however, how many years of college this reflects in CSPD's personnel data. Given the substantially higher percentage of some college in CSPD personnel data as compared to the percent of "less than 2 years of college," the percent in CSPD's personnel data likely represents individuals who have more than two years of college.

were not readily available, though it is worth noting that 29.1% of the survey respondents were military veterans.

In summary, when interpreting the results, it should be noted that survey respondents are slightly more likely to self-identify as: "other" or "two or more races," female, college graduates, with 5-9 years of experience, and at the rank of sergeant, compared to their representation in the CSPD.

Variable	Percent of Respondents	Percent of All CSPD sworn officers
AGE		
18-24 years	2 (0.6%)	5 (0.7%)
25-29 years	42 (13.3%)	79 (11.5%)
30-34 years	60 (19.0%)	129 (18.8%)
35-39 years	47 (14.9%)	116 (16.9%)
40-44 years	51 (16.1%)	99 (14.4%)
45 years & older	114 (36.1%)	258 (37.6%)
RACE/ETHNICITY		
White	254 (80.4%)	544 (79.3%)
Black or African American	9 (2.9%)	26 (3.8%)
Hispanic	31 (9.8%)	79 (11.5%)
Asian	6 (1.9%)	24 (3.5%)
American Indian or Alaskan Native	1 (0.3%)	6 (0.9%)
Native Hawaiian or Pacific Islander	1 (0.3%)	1 (0.1%)
Other / Two or more races	14 (4.4%)	6 (0.9%)
Combined Non-White	62 (19.6%)	(20.7%)
GENDER		
Male	243 (76.9%)	577 (84.1%)
Female	61 (19.3%)	109 (15.9%)
Non-binary / third gender	1 (0.3%)	N/A
Prefer not to say	11 (3.5%)	N/A
EDUCATION		
High school diploma/GED	1 (0.3%)	1 (0.1%)
Less than 2 years of college	9 (2.9%)	145 (21.1%)
Associates Degree	71 (22.5%)	119 (17.3%)
Bachelor's Degree	188 (59.5%)	355 (51.7%)
Graduate Degree	47 (14.9%)	44 (6.4%)
EXPERIENCE (years with CSPD)		
Less than 1 year	4 (1.3%)	4 (0.6%)
1-4 years	72 (22.8%)	147 (21.4%)
5-9 years	89 (28.2%)	159 (23.2%)
10-14 years	24 (7.6%)	64 (9.3%)
15-19 years	40 (12.7%)	86 (12.5%)
20 years or more	87 (27.5%)	179 (26.1%)
CURRENT RANK		
Officer	230 (73.3%)	550 (80.2%)
Sergeant	60 (19.1%)	98(14.3%)
Lieutenant	18 (5.7%)	25 (3.6%)
Commander and above	6 (1.9%)	10 (1.9%)
MILITARY EXPERIENCE		
Yes, veteran	92 (29.1%)	N/A
Yes, current Guard or Reserves	11 (3.5%)	15 (2.2%)
No	213 (67.4%)	N/A

Table 8.1. Characteristics of Officer Survey Respondents (n=316) compared to CSPD (n=686)²²⁴

 $^{^{224}}$ The personnel statistics were provided to our team on January 24, 2022, so the number of officers for whom we have demographic data is eight less than the 694 officers who were eligible to take the survey when it opened on 12/2/2021.

Hereafter, for purposes of analysis, we collapse these variables as described below, and we examine whether there are statistically significant differences in survey responses based on each of these officer characteristics²²⁵:

- Age:
 - o 18-29 (13.9%)
 - o 30-39 (33.9%)
 - o 40-44 (16.1%)
 - 45 & older (36.1%)
- Race/ethnicity:
 - Non-White (combines all racial/ethnic minorities=19.6%)
 - White (80.4%)
- Gender:
 - o Male
 - o Female
 - Non-binary and "prefer not to say" were excluded for comparison purposes due to their small percentage of representation in survey respondents.
- Rank:
 - Officer (73.3%)
 - o Sergeants and above (Sergeants, Lieutenants, Commanders and above; 26.7%)
- Education:
 - Associates Degree or less (25.7%)
 - Bachelor's degree (59.5%)
 - Graduate degree (14.9%)
- Experience:
 - \circ 4 years or less (24.1%)
 - o 5-9 years (28.2%)
 - o 10-14 years (7.6%
 - o 15-19 years (12.7%)
 - 20 years or more (27.5%)
- Military:
 - Previous or current military experience (32.6%)
 - No experience (67.4%)

²²⁵ To properly account for the ordinal nature of the survey question responses, we used nonparametric bivariate association statistical tests. When comparing binary groups (i.e., White/Non-White, male/female, officer/sergeant and above, and military/nonmilitary), the Mann-Whitney/Wilcoxon rank-sum test for statistical significance is used. When comparing across more than 2 groups (i.e., age, education, and years of experience), the statistical significance testing employed is the Kruskal-Wallis test followed by a Dunn test for pairwise comparisons across groups. These tests compare the variable's actual distribution of responses, rather than the comparison of means typically associated with parametric tests. For example, a finding of statistically significant differences by race/ethnicity would be interpreted as: "A statistically significantly higher percentage of Non-White officers agreed with this statement than White officers." As described in Section 3, in this report the research team considers tests with p-values lower than the convention 0.05 level to be statistically meaningful, indicating 95% confidence that there is a difference in that item across the two groups.

To describe the sample of officers who responded to the survey more fully, it is important to consider the types and frequency of interactions they self-reported with members of the public. Specifically, respondents were asked about their frequency of different types of community interactions and about their frequency of use of force since the beginning of the COVID-19 pandemic.²²⁶ For these questions, the frequency response options were:

- Never
- Seldom (1-5 times per year)
- Occasionally (Once every 1-2 months)
- Often (3-4 times per month)
- Frequently (more than once a week)

First, officers were asked about various types of interactions they may have had with community members, including:

- Since the beginning of the COVID-19 pandemic (March 2020), how often have you...
 - spoken to a citizens' group or school group (virtually or in-person)?
 - \circ been thanked by a community member for your service as a police officer?
 - appeared at a community event (virtually or in-person)?
 - been the subject/focus of a negative verbal interaction with a community member while on duty?
 - o engaged in proactive work in partnership with community members?

As shown in Figure 8.1 below, the majority of officers reported that they had *never or seldom* engaged in proactive work with the community (69%), appeared at a community event (80.5%), or spoken to a school or citizen's group (84.1%). This is consistent with the findings from the officer focus groups, where participants noted that there was simply very little (or no) time to engage in community engagement-related activities because of staffing constraints. A quarter of officers reported they had a negative verbal interaction with a community member often or frequently; less than half of officers indicated this had happened to them seldom or never. On the other hand, over half of the respondents (54.7%) reported they had been thanked by a community member for their service as a police officer often or frequently; another 31% reported this occurring at least occasionally. There were no significant differences in the frequency of these types of contacts by officer race/ethnicity, although male officers and those who held the rank of sergeant or higher reported significantly more speaking engagements with community or school groups (which may be based on their assignments).

²²⁶ This 21-month recall period (March 2020-December 2021) is longer than is typically used in survey research, however the onset of the pandemic represents such a seminal event that the research team determined it was the best time to delineate that would be most intuitive for officers' recall.

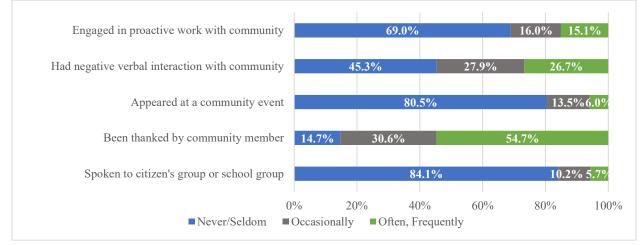


Figure 8.1. Officers' Self-Reported Experiences with Community

Second, officers were asked about their experiences using force. Because the officers were promised confidentiality, these self-reports of use of force were not verified with official data nor do they take into consideration officers' assignments. Officers were asked the following questions:

- Since the beginning of the COVID-19 pandemic (March 2020), how often have you...
 - been confronted with circumstances that legally permitted the use of deadly force, but you resolved the situation by non-lethal means?
 - physically struggled or fought with a suspect who was resisting arrest?
 - interacted directly with a person armed with a knife, baseball bat, or other weapon besides a firearm?
 - interacted directly with a person armed with a firearm?
 - \circ pointed your firearm without discharging it? (0.3% occasionally)
 - o discharged your service firearm (not including during required training)?

Figure 8.2 below shows the distribution of responses based on the same response categories as listed above. As shown, approximately two-thirds of respondents reported seldom or never physically struggling with a resisting suspect; approximately 6% reported this occurred often. Approximately two-thirds of respondents indicated they seldom or never interacted with a person with a weapon other than a firearm. Roughly one-quarter of the respondents reported interacting with a person armed with a firearm occasionally (16.7%), often (8.5%), or frequently (0.9%). Approximately one-third indicated that they seldom pointed their firearm, while another 21.3% reported doing this occasionally. Less than 10% of responding officers reported pointing their firearm often or frequently. The vast majority of officers have never discharged their service firearm (93.6%); 6.1% said this seldom occurred, and 0.3% indicated this occurred occasionally.

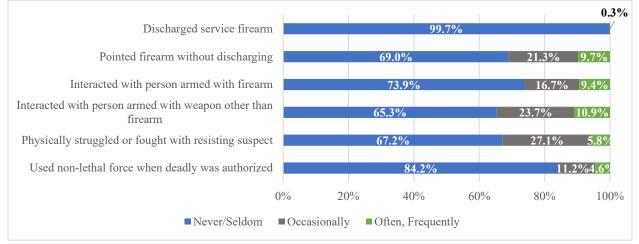


Figure 8.2. Officers' Self-Reported Experiences with Use of Force

There were statistically significant differences in frequency of many of these force interactions by respondent rank and experience. Officers and those with less than five years of experience were significantly more likely than higher-ranked and more experienced officers to report higher frequency of physically struggling with a resisting suspect and interacting with persons armed with non-firearm weapons. Less experienced officers also reported a significantly higher frequency of pointing their firearm without discharging it than officers with five or more years of experience. Both these differences are likely at least partially due to their assignment as most officers and newer employees work in patrol.

Finally, officers were asked about the extent to which they agreed with the following statement "I have serious concerns about my physical safety when I am at work." As shown in Figure 8.3, almost one-third of respondents (30%) reported having serious concerns about their physical safety, while 41% disagreed and 29.1% were neutral). There was a statistically significant difference by officer rank in concerns about physical safety; those at the rank of officer (31%) were slightly more likely to have serious concerns about physical safety at work than are higher-ranked respondents (27%).

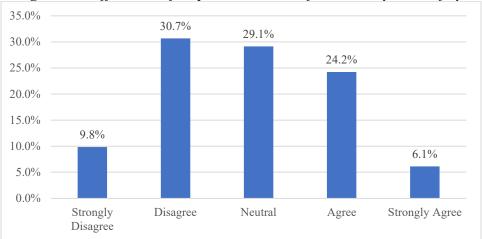


Figure 8.3. Officers' Self-Reported Concerns for their Physical Safety

8.6 Officers' Perceptions

The findings from analyses of survey questions measuring five categories of officers' perceptions are presented below: (1) police-community relations (Section 8.6.1), (2) use of force (Section 8.6.2), (3) officer safety (Section 8.6.3), (4) supervision and administration (Section 8.6.4), and (5) CSPD training (Section 8.6.5). Throughout the description of the findings, we note where statistically significant differences in responses were evident based on officers' race, gender, age, education, experience, rank, or military experience.

8.6.1 Police-Community Relations

A series of survey items asked officers about different components of police-community relations, including officers' sentiments about the state of police-community relations in Colorado Springs, perceptions of community trust and cooperation, perceptions of the people in the communities they routinely patrol, and perceived challenges to engaging with community members.

Impact of Police-Community Relations on Officers' Perceptions

CSPD officers answered a series of questions about how police-community relations in Colorado Springs make them feel. These results are displayed in Figures 8.4 and 8.5. As shown, 58.7% agreed that they felt proud of these relationships, while 33.8% stated they felt 'fulfilled' by these relationships. As shown in Figure 8.4, although 36.2% agreed that these relationships made them feel frustrated, only 11% and 13% said the police-community relations made them feel angry or fearful, respectively. Those at the rank of officer were significantly more likely than those of higher rank to report feeling frustrated, angry, or fearful. Anywhere from one-third to half of the officers responded in a neutral fashion on these items. Thus, the majority of respondents reported feeling positive or neutral about the state of policecommunity relations in Colorado Springs.

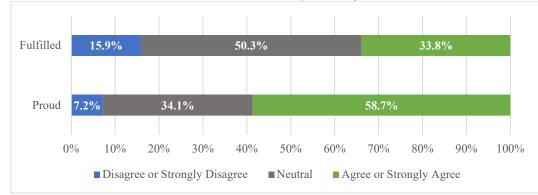
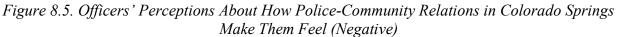
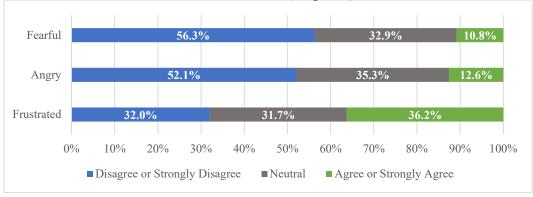


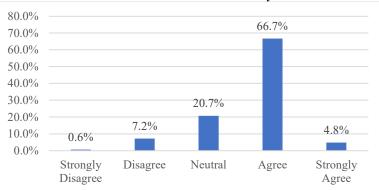
Figure 8.4. Officers' Perceptions About How Police-Community Relations in Colorado Springs Make Them Feel (Positive)





Perceptions of Community Trust and the Importance of Community Engagement

Figure 8.6 presents the survey responses for the degree to which officers agreed with the statement, "There is trust between the CSPD and the community." Roughly 71.5% of CSPD officers agreed or strongly agreed, while only 7.8% disagreed or strongly disagreed. Male officers and respondents of higher ranks reported significantly more agreement with this statement than females and those at the rank of officer.



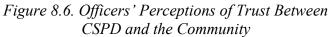


Figure 8.7 displays officers' responses to statements about the importance of community engagement. Over 90% of CSPD officers agreed that it is important for officers to have detailed knowledge of the people, places, and culture in the areas where they work. The findings show that Non-White officers and less experienced officers were significantly more likely to agree with this statement compared to White officers and officers with longer CSPD tenures.

Over 80% of respondents believe the CSPD does a good job at responding to community concerns. There were no statistically significant differences by officer characteristics on this measure, suggesting that CSPD officers overall believe the agency responds well to community needs.

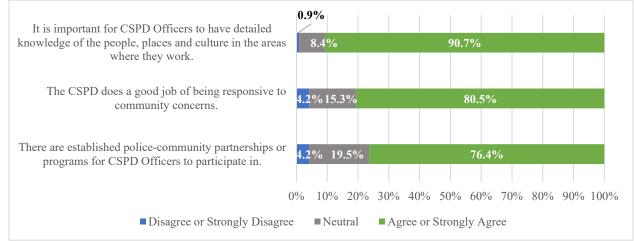


Figure 8.7. Officers' Perceptions of the Importance of Community Engagement

Perceptions of the Communities Routinely Patrolled

Officers were asked to assess their agreement with three statements about whether the people in the communities they routinely patrol were willing to work with police, including if they are:

- Willing to provide police with information about crime suspects
- Willing to call the police to report suspicious or criminal activity
- Willing to assist police if asked

As shown in Figure 8.8, nearly 70% of CSPD officers agreed with the statement that people in the communities they patrol would call the police to report suspicious criminal activity and a slightly lower percentage, but still a majority of officers, indicated community members would provide information to police about crime suspects. Interestingly, officers reported a much higher percentage of neutral responses on the more general statement about whether people in the communities they patrol are willing to assist police if asked. On the whole, however, less than 20% of all officers disagreed with any of these statements about the community's willingness to cooperate with the police in some capacity.

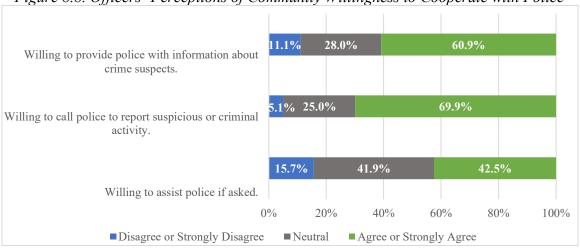


Figure 8.8. Officers' Perceptions of Community Willingness to Cooperate with Police

Figure 8.9 shows the degree to which respondents agreed with additional statements about people in the communities they routinely patrol, including that they:

- Care about what happens to police officers.
- Share my values and beliefs.
- Are respectful in their interactions with me.
- Can be trusted to do the right thing.
- Are capable and willing to harm police officers.

Roughly 61.7% of officers believe that citizens in the areas they patrol care about what happens to police officers (while 15.4% of respondents disagree). This is consistent with findings from the community survey and officer focus groups; most officers feel supported by the public. Differences in this measure were evident based on characteristics of CSPD officers, including officers' race/ethnicity and years of experience. Non-White officers believe citizens care about what happens to police officers significantly more than do White officers. Likewise, officers on the force 15 or more years believe citizens care about officers more so than officers with 14 or fewer years of experience. Similarly, over 60% of officers reported that they perceive the people they interact with while on patrol are respectful.

Importantly, however, over 50% of officers believe that people in the communities they patrol "are capable and willing to harm police officers" (with approximately 16% disagreeing). This suggests that like citizens' perceptions regarding officers in their neighborhoods, officers are bifurcated in their perceptions of the people in the communities they routinely patrol (likely related to where they patrol).

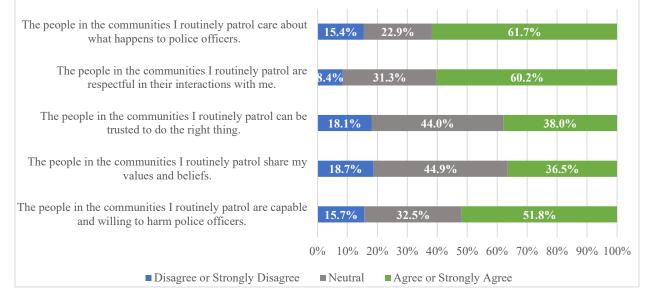


Figure 8.9. Officers' Perceptions About People in the Communities They Patrol

Challenges to Police-Community Relations

Based on some of the issues identified in the focus groups with officers and supervisors, officers were asked several questions about the challenges to positive police-community relations. Two primary impediments were identified 1) staffing constraints and 2) a disconnect between the reality of police work and the public's understanding of that work.

First, the CSPD's staffing constraints were a topic that almost all respondents agreed upon (or equally disagreed upon, depending on the framing of the questions). As shown in Figure 8.10, roughly 97% of respondents disagreed that CSPD officers have enough time²²⁷ to conduct proactive police work due to the number of calls for service; similarly, almost 99% of respondents disagreed that CSPD had enough officers to adequately police the community. The intensity of their responses was also noteworthy, as 73% of respondents *strongly disagreed* that CSPD officers have time for proactive work and approximately 85% *strongly disagreed* with the statement that there are enough officers to adequately police Colorado Springs. These findings did not differ significantly based on respondents' characteristics.

The disconnect between the police and the public understanding of policing in general, and use of force in particular, is a second challenge identified by focus group participants and confirmed by the majority of survey respondents. As shown in Figure 8.10 below, over half of the responding officers (56.2%) disagreed with the statement that "the community understands the risks and challenges CSPD officers face on the job." Similarly, when asked if the public understands the circumstances under which CSPD officers may have to use force and the degree of force they may use, roughly 73% of officers disagreed with this sentiment, while only 8.7% agreed. Perhaps most interestingly, there were not any significant differences on these survey items based on officer demographic characteristics, rank, or experience. Thus, the majority of CSPD officers do not believe the public understands the dynamics and complexity of police work and use of force, suggesting this police-community disconnect is pervasive and not specific among any particular types of officers.

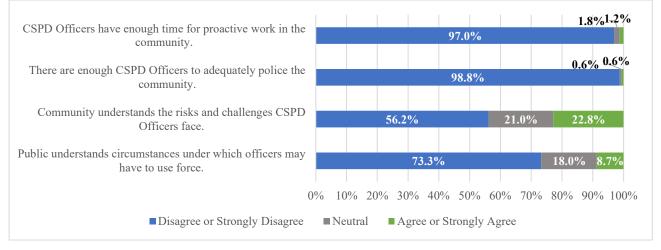


Figure 8.10. Officers' Perceptions of Challenges to Police-Community Relations

Roughly 71% of CSPD officers noted that high-profile national media incidents have made interactions between the CSPD and people of color tenser. However, the impact of this perceived national media influence on communities of color was different between officers who were on the force fewer than 5 years versus those with over 15 years of service (where newer officers believed the national media

²²⁷ This survey item is reverse coded. On the survey it was phrased as "CSPD officers lack the time to conduct proactive police work due to the number of calls for service." To be consistent with other survey items in Figure 8.10 it has been reverse coded to state that "CSPD officers *have enough* time...."

impact was not as important to these relationships as officers with the most experience in the agency). This finding is consistent with other research that shows officers' encounters with the public can be shaped by high-profile use of force incidents in other jurisdictions.²²⁸

Other potential obstacles to police-community relations were identified as problematic by a comparatively smaller percentage of respondents. For example, only about one-third of the respondents agreed that they would like more training related to strengthening police-community relations. Over half of the respondents (53.8%) agreed that CSPD personnel reflect the diversity of the communities they serve, with less than 20% disagreeing with this statement. Those at the rank of officer were more likely than those of higher ranks to agree with this statement, but interestingly, the diversity of the officers themselves (in terms of race and gender) was not related to significant differences in this perception.

In sum, the findings related to officers' perceptions of police-community relations largely echo the sentiments voiced by officer focus group participants. The majority of officers believed the CSPD does a good job meeting the expectations and addressing the concerns of the community despite the challenges; similarly, the majority feel trusted and supported by the public. The CSPD officers who responded to the survey nearly unilaterally agreed that staffing constraints are a major obstacle to proactive policing and community engagement.

8.6.2 Perceptions of Use of Force and De-escalation Principles

As described in Section 2, CSPD officers received modified ICAT de-escalation training in 2021, prior to the administration of this survey. Officers were asked about various attitudes related to de-escalation, force, and officer safety. Figure 8.11 shows the degree to which respondents agreed with the following statements that are counter to the tenets of most de-escalation trainings, including ICAT:

- Refraining from using force when you are legally able puts yourself and other officers at risk.
- In tense citizen encounters, the most important thing is that I get home safely.
- Police officers are often in situations where it is more appropriate to use physical force than to continue talking to a person.
- Generally, if force has to be used, it is better to do so earlier in an interaction with a suspect, as opposed to later.
- Not using force when you could makes suspects more likely to resist in future interactions.
- Officers are not allowed to use as much force as is necessary to make suspects comply.
- Officers spend too much time diagnosing a situation before acting.
- It is sometimes necessary to use more force than is technically allowable.

First, almost 63% of CSPD agreed that waiting to use force puts them and their peers at risk and a similar percentage of respondents (60%) agreed that their safety was the most important dimension in a use of force encounter. Approximately half of the respondents agreed that: officers are often in situations where it is more appropriate to use physical force than to continue talking to a person; if force is used, it is better to do so earlier as opposed to later; and not using force when you could make suspects more likely to resist in future interactions. Finally, over a quarter of officers agreed that officers are not

²²⁸ For example, see Hoffman et al., 2021; Turchan, 2021.

allowed to use as much force as is necessary to make suspects comply, officers spend too much time diagnosing a situation before acting, and that it is sometimes necessary to use more force than is technically allowable. Collectively, these responses demonstrate that many of the core principles of ICAT training have not been fully embraced by CSPD officers.

There were few statistically significant differences on these items based on officers' age, race, and gender. For example, Non-White officers expressed more agreement than White officers with the statement that "Refraining from using force when you are legally able puts yourself and other officers at risk." Older officers reported less agreement than younger officers with the idea that during tense citizen encounters, the most important thing is that they get home safely.

There were, however, consistent statistically significant differences in perceptions based on officer rank. For example, roughly 68% of officers agreed the most important thing for a use of force encounter is that they arrive home safely, compared to only 38% of respondents of higher rank. Roughly 57% of officers agreed that police are often in situations where it is more appropriate to use force rather than continuing talking to the person, compared with 45% of those of higher rank. Approximately half of officers agreed that failure to use force could make suspects more likely to resist the police in the future, compared with roughly 40% of higher-ranking officers. Finally, only 15% of respondents with the rank of sergeants or above agreed that it is sometimes necessary to use force beyond what is technically allowable, compared with almost 30% of officers who agreed that force beyond that which is allowable is sometimes necessary. In sum, officers were more likely to believe force is necessary, in general, for a variety of reasons, while officers with the rank of sergeants or above agreed with the rank of sergeants or above are less likely to agree with this more general viewpoint.

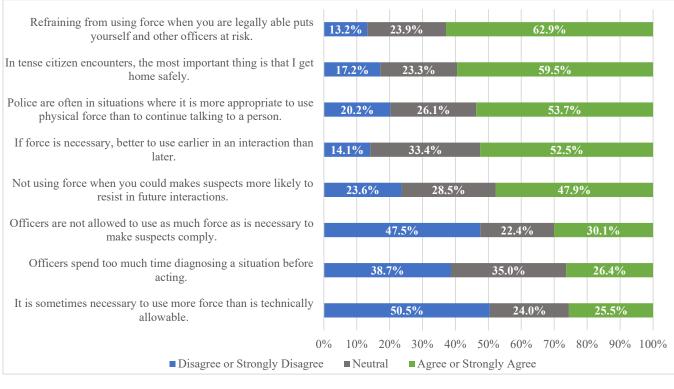


Figure 8.11. Officers' Perceptions Regarding Use of Force and De-escalation Principles

Figure 8.12 below displays the level of agreement CSPD officers reported with the following survey statements that support the tenets of de-escalation training:

- It is important that my fellow officers trust my communication skills.
- I respect officers' ability to talk suspects down rather than using force to make them comply.
- Use of force should be the last resort for police officers.
- Trying to talk through a tense encounter is always safer than using force.

As shown in Figure 8.12, almost 95% of CSPD sworn officers surveyed agreed that it is important for their peers to trust their communication skills, and 87% agreed that they respected other officers' abilities to talk suspects down rather than using force to make them comply. Comparatively, CSPD sworn personnel were more evenly split on whether force should be used as a last resort; 45% agreed, but 28% disagreed, and over one-quarter of officers reported neutral responses. The survey item that received the least agreement by officers was about whether trying to talk through a tense encounter is always safer than using force. Only 21% expressed agreement with this statement, and 45% disagreed.

There was little variation in respondents' levels of agreement for the first two survey items in Figure 8.12 and no statistically significant differences by officers' characteristics. However, older officers and officers with 20 or more years of experience at CSPD were significantly more likely than younger and less experienced officers to report agreement with the idea that use of force should be the last resort for officers. Older officers were also significantly more likely than younger officers to agree that talking through a tense encounter is always safer than using force.

Again, collectively these reported officer perceptions suggest that the CSPD would benefit from additional de-escalation training.

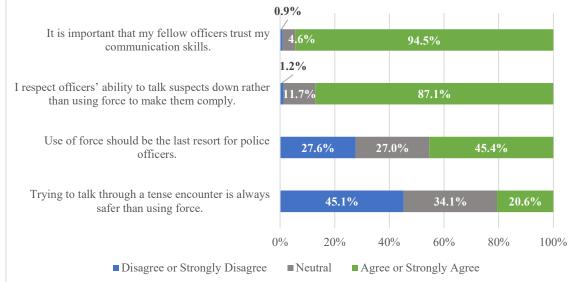


Figure 8.12. Officers' Perceptions Regarding Use of Force and De-escalation Principles, Con't

The survey also questioned officers about their perceptions of the CSPD's use of force policy and reporting use of force policy (CSPD General Orders 500 and 510). Figure 8.13 displays officers' agreement with the following statements about CSPD General Order 500:

- Assists and directs officer decision-making.
- Is effective in keeping me safe.
- Is too restrictive.
- Provides clear guidance for when force can and cannot be used.
- Provides clear guidance regarding how to apply force in situations where it may be necessary.
- Decreases the likelihood of potential citizen injuries.

As shown in Figure 8.13 below, the majority of officers agreed that the CSPD use of force policy assists officer decision-making (71%), provides clear guidance regarding when force can be used (64%), and provides clear guidance regarding how to apply force when needed (51%). However, fewer officers (39%) agreed that the policy is effective at keeping them safe and decreasing the likelihood of citizen injuries.

There were some differences in these perceptions based on officers' rank. Officers were significantly less likely to believe the policy is effective in keeping them safe compared to higher-ranking officers. There was more consistent agreement – across ranks— on whether the policy provides clear guidance, suggesting the rules about when and how to apply force are more precise compared to perceptions regarding the utility of the policy for officer safety.

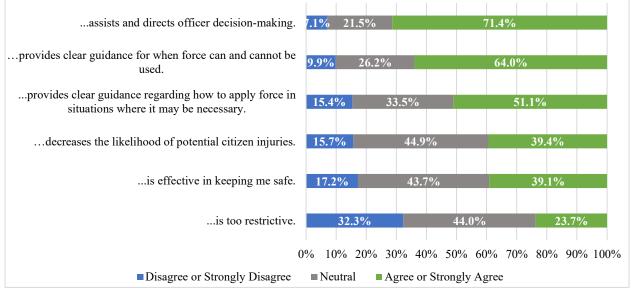


Figure 8.13. Officers' Perceptions of CSPD's Use of Force Policy

Importantly, the last item displayed in Figure 8.13 shows that nearly a quarter (23.7%) of officers perceived that CSPD's use of force policy is too restrictive. This varied by rank, as less than 11% of those with the rank of sergeant or higher agreed the use of force policy was too restrictive, compared to 28% of those at the rank of officer.

Officers were asked some additional questions regarding their perceptions of CSPD's use of force policies. Figure 8.14 displays officers' agreement with the following statements about CSPD General Order 510:

- Provides clear guidance for when a force report should be completed.
- Provides for fair supervisory review of use of force reports.
- Provides for fair investigations into complaints of excessive force.

Regarding the process of reporting, supervisory report reviews, and the fairness of such reviews, CSPD sworn personnel were more agreeable than not on several key items. Almost 80% of respondents agreed that General Order 510 provides clear guidance on reporting use of force. This drops to roughly 60% of respondents who agree that the supervisory reviews are fair. Likewise, roughly 59% of respondents stated that CSPD policy provides for fair investigations into complaints of excessive force. Although a majority of officers agreed with each of these statements, they were significantly less likely than those of higher rank to agree that the reporting requirements are clear, and that the policy provides for fair supervisory review and investigations into complaints of excessive force.

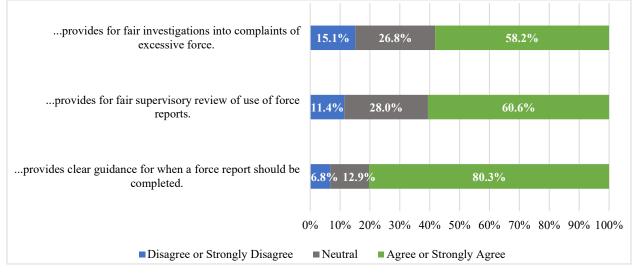


Figure 8.14. Officers' Perceptions of CSPD's Reporting Use of Force Policy

One aspect of the CSPD policy that focus group participants identified as an issue was redundant reporting requirements. Two-thirds of survey respondents confirmed that redundancy in the documentation of use of force is perceived as an impediment and an area for improvement. This significantly by officer rank; almost 67% of officers agreed there are redundant reporting requirements, compared with only 51% of those ranked sergeants or above.

8.6.3 Perceptions of Changes in Use of Force Legislation

As described in Section 2 and earlier in this section (8.3.4), in June 2020, Colorado passed state legislation that directly impacted use of force by police officers. Several focus group participants expressed concern about officer safety because of the perceived confusion among some CSPD officers about the ability to legally use force based on changes related to SB 20-217. Despite department training on the topic that was conducted shortly after the passage of the legislation, they feared that this confusion and potential hesitation to use force could result in increased risks to officer safety. Given this feedback, a series of questions asked officers the degree to which they agreed with statements about their perceptions of SB 20-217, along with their thoughts about their perceptions regarding the legislation. These items include:

- As a result of the passage of SB 20-217,
 - I am confused as to my ability to legally use force.
 - My CSPD peers are confused as to their ability to legally use force.
 - I have become more reluctant to use force even when it is legally appropriate.
 - My CSPD peers have become more reluctant to use force even when it is legally appropriate.
 - I have become more concerned about my safety.
 - \circ My CSPD peers have become more concerned about their safety.

As shown in Figure 8.15, approximately a quarter of officers reported that they were personally confused about their ability to legally use force as a result of the passage of SB 20-217, 62% were personally more reluctant to use force even when legal, and 68% reported increased concern about their safety. Officers were significantly more likely to agree with these statements than those of higher rank.

Respondents perceived that their peers were even more dramatically impacted by the legislation, as over half perceived that their peers were confused about their ability to legally use force, 83% perceived peers to be more reluctant to use legal force, and 81% perceived peers to be more concerned about their safety. There were no statistically significant differences by rank related to the statements about perceptions of peers.

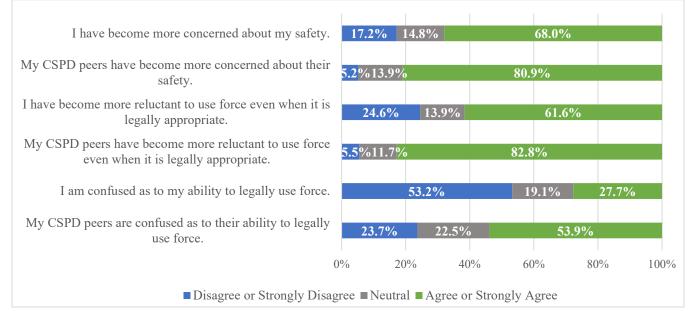


Figure 8.15. Officers' Perceptions about SB 20-217 Legislation

The high levels of concern reported regarding the impact of SB 20-217 by officers – both personally and in relation to their peers – is a troubling finding. It will be imperative for these issues to be specifically acknowledged by CSPD leadership, raised and addressed during use of force trainings, and discussed as part of debriefing sessions between officers and field supervisors.

8.6.4 Perceptions of Supervision and Administration

The survey also provided an opportunity for officers to relay their perceptions about their perceptions of first-line supervisors and administrative support. Specifically, survey respondents were asked to indicate their level of agreement with the following statements:

- CSPD first-line supervisors provide adequate tactical and strategic direction related to using force.
- CSPD first-line supervisors look out for the personal welfare of his or her subordinates.
- The CSPD protects its officers from unreasonable lawsuits and accusations.

Some officers in the focus group sessions expressed concerns about supervisors being less experienced. Despite these concerns, Figure 8.16 shows that approximately half of the survey respondents agreed that CSPD supervisors provide adequate tactical and strategic direction related to using force; 30% reported neutral feelings on this statement, while 20% disagreed. In addition, over 70% of respondents agreed that first-line supervisors look out for the personal welfare of their subordinates. Although a majority of all respondents agreed with this statement, officers were less likely to agree (66%) than those of higher rank (86%). On the question of whether the CSPD protects its officers from unreasonable lawsuits and accusations, 35% agreed, while 27% disagreed. Again, officers were significantly less likely to agree than those of higher rank (33% compared to 45% of sergeants and above).

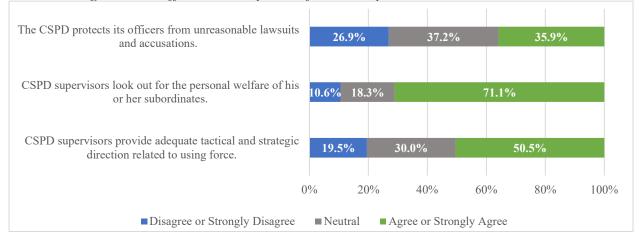


Figure 8.16. Officers' Perceptions of CSPD Supervisors and Administration

Based on themes that emerged from the focus group discussions, we asked officers specifically about their perceptions regarding the CSPD's transparency with the public. Specifically, officers were asked to provide their level of agreement with the following statements:

- The CSPD is transparent with the public.
- The CSPD provides timely information to the public after critical use of force incidents.

Officers' reported perceptions of the CSPD's transparency and timely release of information to the public based on survey data were somewhat divergent from what was voiced by focus group participants. As shown in Figure 8.17, officers' survey responses regarding the CSPD's transparency and timely release of information to the public were generally positive; 62% agreed that the CSPD is transparent with the public and 55% agreed that the CSPD provides timely information to the public

after critical use of force incidents. Roughly 15-20% of respondents disagreed with these statements, indicating they share the concerns raised by focus group participants. Given that these issues were concerns for community focus group participants and survey respondents as well, the need for increased transparency and timely release of information to the public are the topic of one of our recommendations in Section 9.

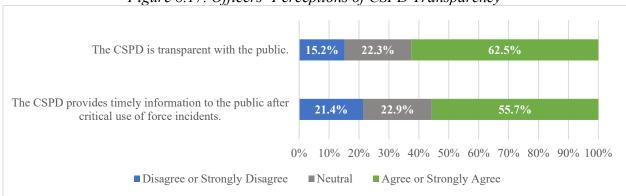


Figure 8.17. Officers' Perceptions of CSPD Transparency

8.6.5 Training

The final topic of inquiry from the officer survey was training (in general) and specifically related to use of force. In this section of the survey, officers were asked to self-assess their confidence in handling particular types of situations or in the use of various skills related to the tenets of use of force and deescalation training, including identifying and responding to persons in crisis, identifying officer safety risks, conflict resolution, and communication skills. The results (not graphically displayed) demonstrated that across areas, officers showed very little variation in their reported confidence levels. Specifically, 95% of officers (or higher) agreed or strongly agreed that they were skilled in these areas. These findings resemble the very high levels of confidence in officers' ability to manage crisis situations found in other research studies.²²⁹

Despite officers reporting confidence in their skills handling crisis situations, focus group participants raised several concerns regarding the content, duration, and method of instruction of their current use of force training, ultimately suggesting that the training received was insufficient and ineffective. We developed survey items to further probe officers regarding these concerns.

First, Figure 8.18 first shows respondents' opinions about training in general. These items are designed to capture officers' openness or receptivity to training, which has been shown in previous research to be a significant predictor of the use of de-escalation tactics and skills.²³⁰ Specifically, it indicates the degree to which respondents agreed with the following statements:

- Training makes me more effective in my work.
- It is important for police agencies to continually add innovative training.
- I consider myself "open" to using new training in my everyday work.

²²⁹ See Engel et al., 2022b; Engel et al., 2020a; Engel et al., 2021.

²³⁰ See Engel et al., 2022b; Engel et al., 2020; Engel et al., 2021.

- Officers can be trained to increase the likelihood of positive encounters with citizens.
- Officers can be trained to improve their ability to de-escalate citizen encounters.
- Officers can be trained to improve their ability to identify officer safety risks in citizen encounters.

The overwhelming majority of respondents agreed with each of these statements; therefore, Figure 8.18 shows the percentage of respondents who agreed and strongly agreed in comparison to those who were neutral or disagreed. As shown, nearly one-third of respondents strongly agreed that training makes them more effective in their work. Non-White officers were significantly more likely than White officers to strongly agree with this statement (41% compared to 28%). A quarter of respondents reported strongly agreeing with statements about considering themselves open to using new training and the importance of the department continually adding innovative training. No significant differences by officer characteristics were noted for these two survey items.

Between 20 and 25% of respondents strongly agreed that officers can be trained to improve their ability to identify officer safety risks, de-escalate citizen encounters, and increase the likelihood of positive encounters with citizens. Overall, more than 90% agreed with training positively impacting officers' ability to identify safety risks and de-escalate encounters. Non-White officers were significantly more likely than White officers to strongly agree that officers can be trained to improve their de-escalation skills (29% compared to 20%), while respondents of higher rank were significantly more likely than officers to strongly agree that officers can be trained to increase the likelihood of positive encounters with citizens. These survey findings echo the focus group participants' comments that officers strongly believe that quality training is critical to them doing their jobs well.



Figure 8.18. Officers' Perceptions of Training in General

The survey also asked the following specific questions about hands-on or interactive training and training related to use of force:

- I would like to have more training related to use of force to perform my job.
- In the last six months, the CSPD provided enough hands-on or interactive learning during training.

- Prior to COVID-19 related restrictions on in-person training, the CSPD provided enough handson or interactive learning during training.
- Police officers receive significant amounts of training that is irrelevant to their work.

As shown in Figure 8.19, nearly three-quarters of respondents (74%) reported wanting more training related to use of force to perform their jobs. Officers who have been at the CSPD for less than five years were significantly more likely to report strongly agreeing with this statement than those with longer tenure at the department.

Focus group participants were dissatisfied with the amount of online training and reported needing an increase in hands-on or interactive learning instead. The command staff interviews conducted by the research team specifically addressed these complaints and were told that the COVID-19 pandemic and understaffing were two primary reasons that many training courses were online. To assess whether officers' perceptions on this issue preceded COVID-19 related restrictions, the survey asked respondents the degree to which they agreed with statements about enough hands-on or interactive learning prior to COVID-19 restrictions and in the last six months (prior to the survey, when restrictions had eased to some degree). As shown in Figure 8.19, only 20-30% believed that the CSPD provided enough hands-on or interactive training before and after COVID-19 related restrictions. Specifically, in the last six months, 56% disagreed with the statement that there had been enough hands-on or interactive training. Prior to COVID-19, 45% of respondents disagreed with the assertion that the CSPD provided enough hands-on or interactive training. Like the focus group participants who voiced dissatisfaction with the relevance and utility of specific types of training they received, 45% of survey respondents reported that much of their training is irrelevant to their actual work. There were no statistically significant differences by respondents' characteristics for these three survey items.

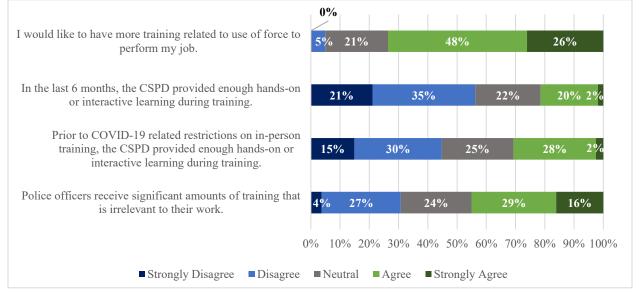


Figure 8.19. Officers' Perceptions of Use of Force and Hands-On/Interactive Training

Finally, we asked respondents three questions about eight different training topics that officers may have received training. These included: (1) firearms training (including shoot/don't shoot scenarios), (2) non-lethal use of force weapons training and tactics, (3) defensive tactics, (4) crisis intervention, (5) cultural diversity/bias-free policing, (6) legitimacy and procedural justice, and (7) interpersonal communication.

For each training topic, respondents were asked the degree to which they agreed with the following statements:

- This training increased my skills or knowledge.
- This training was directly applicable to my job.
- This topic should receive additional training.

Note that to preserve the anonymity of respondents, their actual participation in specific trainings could not be verified.

Figure 8.20 displays the percent of respondents that agree with each of these statements for the different types of training. First considering the question of whether training increased skills or knowledge, the most positively assessed training topics were firearms (80%), crisis intervention (75%), de-escalation (73%), and procedural justice (71%). Cultural diversity training was perceived to be the least effective for increasing skills or knowledge. The following statistically significant differences by officer characteristics are noted:

- Non-White respondents were significantly more likely than White respondents to agree that training related to defensive tactics, procedural justice, and interpersonal communication increased their skills or knowledge.
- Younger officers (18-29) were significantly more likely to strongly agree that non-lethal weapons training increased their skills or knowledge.
- Officers with less than five years of experience were significantly more likely to strongly agree that defensive tactics training increased their skills or knowledge.
- Male officers were less likely than female officers to report that de-escalation training increased their skills or knowledge.

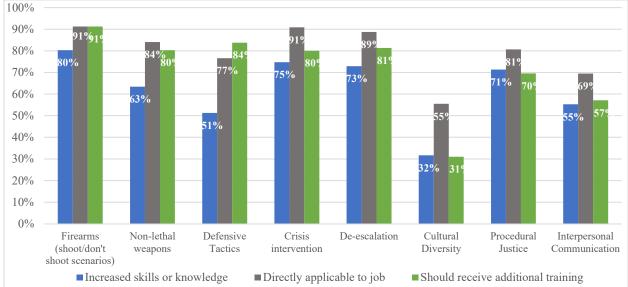


Figure 8.20. Officers' Perceptions of Different Training Topics

On the question of direct applicability to their job, the largest percentages of officers agreed with this statement for training on firearms (91%), crisis intervention (91%), de-escalation (89%), non-lethal weapons (84%), and procedural justice (81%). Again, cultural diversity training was perceived to be the

least applicable to their job in comparison to the other training topics, but nevertheless, over half of the respondents agreed it was applicable. The only statistically significant difference noted was that Non-White respondents were significantly more likely than White respondents to agree that interpersonal communication training was directly applicable to their job.

Finally, officers were asked about whether the different training topics should receive additional training. It is important to note that respondents' indication that a topic should not receive additional training does not necessarily imply that they did not find it valuable or consider the topic important; alternatively, they may just perceive themselves to be adequately trained on that topic. Over 90% of officers believed they needed more training in shoot/don't shoot scenarios, and over 80% indicated they needed more training had the lowest percentage of respondents who agreed that additional training on this topic was needed. It is interesting that cultural diversity training received the lowest level of agreement across these three survey questions because focus groups participants clearly indicated the need for cultural competency training. The following statistically significant differences by officer characteristics are noted:

- Non-White respondents were significantly more likely than White respondents to agree that the following topics should receive additional training: cultural diversity, procedural justice, and interpersonal communication.
- Female officers were more likely than male officers to report that de-escalation should receive additional training.
- Younger officers and officers with fewer years of experience were more likely than older officers and officers with more experience to agree that training on non-lethal weapons training and tactics should receive additional training time. Younger officers were also more likely to report this sentiment for defensive tactics training.

8.7 Section Summary

Section 8 documented our mixed-methods examination of CSPD officers' perspectives regarding use of force. By gathering information from focus group interviews with officers and first-line supervisors, as well as analyzing data gathered from a quantitative survey, we were able to gain valuable insight from CSPD personnel that supplements the statistical analyses of use of force and arrest data. Along with the community perspectives described in Section 7, this holistic understanding of CSPD relationships with the community and use of force informed the research team's recommendations provided in Section 9.

Two focus groups were conducted with 24 officers and a third focus group was conducted with first-line supervisors that explored participants' perceptions of police-community relations, use of force, and ways to make encounters with the public safer. The following themes emerged from the focus groups: (1) perceptions of police-community relations., (2) staffing, (3) transparency and communications, (4) impact of SB 20-217, (5) training, (6) technology, and (7) dispatch.

Much of the information gleaned for the focus group discussions was used to develop the officer survey. The officer survey was added to our study methodology based on an initial request from the PPA, and agreement with CSPD leadership regarding the need to more systematically account for officers' perspectives regarding use of force. This voluntary, anonymous survey was completed by 335 sworn officers (across ranks), representing a 48.3% response rate for the CSPD.

Findings from both the qualitative focus group discussions and quantitative survey data analyses were relatively consistent. First, focus group participants generally perceived that the CSPD has more trust and support from the community than most police agencies nationally, and that it was a good place to work. Similar perceptions were evident in the survey results. For example:

- 72% agreed that there was trust between the CSPD and the community.
- The majority agreed that people in the communities they patrol were willing to cooperate with the police in different ways.
- 62% believed that citizens in the areas they patrol care about what happens to police officers.
- Over 80% believed the CSPD does a good job addressing community concerns.

Variation in support from the community, however, was acknowledged by both focus group participants and survey respondents, with some members of the public perceived to be very critical of the police. For example, over 50% of officers believe that people in the communities they patrol "are capable and willing to harm police officers." This suggests that like citizens' perceptions regarding officers in their neighborhoods (described in Section 7), officers are also bifurcated in their perceptions of the people in the communities they routinely patrol.

Over 90% of CSPD officers reported it is important for officers to have detailed knowledge of the people, places, and culture in the areas where they work. Unfortunately, both focus group participants and survey respondents recognized that current staffing constraints have severely limited officers' ability to proactively engage with community members in positive interactions. For example, nearly all survey respondents agreed that the CSPD does not have enough officers to police the community and CSPD officers do not have enough time to conduct proactive police work.

Focus group participants perceived that most members of the public do not understand the complexities of policing, nor do they understand specifically how little force is actually used during police contacts. This disconnect between the police and the public understanding was confirmed by the majority of survey respondents. For example:

- 73% disagreed with the statement that "the public understands the circumstances under which CSPD officers may have to use force and the degree of force they may use."
- 56.2% disagreed with the statement that "the community understands the risks and challenges CSPD officers face on the job."

One of the core themes that emerged from the focus groups with CSPD officers was the perceived lack of transparency by the CSPD. Across the country, this is a frequently raised concerned by citizens regarding their police agencies, but it is rarely identified as a core concern among the officers themselves. The focus groups with CSPD officers, however, resulted in considerable discussion of the need for the CSPD leadership to be more transparent with the public, particularly in the aftermath of critical incidents. In the survey results, officers' reported perceptions of the CSPD's transparency and timely release of information to the public revealed that at least 15-20% of respondents were concerned about CSPD's transparency and timely release of information to the public. Given that these issues were also raised in the focus group with the Chief's Community Leaders Group and by residents on the community survey, the need for increased transparency and timely release of information to the public are revisited in our recommendations in Section 9.

We also probed officers in the focus groups and on the survey regarding their perceptions of the CSPD use of force policy and training. The majority of officers had positive perceptions of the CSPD use of force policy. For example:

- 80% agreed it provides clear guidance on reporting use of force.
- 71% agreed it assists officer decision-making.
- 64% agreed it provides clear guidance regarding when force can be used.
- 51% agreed it provides clear guidance regarding how to apply force when needed.

The source of frustration for most focus group participants in terms of guidance on using force was not CSPD policy, but rather the recently passed SB 20-217 (Enhance Law Enforcement Integrity Act). There was widespread agreement across focus group participants that the provisions of this legislation influence officers' hesitancy to use force and will, as a result, increase their risk of injury or death. We asked these questions directly on the officer survey, and the responses mirrored the concerns raised in the focus groups. For example, as a result of SB 20-217:

- Officers personally reported that they were confused about their ability to legally use force (28%), more reluctant to use force even when legal (62%), and increasingly concerned about their safety (68%).
- Over half of respondents perceived that their peers were confused about their ability to legally use force, and a sizable majority reported their peers were more reluctant to use legal force (83%), and more concerned about their safety (81%).

During the focus group sessions, officers also voiced concerns about officer safety because of their perceived lack of effective training. Participants were critical of the amount, quality, and format of training, particularly regarding the use of force. Officers were particularly concerned about the lack of hands-on, interactive, and practice components to their training. Findings from the officer survey confirm these concerns. For example:

- 74% reported wanting more training related to use of force to perform their jobs.
- Only 20-30% of officers believed that the CSPD provided enough hands-on or interactive training both before and after COVID-19 related restrictions.
- Over 90% reported more training should be provided using shoot/don't shoot scenarios, and over 80% indicated they needed more training on non-lethal weapons, defensive tactics, crisis intervention, and de-escalation.

Although it was not addressed by the officer survey, focus group participants also perceived that policy and training changes for dispatchers were also needed.

Focus group participants also noted that they did not feel they had been effectively trained on deescalation despite receiving a modified ICAT training in 2021. Officers perceived that de-escalation tactics and skills are being used in the field, but more training is needed to enhance these skills. The survey prompted officers to report perceptions that are used to assess their understanding and agreement with core ICAT (de-escalation) principles. As suggested by focus group participants, officers' responses to the majority of these measures indicated that many of the core tenets of ICAT training have not been fully embraced by CSPD officers. These findings are also revisited within the recommendations section of this report.

9. SUMMARY OF FINDINGS AND RECOMMENDATIONS

This report presents the results from a comprehensive multi-method examination of police use of force by the CSPD. The research methods include quantitative analyses of official use of force and arrest data, community and officer surveys, qualitative document reviews, focus groups with community members and officers, and semi-structured interviews with CSPD officials. We specifically focused on understanding how, when, why, and against whom CSPD officers use force. This examination was designed to identify opportunities to reduce the frequency and severity of use of force incidents, racial/ethnic disparities in use of force, and injuries to both officers and citizens. Based on the findings from these analyses, we present a series of recommendations – and accompanying action steps – for adjustments to CSPD use of force policies, training, supervision, and data collection. Specifically, the following eight recommendations (with associated specific action steps) are detailed below:

- (1) Enhance agency culture that emphasizes, reinforces, and rewards the use of de-escalation tactics and skills by officers through systematic documentation, continual reinforcement of policies and training, and development of accountability and oversight mechanisms.
- (2) Continue the processes established for the CSPD's Use of Force Committee for comprehensive and routine reviews and updates to policy.
- (3) Review and update the documentation, policy, training, and supervisory oversight related to the pointing of firearms at a person.
- (4) Conduct an independent audit of CSPD use of force training to ensure content, quality, and duration of use of force training is meeting industry best practices.
- (5) Enhance transparency through the timely release of information to the community to improve public confidence and trust.
- (6) Continue to enhance supervision, accountability & oversight related to use of force.
- (7) Review and make appropriate changes to use of force data collection to meet best practices.
- (8) Work internally and externally to continually reduce racial/ethnic disparities in use of force.

It is important to reiterate that these recommendations (and specific action steps to follow) are based on the recognition that while racial/ethnic disparities in use of force are routinely reported in agencies across the country, these disparities often persist despite agencies' reform efforts. Unfortunately, racial/ethnic disparities in adverse outcomes are observed throughout American society, including education, public health, labor, financial/lending, housing, criminal justice system (beyond policing), etc. Making police interactions with the public safer and more equitable while ensuring public safety is a goal that extends beyond the work of individual police agencies. Therefore, implementation of the recommendations provided in this report – although led by the CSPD – cannot be solely their responsibility. Partnerships across public and private agencies, organizations, and groups must be strengthened to help identify problems and implement solutions. Given the CSPD's initial investments to better understand police use of force incidents, the Colorado Springs community is well-positioned to support innovative and evidence-informed approaches to reduce the frequency, severity, and racial/ethnic disparities in use of force.²³¹

²³¹ A new report commissioned by the State of Colorado (forthcoming) may prove to be a useful guide for identifying law enforcement best practices.

9.1 Enhance the Use of De-Escalation during all Police-Citizen Encounters

Since the officer-involved shooting of Michael Brown in Ferguson, MO in 2014, calls for the adoption of use of force "de-escalation" policies and training have steadily grown and are now widely endorsed by policymakers, policing experts, and the public. In a 2019 national survey of 155 large police departments, nearly all responding agencies indicated that they offer de-escalation training to at least some of the officers in their agency.²³² This widespread support for de-escalation training has only intensified since the police killing of George Floyd in May 2020, with several states introducing legislation mandating de-escalation training for the police.²³³ For example, CSPD officers received modified Integrating Communications, Assessments, and Tactics (ICAT) de-escalation training in 2021.

Like most training in law enforcement, however, de-escalation training has not been subjected to substantial empirical evaluation.²³⁴ Yet a recent study conducted by some members of this research team has provided much-needed evidence regarding the effectiveness of de-escalation training. Using a modified randomized control trial (RCT) research design to evaluate the impact of the ICAT de-escalation training developed by the PERF (Police Executive Research Forum), we found that the timing of the training was associated with a 28% reduction in officer use of force, 26% reduction in citizen injuries, and a 36% reduction in officer injuries.²³⁵ Additional analyses demonstrated that officers' receptivity to training varied but is critical for behavioral change, and further, that field supervision continues to be an underutilized mechanism to reduce police use of force.²³⁶

It has also been recommended that rather than just viewing de-escalation training as an "add-on" training for a block of hours during in-service, the core tenets supporting de-escalation should be infused throughout other trainings and provided to cadets within training academies. De-escalation training should also be complemented with trainings on procedural justice, crisis intervention teams (CIT), and officer-intervention. A survey conducted by the PERF in 2015 found that, on average, officers spend little time training on these topics.²³⁷ Specifically, studies suggest that police academies currently designate most of their training hours on weapons and defensive tactics (more than 120 hours per year), and less on de-escalation, communication skills, or crisis intervention (roughly 26 hours per year). As such, many argue the focus of police training needs to be adjusted.²³⁸

Other experts suggest that police training is outdated and needs to include evidence-based, theoryinformed curricula and delivery, which will ultimately improve learning and skill retention.²³⁹ Several studies point towards the utility of repeated content exposure and practice or booster trainings.²⁴⁰ Following a thorough review of police training nationally, the *Center for Criminal Justice (CCJ)* recommends that training content be delivered through a mixture of lectures, real-world video examples,

²³² CBS News, 2019.

²³³ For a comprehensive list, see National Conference of State Legislatures (2022).

²³⁴ For example, see: Engel, McManus, & Herold, 2020; Engel et al, 2022; Lum et al., 2016.

²³⁵ Engel et al., 2022a; Engel et al., 2021; Engel et al., 2020.

²³⁶ For example, see: Engel et al., 2022b; Engel et al., 2021.

²³⁷ Police Executive Research Forum, 2015

²³⁸ For example, see Center for Criminal Justice, 2021.

²³⁹ For example, see Birzer, 2003; Mugford et al., 2013.

²⁴⁰ Kang, 2016; Mugford et al., 2013; McLean et al., 2020; Wolfe et al., 2020.

scenario-based role playing, and group discussion.²⁴¹ They also emphasize the need for a "resiliencybased" approach to training, which teaches officers to "recognize stress and regulate their responses to it," compared to the more typical "stress-oriented" military training approach, which involves "intensive physical demands and psychological pressure."²⁴² However, no training will be effective at changing officer behavior if it is not supported by first-line supervisors, reinforced by command staff, documented through clear and comprehensive policies, and designed to hold officers accountable through a clear review process.

Recommendation 1: Establish agency culture that emphasizes, reinforces, and rewards the use of de-escalation tactics and skills by officers through systematic documentation, continual reinforcement of policies and training, and development of accountability and oversight mechanisms.

It is important to recognize that to achieve meaningful reductions in police use of force, racial/ethnic disparities in that use of force, and citizen and officer injuries that often accompany use of force, we must do more than implement new trainings. We cannot simply "train our way out" of this crisis in police-community relations that is directly associated with use of force. While officer education and skill instruction are pivotal, the implementation of training alone is not enough to facilitate true, long-term change in police behavior. Rather, a holistic approach is needed within police agencies to support the use of de-escalation tactics and skills in the field.

Action Item 1.1: Develop a data collection process to capture the specific de-escalation tactics used during police-citizen encounters and document their effectiveness.

While data regarding the use and effectiveness of de-escalation tactics is not yet routinely collected by police agencies, such information would provide multiple benefits to agencies. CSPD General Order 500.07 states that "officers should use de-escalation techniques when it is reasonable, safe, and appropriate to do so." We first recommend that CSPD officers document their use of de-escalation tactics during use of force encounters to better understand the interactive nature of use of force encounters and to be able to assess how often CSPD officers are employing de-escalation tactics as trained and required by policy. We further recommend that the collection of de-escalation data be extended beyond just use of force situations and incorporated in the routine collection of data for all police contacts with citizens.

There are multiple reasons for this data to be collected. First, it would provide a more precise mechanism to measure the impact of changes to policies and training and could assist with training enhancements. Perhaps, more importantly, the routine capturing of the use of de-escalation tactics would send a reinforcing message to officers that this activity is *expected* during police–citizen encounters and provides a mechanism for holding officers accountable. For example, the Oklahoma City Police Department systematically captures the use and perceived effectiveness of de-escalation tactics as a component of their use of force data collection. This concept has been extended by the University of

²⁴¹ Center for Criminal Justice, 2021

²⁴² Center for Criminal Justice, 2021 (p.1)

Cincinnati Police Division, where all pedestrian and traffic stops include the capture of any deescalation tactics used.

Action Item 1.2 – Develop, train, and implement supervisory practices for coaching, mentoring, and evaluating officers on the use of de-escalation tactics and skills.

We have known for decades that first-line supervisors play a critical role in shaping officers' behavior through the reinforcement and promotion of training objectives among their subordinates.²⁴³ Agencies should support supervisors in their reinforcement of de-escalation training through the development of specific activities that provide opportunities for supervisors to coach, mentor, and evaluate officers on their use of de-escalation tactics and skills. For example, the Louisville Metro Police Department (LMPD) is actively developing these coaching opportunities, based on a study that demonstrated their first-line supervisors were not actively supporting the tenets of ICAT training. The study with LMPD further showed that officers were more likely to report using de-escalation tactics and skills taught in the ICAT training in the field *if they believed their first-line supervisors and command staff supported the training*.²⁴⁴

Action Item 1.3 – Continue to enhance and evaluate trainings designed to reduce the frequency and severity of use of force.

The CSPD training unit has adopted some innovative trainings designed to reduce officers' use of force; however, some of these trainings have been modified or adapted in some manner based on resource constraints, instructor preference, agency needs, etc. For example, the ICAT training – which is typically a 16-hour curricula that includes time for scenario practice and role-playing – was modified to an 8-hour training, in part by reducing the interactive practice component. When trainings are modified from their original format, duration, structure, etc., it is essential to assess their effectiveness to determine if strict adherence to model fidelity is necessary for effectiveness in police behavioral change.

Most police trainings are not evaluated – that is, we do not know if the police training as delivered has the intended impact or any unintended consequences. Few other areas that are as critical to public policy are more underdeveloped. Findings from recent research highlight both the potential impact of de-escalation training and the desperate need to better understand this impact. The CSPD should continue to enhance their training related to de-escalation – but further, also systematically evaluate the impact of this training on officer behavior. It is essential to create a feedback mechanism within police agencies, where the findings from well-designed research provide information that can be used by police trainers to refine and enhance training.

²⁴³ For example, see Engel, 2001; Engel, 2002; Engel, 2003b.

²⁴⁴ For example, see Engel et al., 2021; Engel et al., 2022b.

9.2 Enhance routine review and updates to the CSPD use of force policy.

Calls for changes to use of force policies have accelerated across the country in the past several years. Both the *National Conference of State Legislatures* and *Duke Law School Center for Science and Justice* track the legislative changes mandating police reform efforts, including changes in use of force policies in some jurisdictions.²⁴⁵ Four changes within use of force policies, in particular, have been recently emphasized, including: (1) officers' duty to intervene and mandatory reporting, (2) the use of chokeholds and other neck restraints, (3) the use of no-knock warrants and police raids, and (4) the use of de-escalation tactics during encounters with citizens. Note, however, that research studies have not yet thoroughly evaluated the impact of these new commonly recommended changes.²⁴⁶ However, recent findings (previously reviewed) have demonstrated the significant impact that training can have on the frequency and severity of use of force. Similarly, research beginning in the 1970s has consistently demonstrated that changes in policies can significantly impact police behavior, including reductions in both fatal and nonfatal uses of force, without adverse impacts on crime or arrest aggressiveness.²⁴⁷

Given the available body of research demonstrating that changes to use of force policy can positively (or negatively) impact the frequency, severity, and injuries associated with police force, it is imperative that police agencies routinely review and update such policies and training. The CSPD has already established this mechanism through the establishment of the Use of Force (UOF) Committee approximately four years ago.

Recommendation 2: Continue the processes established for the CSPD's Use of Force Committee for comprehensive and routine reviews and updates to policy and communicate this work internally and externally.

As described in Section 2, the UOF Committee is chaired by the Deputy Chief of the Investigations and Special Operations Bureau and includes line-level and supervisory representatives from patrol, training, and specialized units, as well as the Administrator of the Research and Development Section, Commanders of Patrol and Management Services, and the Deputy Chief of Patrol. This committee meets regularly to proactively evaluate and revise CSPD's use of force based on changes in law or best practices and innovation in the field. The committee regularly briefs the Chief of Police on its work but does not, however, regularly report on its activities in a formalized manner.

Action Item 2.1 A summary and explanation of the Use of Force Committee's work should be communicated internally down to the lowest organizational levels and included as part of the annual use of force report.

Officer and supervisor focus group participants perceived that the department's internal committees are ineffective at communicating the results of their work to officers. Internal messaging of the purpose behind changes and updates should be examined. Similarly, both community and officer focus group

²⁴⁵ Legislative Responses for Policing-State Bill Tracking Database (ncsl.org): Duke Center for Science and Justice Tracking Police Reform Legislation by State – Duke Law Center for Science and Justice Blog

²⁴⁶ For review, see Engel, forthcoming.

²⁴⁷ For example, see Fyfe, 1979, 1982; Geller, 1992; Sparger & Giacopassi, 1992.

participants and survey respondents reported a general perception of the lack of public knowledge about the complexities of police work in general and use of force, in particular. Including a summary of the purpose and work of the Use of Force committee in an annual, publicly released use of force report (also referenced in Action Items 5.2 and 8.3 below) would serve to increase transparency but also educate the public. An update and summary of changes for both audiences would contribute to a better understanding of the department's overall goals related to use of force as well as officer and public safety.

Action Item 2.2. The CSPD Use of Force Committee should consider the following modifications to the *Use of Force CSPD General Order 500*.

Given the work of the pre-existing internal Use of Force Committee, it is recommended that the Use of Force Committee consider the following list of recommended changes to the CSPD's current Use of Force policy.

- Recommend adding a Sanctity of Life and protection of the public provision under Policy section .04.
- Include the following policy statement under Policy section .04: When feasible based on the circumstances, officers will use de-escalation techniques, disengagement, area containment, surveillance, waiting out a subject, summoning additional resources, and/or requesting assistance from specialized units such as mental health or crisis intervention resources, to reduce the need for force, and increase officer and citizen safety. CSPD officers shall de-escalate the amount of force used as the resistance decreases.
- Include the description of de-escalation and examples of de-escalation techniques under Policy section .07:
 - De-escalation: When it is consistent with protecting the safety of the officer, subject(s), or the public, officers shall use de-escalation techniques to avoid or reduce the need for the use of force. These techniques include gathering information about the incident, assessing the risks, assembling resources, tactically slow the response down and communicating and coordinating a response. Officers interacting with subjects should use advisements, warnings, verbal persuasion, and other tactics and alternatives to avoid higher levels of force. Officers should be aware that they may withdraw to a position that is tactically more secure or allows them greater distance to consider or deploy a greater variety of force options.²⁴⁸
- Recommend expanding definitions (GO 500.05) to include: Passive Resistance (revise current definition), Exigent Circumstances, Flight, Less Lethal Use of Force (revise current definition), Authorized Weapons, Objectively Reasonable Force (revise current definition), Reportable Force, Deadly Force/Lethal Force, Force/Use of Force, and Pointing of a Firearm/Weapon.
- Under the Use of Deadly Force Section (GO 500.10), recommend prohibiting Head Strikes with an Impact Weapon/Firearm unless deadly force is authorized and adding a provision addressing

²⁴⁸ This recommended provision to CSPD Use of Force policy comports with recent ICAT training the Department implemented from PERF.

the *Tennessee vs. Garner* case law that an officer may not seize an unarmed, non-dangerous (fleeing felon) suspect by employing deadly force.

Action Item 2.3. The CSPD Use of Force Committee should consider the following modifications to the Reporting Use of Force CSPD General Order 510.

Similarly, it is recommended that the Use of Force Committee consider the following list of recommended changes to the CSPD's current Reporting Use of Force policy.

- Recommend updating the included "offense report requirements" and not exclude "pointing a firearm at a person" incidents to ensure more details are obtained for analysis to determine if the lethal detention was appropriate and assessed similar to other use of force reviews (GO 510.30).
- Recommend requirement to collect all video and/or audio recordings known to exist, including, but not limited to, in-car audio/video, body worn camera audio/video, and when appropriate security or cell phone videos obtained or provided by citizens, will be appropriately collected, and secured (GO 510.60).
- Consider expanding parameters for administrative review of a use of force incident or any critical incident (e.g., Department training is currently adequate, *Graham v. Connor* analysis, etc.). Revise to prohibit officers from making conclusory statements including the use of "boilerplate" or "pat language" (e.g., suspect took a fighting stance, or the suspect made a furtive movement) in reports or statements documenting the pointing of a firearm. A specific description of an individual's behavior that led to the perceived need for a potential use of lethal force by the officer(s) must be clearly articulated. (GO 510.60).

9.3 Reduce the Frequency of Pointing of Firearm Events

Recent research has demonstrated that police agencies with policies that require officers to document when they point their firearm at a person have fewer officer-involved shooting incidents. For example, one study examined the impact of the various organizational policies and characteristics on fatal police shooting rates nationally and found that one agency policy – requiring officers to document every time they pointed their firearm – resulted in significantly lower levels of fatal police Shootings.²⁴⁹ Likewise, a study recently found significant reductions in shootings within the Dallas Police Department after the implementation of a "point and report" policy requiring documentation of the pointing of firearms, even when not discharged. There was also a significant decrease in the proportion of cases involving a "threat perception failure" (i.e., an officer perceived a gun, but there was no gun), but no significant increase in officer injuries.²⁵⁰

Despite this evidence, it is estimated that the mandatory collection of firearm displays remain rare across police agencies. As a leader in the policing field, the CSPD initiated the collection of information on the pointing of firearms in February 2017. It is governed by CSPD General Orders 500 and 510. Although CSPD includes pointing of a firearm as a "reportable use of force," this information is gathered on a separate form and officers are not required to provide as much information as they are with other uses of

²⁴⁹ Jennings & Rubado (2017)

²⁵⁰ Shjarback, White, & Bishopp (2021)

force. Although the pointing of a firearm report narrative often includes detailed information, this information is not systematically captured and is not readily available for quantitative analyses.

Section 6 documents the findings from statistical analyses examining the frequency and circumstances surrounding the pointing of firearms. Our analyses show that nearly two-thirds of the individuals with reportable uses of force had firearms pointed at them, without any other use of force during the incident. Other findings related to pointing of firearms show:

- The number of individuals who had firearms pointed at them was relatively stable from 2017 to 2019, before a considerable decline of 11.9% in 2020.
- Sand Creek Division had the highest number of reported individuals who had firearms pointed at them across all four years, though this number decreased steadily from 2018 to 2020.
- From the initiation of the collection of pointing of a firearm data until December 2020, 653 unique officers reported at least one instance of pointing their firearm at a person. Most officers (81%) were involved in multiple events, with an average of about two incidents per officer per year but a wide range of frequency.

The high frequency of pointing of firearm incidents (70% of all reportable uses of force)²⁵¹ should be addressed. It cannot be determined if the number of pointing incidents per officer is appropriate based on their individual work conditions, as some variation in frequency should be expected based on officers' specific patrol areas and/or assignments. However, this level of frequency – along with the findings that slight to moderate racial/ethnic disparities exist for this specific force tactic – provides an opportunity for review and update of the policies, training, and reporting of pointing of firearms to reduce the frequency while still maintaining officer safety.

Recommendation 3: Review and update the documentation, policy, training, and supervisory oversight related to the pointing of firearms at a person.

Given the historical impact of changes in use of force policies on police behavior²⁵², it is important that these policies receive continual review to reduce the risk of officer and citizen injuries, and the likelihood of racial and ethnic disparities in the application of force. Three specific action items are documented below.

Action Item 3.1 – As a reportable use of force, pointing of firearms should be documented with the same level of detail as other uses of force by changing the reporting forms, and the storage and routine analyses of data.

As noted above, during the roughly four-year study period, incidents involving the pointing of firearms accounted for approximately two-thirds of all reportable force. Despite the frequency of this particular use of force, the information that is collected on the Pointing of Firearm Report is much less detailed than the information collected on the Use of Force Report. For example, the Pointing of Firearm Report

 $^{^{251}}$ 64.3% of individuals who had force used against them had *only* a firearm pointed, while 69.7% had a firearm pointed at them and at least one other type of force used.

²⁵² For example, see Fyfe, 1981; Fyfe, 1982.

does not include information about the level of resistance by citizens, the effectiveness of the action, details of the safety concern that led to the pointing of the firearm, or any indication of the reason for the use of force. It is recommended here (and again as part of Action Item 7.1 below) that pointing of firearm data be collected with the same level of detail as the other reportable uses of force.

Action Item 3.2 – Adjust policy and training to provide more guidance regarding the appropriate use of pointing of firearms; focus on opportunities to reduce frequency of use while maintaining officer safety.

Given the high frequency of the pointing of firearms, changes in policy and training are strongly recommended. The United States Supreme Court standard regarding whether a particular use of force is objectively reasonable is *Graham v. Connor*, which indicates that three factors should be considered in the determination of objective reasonableness: 1) the severity of the crime at issue, 2) whether the subject poses an immediate threat to the safety of the officer and others, and 3) whether the subject is actively resisting arrest or attempting to evade arrest by flight.²⁵³ TMLLC's qualitative review of a sample of pointing of firearm incidents revealed a gap in CSPD policy where it appears this constitutional standard has not been used to analyze the appropriateness of pointing of firearm incidents.

For example, General Order 500.25 currently states the following:

Pointing a firearm at a person is a reportable use of force under G.O. 510 Reporting Use of Force. Officers will also use the body worn camera classification "Use of Force Situation," in addition to any other applicable classifications. Officers may point a firearm at a person when an officer reasonably believes it is necessary for the safety of officers and/or others. Pointing a firearm will not be used for the purpose of intimidation absent the reasonable fear for the safety of officers and/or others. Once the safety concern is no longer present, officers must immediately cease pointing a firearm at a person.

The following revisions are recommended:

- Revise GO 500.25 Pointing a Firearm section to direct that: officer(s) shall not point a firearm or actively target a person unless the circumstances surrounding the incident create an objectively reasonable belief that the situation may escalate to the point where lethal force may be authorized. Once officer(s) determine that the use of lethal force is no longer likely, the officer(s) shall holster the firearm, and in case of a patrol rifle or shotgun transition to a safe low ready position.
- Once the revised policy is adopted, the CSPD must ensure all new hires and incumbent officers, supervisors, and commanders receive training on this requirement.

Action Item 3.3 – Data collected regarding the frequency and circumstances of officers' pointing of firearms should be routinely reviewed by supervisors and added as a metric in the CSPD's existing Early Intervention Program.

²⁵³ Graham v. Connor, 490 U.S. 386 (1989).

The frequency (and racial/ethnic disparities) in the pointing of firearms should be tracked and reviewed by supervisors with the same level of rigor and oversight as other reportable uses of force. Currently, the Early Invention Program (EIP) includes use of force incidents (shift-specific thresholds), deadly force incidents, administrative investigations, vehicle crashes or damage to vehicle, vehicle pursuits, and accidental discharges.²⁵⁴ However, pointing of firearm incidents are not included in this review; it is recommended that they should be included as criteria under General Order 1817.10.

The EIP is not disciplinary or punitive, nor is it a performance evaluation. The purpose of the EIP is to: (1) Mitigate the potential for escalating employee issues utilizing a proactive monitoring system, (2) Identify personnel who may require assistance or training to perform their assigned duties in a more efficient and effective manner, (3) To provide preemptive intervention and options for improvement.²⁵⁵ As with any other type of use of force, pointing of firearms should be closely monitored, with opportunities for intervention and additional training identified early to reduce the likelihood of a critical incident.

9.4 Review and improve CSPD use of force training.

One of the clear themes that emerged from both the officer survey and focus groups with officers and sergeants, is that CSPD officers do not believe they are well trained to handle critical incidents involving the use of force. Although some use of force training, including ICAT de-escalation training, was impacted by COVID-19 related restrictions, officers believed this issue preceded the onset of the pandemic. For example, in the officer survey, nearly three-quarters of respondents indicated they would like to have more use of force training. Only 20-30% believed that they had been provided enough hands-on or interactive training before and after COVID-19 related restrictions.

While the vast majority of officers reported confidence in their skills to de-escalate situations, they also indicated their current training was insufficient. For example, over 90% of officers believed they needed more training in shoot/don't shoot scenarios, and over 80% indicated they needed more training related to non-lethal weapons, defensive tactics, crisis intervention, and de-escalation.

During the focus group sessions, we heard urgent messages about the likelihood of officers being injured or killed because of their perceived lack of effective training and the impact of Senate Bill 20-217 and House Bill 21-1250. Some officers indicated that the lack of effective training could lead to "potentially deadly situations." Multiple officers were very critical of not just the amount but also the quality of training provided regarding the use of force. In addition to lacking an interactive or practice component, we routinely heard that officers did not receive enough training for "going hands-on" with resistant individuals. Further, they indicated that much of the training they receive is outdated, redundant, unrealistic, or simply not helpful. The high levels of concern reported by officers regarding the impact of SB 20-217 must be addressed during use of force trainings and discussed as part of debriefing sessions between officers and field supervisors.

We also learned from the analysis of use of force types that less-lethal tools (e.g., TASERs) are among the *least* effective means to gain compliance from resisting subjects. Further, we learned that

 ²⁵⁴ Colorado Springs General Order 1817 Early Intervention Program, Section .10 Reporting Period and Thresholds.
 ²⁵⁵ Colorado Springs General Order 1817 Early Intervention Program, Section .03 Discussion.

approximately 20% of all use of force incidents that officers are involved in result in some type of injury to the officer, and 73% result in injury to citizens. Most troubling is that officers vary dramatically in their frequency of force and likelihood of injury, with female officers 1.7 times more likely than male officers to be injured during use of force incidents.

Collectively, the persistent and pervasive nature of this feedback – with multiple sources suggesting that deficiencies in training are an officer safety issue – supports the recommendation and specific action items listed below that should be prioritized by the CSPD.

Recommendation 4: Conduct an independent audit of CSPD use of force training to ensure content, quality, and duration of use of force training is meeting industry best practices.

Best practices in police training have been documented by various expert groups, including the Council on Criminal Justice's Task Force on Policing. Specific to use of force, the Police Executive Research Forum, and other independent reviews have provided important guidance.²⁵⁶ A review of CSPD training compared to these recommended practices will be instructive. Based on the findings of this recommended audit, immediate changes to the schedule and delivery of training should be prioritized by the CSPD. This concern may or may not be warranted, but it is, nonetheless, prudent for the recommended audit to be independently conducted.

Action Item 4.1: The CSPD should develop a process to select an independent evaluator with expertise in use of force and de-escalation expertise/training to review all academy curriculum related to crisis response and use of force.

The process for the selection of the independent auditor should include representation from line-level officers, field supervisors, training staff, PPA (Police Protective Association) members, command staff, and community members.

Action Item 4.2: This training audit should be conducted expeditiously, including a review of all training curriculum/lesson plans, in-person observation of training courses, interviews with training staff, surveys of officers attending training courses, a review of dispatcher training, and interviews or focus groups with dispatchers.

The gathering of additional information – beyond a review of the curriculum/lesson plans – will be important for this review. Officers indicated their largest concerns were with the quality of the training and the lack of opportunities for skills practice or hands-on interactive learning. Direct observation of training courses will be helpful to determine if there are opportunities for improvement in these areas. The review of use of force training curriculum must include a review of training related to pointing of firearms. Additionally, during the focus groups with officers and first-line supervisors, many participants expressed concerns about the amount and quality of training that call center employees

²⁵⁶ For example, see Bennell et al., 2020; CCJ, 2021 (<u>https://assets.foleon.com/eu-west-2/uploads-7e3kk3/41697/effectiveness_of_police_training.f83a079a3503.pdf</u>); PERF, 2016; PERF, 2015a (https://www.policeforum.org/assets/reengineeringtraining1.pdf)

receive. There was a general sense of frustration about dispatchers not providing officers with the information needed to handle calls for service in a safe, timely, and effective manner.

Action Item 4.3: Community representatives should be included in the audit process to ensure community perspectives are considered and included, where appropriate.

To enhance the CSPD's commitment to community engagement and transparency, community perspectives should be included in both the audit of the training, along with recommendations for changes to the training moving forward.

Action Item 4.4: The CSPD must prioritize the implementation of the recommended changes based on the findings of this proposed training audit.

Making police-citizen encounters safer – for both officers and citizens – is a shared goal for all in the CSPD and the Colorado Springs community. This training audit, and implementation of resulting recommendations – which may require shifting of CSPD resources and personnel – should be prioritized by the CSPD administration. In addition to the obvious opportunities to improve officer and public safety, it will likely improve officer morale and could also be used as a recruitment opportunity highlighting the availability of the best training. Finally, as the CSPD increases in sworn strength, it is critical that new officers be trained with the most advanced methods available, and that the training is consistent with in-service training for existing officers. We recommend the continued and expanded use of the academy's training simulator to provide cadets and incumbent officers training on real life scenarios that emphasize tactics and de-escalation techniques during police-citizen encounters.

9.5 Build Community Trust in Police through Transparency and Engagement

One of the core themes that emerged from the surveys and focus groups with community members and CSPD officers was the perceived lack of transparency by CSPD. This concept was particularly interesting; although many community members raise issues related to the need for more transparency, particularly as it relates to use of force incidents, we rarely hear the same comments echoed by law enforcement. However, within the focus groups with CSPD officers, there was much conversation about the *immediate need* for the CSPD leadership to be more transparent, particularly in the aftermath of critical incidents.

Recommendation 5: Enhance transparency through the timely release of information to the community to improve public confidence and trust.

One of PERF's *Guiding Principles on Use of Force* recommends that "Agencies need to be transparent in providing information following use-of-force incidents."²⁵⁷ Although historically police agencies have been cautious about releasing too much information to the public too quickly, for fear that it could increase the risk of legal liability, there has been a recent shift against this approach based on the recognition that news media and social media will construct their narrative with or without police input

²⁵⁷ See PERF, 2016, p.52.

and it is better for agencies to "get out in front of the story."²⁵⁸ The implications for police-community trust if a police agency is viewed as not being forthcoming with the public can be even more damaging, particularly in crisis incidents. PERF recommends that "agencies should release basic, preliminary information about an incident within hours of its occurrence and should provide regular updates as new information becomes available."²⁵⁹

Action Item 5.1. Develop a standardized approach for the timely release of information regarding critical incidents.

Both community members and CSPD officers were frustrated by the delay in releasing information and body camera footage following a critical incident. The CSPD should adopt a standard response for these types of situations so that the police and the public know what to expect in terms of what will be released, when it will be released, and any legal reasons that this information might be delayed. The timely and consistent release of information to the public is critical to the perceptions of transparency to the public and support for officers.²⁶⁰ Several officers noted in the focus groups that the CSPD should follow the more progressive approaches of the Las Vegas Metro Police Department, Los Angeles Police Department, or Phoenix Police Department, where information is released to the media in a routine, packaged format. They generally agreed that more information provided to the public is good for the police because it disproves the narrative that officers are engaged in inappropriate behavior.

Action Item 5.2. Make use of force data (and summary data reports) readily available for public dissemination.

One of PERF's *Guiding Principles on Use of Force* recommends that "To build understanding and trust, agencies should issue *regular reports to the public* on use of force."²⁶¹ Outside of the commission of the current study, the CSPD has not historically issued this type of public report on a consistent basis. The public release of this report should be followed by updates to the public about CSPD's progress in response to this report's recommendations as well as the regular release of annual reports on use of force in the future. This type of transparency is critical for building and maintaining trust with the public.

Action Item 5.3. Enhance the public relations strategy to better emphasize positive policecommunity engagement and public safety accomplishments.

A consistent theme from both the surveys and focus groups with community members and CSPD officers was that media coverage of the CSPD is one-sided and overwhelmingly negative. Both community members and officers recommended a more proactive media strategy that 1) communicates more frequently through all available media outlets, social media, elected officials, and community members or organizations and 2) emphasizes the department's accomplishments and community-

²⁵⁸ For example, see PERF, 2015b, p.4, PERF 2016.

²⁵⁹ See PERF, 2016, p.52.

²⁶⁰ For example, see Council on Criminal Justice, 2021 *Body-Worn Cameras Policy Assessment;* IACP, 2019 *Media Relations Concepts & Issues Paper.*

²⁶¹ See PERF, 2016.

building efforts. The IACP *Media Relations Concepts & Issues Paper* may be of use if updates to the department's General Order 1690 (Public Information Office and News Media) are needed.²⁶²

Action Item 5.4. Prioritize opportunities for officers to engage community members in proactive, positive, and non-enforcement interactions to increase officers' knowledge of the community and build rapport with community members.

The PERF *Defining Moments for Police Chiefs* report notes that police agencies must make a concerted effort to build trust and maintain open lines of communication with community leaders and members of the public not just in time of crisis, but consistently through everyday interactions; this benefits an agency when a crisis does occur because they already have a reservoir of trust on which to draw.²⁶³ The research team acknowledges that the current staffing shortage has limited CSPD's officers' ability to engage in non-enforcement interactions with the community. As much as possible under the current conditions, and as staffing improves, however, the CSPD should take steps to increase opportunities for officers to engage in proactive and non-enforcement related interactions with the general public of Colorado Springs, including informal conversations during patrol, participation in community programs, speaking to community groups, and attendance at community events. Officers noted that they miss the opportunity to engage in these types of community-building interactions and community survey respondents noted that positive experiences with the police are critical for enhancing public trust.

Furthermore, as police agencies implement changes in training and policy surrounding use of force and de-escalation, it is important that community engagement efforts be incorporated. Applying a community-oriented framework in the identification, development, and implementation of reform will require police agencies to draw on community insight and feedback as changes are implemented.²⁶⁴ Operationally, this highlights the importance of informing and providing opportunities for discussion among local policymakers, community leaders, and residents on key issues surrounding police use of force, de-escalation, and agency reform. Police agencies may also consider integrating community members into de-escalation training as actors for role-play scenarios or as presenters to provide community perspectives to officers. Incorporating community residents into training, including individuals with lived experiences or individuals most affected by police interactions, has been highlighted as best practice in other training programs, such as crisis intervention team training, and is viewed to enhance officers' experience with empathy toward the citizens they encounter.²⁶⁵

9.6 Enhance Supervision, Accountability & Oversight related to Use of Force

TMLLC's qualitative review of a sample of 140 pointing of firearm incidents revealed a gap in CSPD policy whereby the standards of *Graham v. Connor* were not required in policy to analyze the appropriateness of pointing of firearm incidents. Action Item 3.2 addressed the recommended changes to policy regarding this issue. Proper oversight of these incidents, however, also requires additional

²⁶² See IACP, 2019.

²⁶³ For example, see PERF, 2015b.

²⁶⁴ For example, see Gill et al., 2014; Skogan, 2019.

²⁶⁵ For example, see Usher et al., 2019.

training for supervisors to ensure that they are properly analyzing and taking corrective action in the pointing of firearm incidents when needed.

Incidents involving "pointing a firearm at a person" should require detailed reports from the involved officer(s) to include articulation regarding why the pointing of a firearm was appropriate (not officer safety alone as justification), under the circumstances. This requirement will ensure supervisors have the necessary information to conduct a proper use of force analysis that will facilitate appropriate corrective action to remediate and reduce these events. This will provide the CSPD with additional oversight of these incidents and enhance officer's critical thinking skills during police-citizen encounters.

Recommendation 6: Continue to enhance supervision, accountability & oversight related to use of force.

Even the best police departments have opportunities for continual improvement. Based on our review, the CSPD accountability and oversight process for pointing of firearm incidents appears to involve routine reporting by officers as required by policy, but insufficient supervisory review. We found little evidence that supervisors addressed the appropriateness of the pointing of a firearm, including whether the tactics employed were justified or whether the reported facts conflicted with other documentation or video footage. In each of the cases for which we determined use of force was not appropriate or that the encounter was unnecessarily escalated by CSPD officers, supervisors approved the use of force as "objectively reasonable" and did not document any corrective measures taken. Pointing of firearm incidents need to be thoroughly reviewed by the supervisory chain of command, and problem areas immediately addressed with the involved officers.

Additional issues noted were related to supervisory reviews of pointing of firearm incidents included the lack of timeliness of reviews (five incidents), and the lack of additional levels of review by the chain of command (five incidents). Supervisors should be held accountable for the timely, accurate, complete, and thorough investigation and documentation of all use of force incidents, including the pointing of a firearm by officers under their command or assigned to them for review. Supervisors also have the responsibility for ensuring the provisions of all policies and procedures are appropriately applied.

Action Item 6.1 First-line supervisors should receive additional training on conducting use of force investigations, and specifically on evaluating the appropriateness of pointing of firearm incidents.

As described in Section 2, most use of force investigations are completed by field supervisors. Currently, newly promoted sergeants complete a new supervisor training (40 hours), which includes approximately seven hours of instruction related to the oversight of use of force and conducting related investigations. In addition, on an ad hoc basis, the Internal Affairs unit allows new supervisors to shadow investigators for as long as their chain of command permits, one day to two weeks. CSPD leadership is exploring the feasibility of making it standard procedure for new supervisors to complete a one-week shadowing experience with Internal Affairs. The TMLLC research team recommends this change in procedure.

Our interviews with command staff revealed that there is a perception that supervisors need additional training to evaluate use of force reports more critically and conduct investigations with more objectivity.

Many supervisors' natural tendency is to give their officers the benefit of the doubt. These administrators indicated that a good supervisor could take these opportunities for mentoring officers and correcting behaviors early before they become problematic and result in disciplinary action. Interviewees from CSPD Command Staff indicated that the course content for supervisory training is currently being revamped.

9.7 Enhance Data Collection

Like most law enforcement agencies, the CSPD systematically collects information regarding policecitizen contacts and police officer activities – including calls for service, reported crimes, arrests, uses of force, and injuries – while also maintaining an employee tracking system with personnel information, training records, etc. Also similar to most law enforcement agencies, the quality of the various CPSD data collection systems, the validity of the data collected, and the ability of the various data structures from the various reports to be linked together (by incident, person, or officer) varies dramatically. As the CSPD becomes more data-driven in their practices, and more responsive to community requests for transparency in their operations, the need to enhance the quality of these data collection mechanisms and the information gathered will only continue to grow. The specific data-related issues identified in this section are those that the TMLLC research team discovered as part of the analyses of use of force data; however, a thorough review of all data collection systems and the quality /validity of the information gathered is recommended throughout the CSPD.

Related specifically to the use of force data, previous research studies have routinely identified multiple factors that are important to consider – however, this information is often not systematically collected or analyzed by police agencies. For police agencies seeking opportunities for continual improvement, official data related to coercive police actions must be: (1) reliable and valid, (2) sufficiently detailed to be used for multiple analytical purposes, (3) collected in a readily usable format that can be easily extracted and combined with other data sources, and (4) routinely analyzed using appropriate statistical techniques. Finally, the findings from these analyses must be: (5) disseminated both internally and externally, (6) used to inform practice, policies, supervision, and training internally, and (7) used to enhance transparency and police-community relations externally.

The first step to reducing the frequency and severity of use of force, reducing racial/ethnic disparities in the use of force, and reducing injuries resulting from the use of force, is to conduct detailed statistical analyses on valid data to identify patterns and trends. Simply stated, quality data and rigorous analysis can be used to better understand use of force encounters, which will improve force-related policies and training.²⁶⁶ The Use-of-Force Data Framework developed by PERF includes a comprehensive list of measures related to use of force that are recommended for agencies to collect.²⁶⁷ However, data collection processes must balance operational efficiency with analytical needs, resulting in some compromises regarding the amount and format of data gathered.

 ²⁶⁶ For example, see PERF, 2021. <u>https://www.policeforum.org/assets/CollectingAnalyzingUOFData.pdf</u>
 ²⁶⁷ See: and <u>https://www.policeforum.org/assets/PERFUOFDataFramework.xlsx</u>

Based on our detailed examination of the CSPD's arrest, use of force, injury, and personnel data, we recommend the CSPD develop a data collection and analysis committee to review and develop changes in the current data collection systems, beginning with the specific data collection issues we identify below.

Recommendation 7: Review and make appropriate changes to use of force data collection to meet best practices.

We propose the development of a group within the CSPD tasked with reviewing this entire report, noting areas where the use of force or arrest data collection systems could be immediately improved. This group would be further responsible for developing solutions to the various data collection challenges identified, implementing those solutions, and then evaluating their impact.

Action Item 7.1: Standardize the CSPD's use of force reporting data collection systems.

The CSPD currently uses three different report forms to collect information about reportable use of force, both issues that were raised as areas for improvement by officer focus group participants. The selection of the appropriate form is based on the type of force used by officers: (1) use of weaponless physical force or a weapon, (2) pointing of firearms only, and (3) canine. These reports, however, do not gather the same information for every reportable force incident and further, are analytically difficult to merge into a single analysis by either citizen or officer involved. Although the report narrative often includes more detailed information, this information is not systematically captured, and is not readily available for quantitative analyses. As a result, our analyses of use of force and pointing of a firearm had to be conducted separately.

We recommend that CSPD rely upon a single Use of Force Reporting system, and the use of any supplemental reports must be merged with the primary report for documenting information related to specific types of force. Additional detailed information related specifically to the documentation of pointing of firearms is highlighted in Recommendation 3 above.

Action Item 7.2: Develop a system to readily combine data sources related to the same incidents, individuals, and officers with the use of unique identifiers.

When an individual is arrested, the CSPD data system creates a "Jacket Number" for this person. We recommend CSPD begin to incorporate the unique ID (Jacket Number) in all use of force reports so that the individual can be linked across various reports. We also suggest a similar identifier (numeric "Jacket Number") be established for any individual who has force used on them, regardless of whether they are arrested at the time (e.g., transported to a hospital, sobering center, or mental health center) to compute the number of people and events occurring each year more easily. Currently, names are used to merge

data sources; however, names are more difficult to match, due to misspellings, capitalization, individuals with the same name, etc.²⁶⁸

Action Item 7.3: Make appropriate changes to the collection of key variables in use of force incidents.

The following specific data collection issues were identified during our analyses of the use of force data:

- The way that information is collected regarding individuals' impairment should be changed.²⁶⁹ Officers are not able to capture if an individual encountered is perceived to have issues related to alcohol or drug use as well as mental health issues, which research has shown can increase the likelihood of force more than single types of impairment.²⁷⁰ We recommend that this data field be altered to capture all information regarding impairment.
- Subject and officer injuries should be linked to specific force types used by officers. Injuries are common (73%) among those who had force used against them, and approximately 20% of officers are injured as a result of using force. In incidents that involve more than one type of force, however, it is not possible to determine which type(s) of force led to a sustained injury.²⁷¹
- The CSPD should add a data field to capture first aid rendered and/or medical treatment received. The CSPD currently collects information regarding whether an individual who had force used against them was hospitalized, but there is no information about whether any medical treatment or first aid was offered, rendered, or offered and refused.²⁷²
- A data field should be added to capture whether the individual who had force used against them was transported and, if yes, the location of transport (e.g., hospital, jail, mental health facility).²⁷³

Action Item 7.4: Make appropriate changes to the collection of key variables for arrest reports.

²⁷² For example, see Hickman et al., 2021.

²⁶⁸ For example, the data merge we used for this report showed that 77.6% (N = 1,617) of the 2,084 uses of force we assessed linked to arrests (via the arrest database). However, a string measure "was the citizen arrested" indicated that 90.9% (N = 1,894) of the citizens who had force used against them were arrested. For 277 individuals where an officer noted the person was arrested in the use of force data, the individual did not link to the arrest data (despite our efforts to cross-check names, dates of events, and dates of births across multiple data sources). The potential for inaccurate reporting (either over- or underreporting) would be reduced greatly if a jacket number were included at the use of force level. Consistency is also needed in the documentation of the approximately 1.1% of use of force cases where the individual is "unknown." Finally, the use of a jacket identifier would also assist with linking individuals' who have firearms pointed at them to the arrest data, where applicable.

²⁶⁹ Currently the CSPD captures information regarding whether the officer perceived that the individual who had force used against them was impaired in some way within a single data field called "citizen influence assessment." Here officers can *only select one* of the following: no evidence of impairment or none detected, under the influence of alcohol, under the influence of alcohol and drugs, under the influence of drugs, and whether the person appears emotionally disturbed. ²⁷⁰ For example, see Morabito et al., 2017.

²⁷¹ Like the information that is collected in the "force effective" data field, where an officer notes each force type as either effective or ineffective, officers should indicate whether an injury to the subject or themselves occurred as the result of each force type used and note the severity of that injury.

²⁷³ Currently CSPD captures information about whether an individual was hospitalized and whether they were arrested. We assume that individuals who were arrested went to jail, but they could have been transported somewhere else. Furthermore, for individuals who are not arrested or hospitalized, it is unknown if any transport occurred.

The CSPD should collect additional information in the arrest data. Our analyses of arrest encounters were limited in their precision by the data fields available.

- Although the CSPD collects information about whether an individual was charged with resisting arrest, resistant behavior for *all* arrestees is not systematically captured as it is for those who had force used against them. The lack of a measure of individual resistance, which is the single most consistent predictor of force, is the biggest limitation of CSPD arrest data.
- Other important predictors of force that were not systematically captured in CSPD arrest data include the presence of a weapon and impairment by alcohol/drugs or mental health issues. Nearly 70% of individuals who had force used against them were perceived to be impaired by alcohol/drugs or mental health issues.

The CSPD would benefit from gathering additional information like this within its arrest reports to better understand police decision-making during arrest encounters and the factors that lead to use of force, which in turn, would potentially offer additional avenues for training, accountability, and policy.

9.8 Work Collaboratively to Reduce Racial/Ethnic Disparities

The CSPD commissioned this study to assess officer use of force, including any differences in force used across racial/ethnic groups. From the outset, there should be a shared acknowledgment among all stakeholders (e.g., the CSPD, City of Colorado Springs, and community members) of the limitations of the data, methodologies, and statistical techniques used to examine patterns and trends of police use of force. As routinely stated throughout this report, statistical analyses alone cannot determine if racial and ethnic disparities in police use of force are due to individual racial bias by the police or other unmeasured factors. While statistical analyses can be used to identify patterns and trends in police use of force, they cannot be reliably used to determine the *causes* of racial/ethnic disparities. However, the information provided within this report can (and should) be used as a baseline measure to assess progress toward the goal of reducing racial/ethnic disparities in adverse policing outcomes.

The findings from this report suggest the racial/ethnic disparities in use of force range from no (or modest) disparities, to moderate. Where racial/ethnic disparities do exist, they are concentrated in particular locations, involve specific types of police-citizen encounters, or specific types of force. While our data cannot rule out the possibility of individual officer bias in decision-making, it is unlikely that widespread bias across officers is driving these findings. The problem with assuming the racial/ethnic disparities identified are due to police bias is that the solutions subsequently offered focus only on changing officers' presumed bias, rather than the larger causes of disparities, including systemic social., community, or organizational factors that are beyond the control of individual officers. Further, these potentially unsupported accusations of officer morale. Alternatively, summarily dismissing the possibility of *any* police bias denies the lived experiences of some community members. Therefore, any disparity in policing outcomes is worthy of attention and closer examination. Preparing police agencies to identify and monitor changes in racial/ethnic disparities is considered best practice. The CSPD is well-positioned to continue this higher level of accountability and transparency.

Recommendation 8: Continue to work internally and externally to continually monitor and reduce racial/ethnic disparities in use of force.

To reduce racial/ethnic disparities in policing outcomes, there must first be a clear identification of what the racial/ethnic disparities are, where they exist, and the specific context involved. The CSPD has taken the first step by commissioning a detailed problem analysis. The findings regarding racial/ethnic disparities contained within this report can be used as the foundation for the development and implementation of a strategy to continue to monitor police-citizen encounters that involve the use of force and address any disproportionate impact on people of color. While this process should be led by the CSPD, it must be informed by community members. Reducing racial/ethnic disparities in policing (and specifically in use of force) is not just a police issue; it is a community issue that requires community-engaged solutions. Four specific action items related to this recommendation are detailed below.

Action Item 8.1 – Internally review the racial/ethnic disparities in CSPD use of force identified in this report; provide this information directly to CSPD commanders, field supervisors, and training staff to identify (and implement) operational opportunities to reduce the disparities identified.

CPSD administrators should work internally to examine the racial/ethnic disparities identified in Sections 4-6, some of which are briefly summarized below:

- Using arrestee and suspect population benchmarks, small to moderate disparities are noted. Black individuals encountered by CSPD within the Gold Hill Division are slightly more likely to have physical force used against them and firearms pointed at them compared to White individuals (based on comparisons to suspect and arrestee benchmarks).
- Likewise, Hispanic individuals stopped by police in the Sand Creek Division are slightly more likely to have force used against them compared to White individuals (based on comparisons to suspect and arrestee benchmarks) Across all divisions, Hispanic individuals were also slightly to moderately more likely than White individuals to have firearms pointed at them compared to Whites (again based on comparisons to suspect and arrestee benchmarks).
- Department-wide, Black and Hispanic arrestees were slightly more likely to have force used against them compared to White arrestees, after controlling for some other situational and community factors that predict use of force.

There are several possible explanations for these differences across racial/ethnic groups, which can only be determined based on local knowledge of the area and additional information that is not available in the aggregate data analyzed. As a first step, CSPD command staff should engage first-line supervisors, officers, community groups and residents in these areas to gain additional perspectives regarding the reasons that these racial/ethnic disparities exist, and what solutions might be tried to reduce them.

Action Item 8.2 – Develop internal accountability and oversight mechanisms to routinely monitor and address patterns and trends in racial/ethnic disparities in police-citizen encounters.

The CSPD should build on the detailed analysis of patterns and trends in CSPD use of force by developing internal processes to (1) systematically monitor and document racial/ethnic disparities moving forward, and (2) include racial/ethnic disparity measures in the CSPD's pre-existing Early Intervention Program (EIP) to provide routine oversight. The development of these processes will ensure

the continued identification of disparities and provide a feedback loop regarding the effectiveness of implemented interventions.

Action Item 8.3 – Produce annual public reports documenting patterns and trends of use of force incidents, along with the specific steps taken to reduce the frequency and severity of use of force, racial/ethnic disparities in use of force, and officer and citizen injuries – and their outcomes.

It is recommended here (and previously as part of Action Item 5.2) that annual use of force reports that document patterns and trends, along with racial and ethnic disparities across CSPD organizational units, should be annually prepared and released to the public. This is a best practice, and while most of the peer agencies against which we compared the CSPD do issue some type of annual report on use of force to the public, the CSPD does not currently.²⁷⁴ Often these are summary reports and do not provide an indepth examination of use of force and disparities like the current report does. The commission of this current report and its public release are strong first steps in this direction, but this process of regular analysis, internal examination, and presentation to the public needs to be routinized and integrated into General Orders on Use of Force and Fair and Impartial Policing.

Action Item 8.4 – Work collaboratively with community leaders (including the Chief's Community Leaders Group and the LETAC) to: (1) share information regarding the patterns and trends of use of force, and (2) develop plans (that extend beyond the CSPD) to assist in reducing racial/ethnic disparities.

As previously noted, racial/ethnic disparities typically exist across many adverse societal outcomes. Reducing racial/ethnic disparities in policing outcomes should be embedded within a larger city effort to reduce systemic disparities in education, health, poverty, etc. Other city and county agencies should be leveraged to assist in these prioritized efforts.

In closing, progress toward implementation of these recommendations will assist the CSPD in continuing to proactively improve officer decision-making, ensure fairness during encounters with the public, reduce the use of force and injuries to officers and members of the public, and increase transparency and trust with the community that it serves.

²⁷⁴ For example, see PERF, 2016.

REFERENCES

- Alpert, G. P., & Dunham, R. (1999). The force factor: Measuring and assessing police use of force and suspect resistance. Report to the National Institute of Justice. Use of force by police: Overview of national and local data. Washington, DC: U.S. Department of Justice.
- Alpert, G. P., & Dunham, R. G. (2010). Policy and training recommendations related to police use of CEDs: Overview of findings from a comprehensive national study. *Police Quarterly*, 13(3), 235-259.
- Alpert, G. P., Smith, M. R., & Dunham, R. G. (2004). Toward a better benchmark: Assessing the utility of not-at-fault traffic crash data in racial profiling research. *Justice Research and Policy*, 6(1), 43-69.
- Ba, B.A., Knox, D., Mummolo, J., & Rivera, R. (2021). The role of officer race and gender in police-civilian interactions in Chicago. *Science*, *371*, 696-702.
- Bennell, C., Blaskovits, B., Jenkins, B., Semple, T., Khanizadeh, A. J., Brown, A. S., & Jones, N. J. (2020). Promising practices for de-escalation and use-of-force training in the police setting: a narrative review. *Policing: An International Journal*.
- Birzer, M. L. (2003). The theory of andragogy applied to police training. *Policing: An International Journal of Police Strategies & Management, 26*(1), 29-42.
- Bishopp, S. A., Klinger, D. A., & Morris, R. G. (2015). An examination of the effect of a policy change on police use of TASERs. *Criminal Justice Policy Review*, *26*(7), 727-746.
- Bolger, M. A., Lytle, D. J., & Bolger, P. C. (2021). What matters in citizen satisfaction with police: A meta-analysis. *Journal of Criminal Justice*, 72, 101760.
- Bottoms, A., & Tankebe, J. (2012). Beyond procedural justice: A dialogic approach to legitimacy in criminal justice. *The Journal of Criminal Law and Criminology*, *102*(1), 119-170.
- Bozeman, W. P., Stopyra, J. P., Klinger, D. A., Martin, B. P., Graham, D. D., Johnson III, J. C., ... & Vail, S. J. (2018). Injuries associated with police use of force. *Journal of Trauma and Acute Care Surgery*, 84(3), 466-472.
- Brandl, S. G., Frank, J., Worden, R. E., & Bynum, T. S. (1994). Global and specific attitudes toward the police: Disentangling the relationship. *Justice Quarterly*, *11*(1), 119-134.
- Brandl, S. G. & Stroshine, M. S. (2017). Oleoresin capsicum spray and TASERs: A comparison of factors predicting use and effectiveness. *Criminal Justice Policy Review*, 28(3), 279-306.
- Brent, JJ. & Kraska, P.B. (2010) Moving beyond our methodological default: A case for mixed methods. *Journal of Criminal Justice Education*, 21(4), 412-430.
- Brunson, R. K. (2007). "Police don't like black people": African-American young men's accumulated police experiences. *Criminology & Public Policy*, 6(1), 71-101.

- Castillo, E. M., Prabhaker, N., & Luu, B. (2012). Factors associated with law enforcement-related useof-force injury. *American Journal of Emergency Medicine*, 30, 526-531.
- CBS News. (2019). We asked 155 police departments about their racial bias training. Here's what they told us. Retrieved from : <u>https://www.cbsnews.com/news/racial-bias-training-de-escalation-</u>training-policing-in-america/
- Cesario, J., Johnson, D., & Terrill, W. (2019). Is there evidence of racial disparity in police use of deadly force? Analyses of officer-involved fatal shootings in 2015-16. *Social Psychological and Personality Science*, *10*, 586-595.
- Center for Criminal Justice (2021). *Effectiveness of Police Training. Policy Assessment*. Center for Criminal Justice, Task Force on Policing.
- Chen, H., Cohen, P., & Chen, S. (2010). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communications in Statistics—simulation and Computation*, 39(4), 860-864.
- Covington, M. W., Huff-Corzine, L., & Corzine, J. (2014). Battered police: Risk factors for violence against law enforcement officers. *Violence and Victims*, 29(1), 34-52.
- Crawford, C., & Burns, R. (1998). Predictors of the police use of force: The application of a continuum perspective in Phoenix. *Police Quarterly*, 1(4), 41-63.
- Crow, M. S., & Adrion, B. (2011). Focal concerns and police use of force: Examining the factors associated with Taser use. *Police Quarterly*, 14(4), 366-387.
- Davis, E., Whyde, A., & Langton, L. (2018). *Contacts between police and the public, 2015*. Washington, DC: U. S. Department of Justice.
- Duke Center for Science and Justice Tracking Police Reform Legislation By State. (2020). Retrieved from <u>https://sites.law.duke.edu/csj-blog/2020/07/14/duke-center-for-science-and-justice-tracking-police-reform-legislation-by-state/</u>
- Dziejma, S., & De Sousa, D. (2017). National Consensus Policy on use of force: How 11 leading enforcement leadership and labor organizations arrived at one policy. *The Police Chief*, 84(4), 22-26.
- Engel, R. S. (2001). Supervisory styles of patrol sergeants and lieutenants. *Journal of Criminal Justice*, 29(4), 341-355.
- Engel, R. S. (2002). Patrol officer supervision in the community policing era. *Journal of Criminal Justice*, *30*(1), 51-64.
- Engel, R. S. (2003a). Explaining suspects' resistance and disrespect toward police. *Journal of Criminal Justice*, 31:475-92.

- Engel, R. S. (2003b). How police supervisory styles influence patrol officer behavior. *Critical issues in policing: Contemporary readings*, 6.
- Engel, R. S. (2005). Citizens' perceptions of distributive and procedural injustice during traffic stops with police. *Journal of Research in Crime and Delinquency*, *42*, 445-481.
- Engel, R. S., & Calnon, J. M. (2004). Comparing benchmark methodologies for police-citizen contacts: Traffic stop data collection for the Pennsylvania State Police. *Police Quarterly*, 7(1), 97-125.
- Engel, R. S., Calnon, J. M., & Bernard, T. J. (2002). Theory and racial profiling: Shortcomings and future directions in research. *Justice Quarterly*, 19(2), 249-273.
- Engel, R. S., Corsaro, N., Isaza, G. T., & McManus, H. D. (2022). Assessing the impact of de-escalation training on police behavior: Reducing police use of force in the Louisville, KY Metro Police Department. *Criminology & Public Policy*.
- Engel, R. S., Corsaro, N., Isaza, G. T., & McManus, H. D. (2020a). Examining the impact of Integrating Communications, Assessment, and Tactics (ICAT) de-escalation training for the Louisville Metro Police Department: Initial findings. *Alexandria, VA: International Association of Chiefs of Police*. Retrieved from <u>https://www.theiacp.org/sites/default/files/Research%20Center/LMPD_ICAT%20Evaluation%2</u> <u>0Initial%20Findings%20Report_FINAL%2009212020.pdf</u>
- Engel, R. S., Isaza, G. T., Motz, R., & Corsaro, N. (2021a). Examining the Impact of Integrating Communications, Assessment, and Tactics (ICAT) De-escalation Training for the Louisville Metro Police Department: Report 2 - Supplemental Findings. Cincinnati, OH: IACP/UC Center for Police Research and Policy.
- Engel, R. S., Isaza, G. T., Motz, R. T., McManus, H. D., & Corsaro, N. (2021b). De-Escalation Training Receptivity and First-Line Police Supervision: Findings from the Louisville Metro Police Study. *Police Quarterly*, 10986111211049834.
- Engel, R. S., McManus, H. D., & Herold, T. D. (2020b). Does de-escalation training work? A systematic review and call for evidence in police use of force reform. *Criminology & Public Policy*, 19(3), 721-759.
- Engel, R. S., Sobol, J. J., & Worden, R. E. (2000). Further exploration of the demeanor hypothesis: The interaction effects of suspects' characteristics and demeanor on police behavior. *Justice Quarterly*, 17(2), 235–258.
- Engel, Robin S., and Kristin Swartz. 2014. Race, crime, and policing. In *The Oxford handbook of ethnicity, crime, and immigration*, eds. Sandra M. Bucerius and Michael Tonry, 135–65. New York, NY: Oxford University Press.
- Fairburn, R. (2016). PERF's UOF report illustrates disconnect between street cops, administrators. *Police*, *1*.
- Fallik, S. W., Deuchar, R., & Crichlow, V. J. (2020). Body-worn cameras in the post-Ferguson

era: An exploration of law enforcement perspectives. *Journal of police and criminal Psychology*, *35*(3), 263-273.

- Farrell, Amy, Jack McDevitt, Lisa Bailey, Carsten Andresen, and Erica Pierce. 2004. Massachusetts Racial and Gender Profiling Study, Final Report. Submitted to the Massachusetts Department of Public Safety. Available on the PERF website at http://www.policeforum.org.
- Ferdik, F. V., Kaminski, R. J., Cooney, M. D., & Sevigny, E. L. (2014). The influence of agency policies on conducted energy device use and police use of lethal force. *Police Quarterly*, 17, 328-358.
- Fridell, L. (2004). *By the Numbers: A Guide for Analyzing Race Data from Vehicle Stops,* Police Executive Research Forum, Washington, DC.
- Fridell, L. (2017). Explaining the disparity in results across studies assessing racial disparity in police use of force: A research note. *American Journal of Criminal Justice, 42,* 502-513.
- Fridell, L. & Lim, H. (2016). Assessing the racial aspects of police force using the implicit- and counter-bias perspectives. *Journal of Criminal Justice*, *44*, 36-48.
- Fryer, R. G. (2016). *An Empirical Analysis of Racial Differences in Police Use of Force*. http://www.nber.org/data-appendix/w22399
- Fryer, R. G. (2019). An empirical analysis of racial differences in police use of force. *Journal of Political Economy*, 127(3), 1210-1261.
- Fyfe, J. J. (1979). Administrative interventions on police shooting discretion: An empirical examination. *Journal of Criminal Justice*, 7(4), 309-323.
- Fyfe, J. J. (1982). Blind justice. Journal of Criminal Law and Criminology, 73, 707-722.
- Garner, J. H., Hickman, M. J., Malega, R. W., Maxwell, C. D. (2018). Progress toward national estimates of police use of force. *PLoS ONE*, *13*(2), e0192932.
- Garner, J. H., Maxwell, C. D., & Heraux, C. G. (2002). Characteristics associated with the prevalence and severity of force used by the police. *Justice Quarterly*, 19(4), 705-746.
- Garner, J. H., Schade, T., Hepburn, J., & Buchanan, J. (1995). Measuring the continuum of force used by and against the police. *Criminal Justice Review*, *20*(2), 146-168.
- Gau, J. M. (2014). Procedural justice and police legitimacy: A test of measurement and structure. *American Journal of Criminal Justice*, 39(2), 187-205.
- Gau, J. M., Mosher, C. & Pratt, T. C. (2010). An inquiry into the impact of suspect race on police use of TASERs. *Police Quarterly*, 13(1), 27–48.
- Geller, A., Goff, P. A., Lloyd, T., Haviland, A., Obermark, D., & Glaser, J. (2021). Measuring racial disparities in police use of force: methods matter. *Journal of Quantitative*

Criminology, *37*(4), 1083-1113.

- Geller, W. A., & Scott, M. (1992). *Deadly force: What we know: A practitioner's desk reference on police-involved shootings*. Washington, DC: Police Executive Research Forum.
- Gill, C. Weisburd, D., Telep, C. W., Vitter, Z., & Bennett, T. (2014). Community-oriented policing to reduce crime, disorder and fear and increase satisfaction and legitimacy among citizens: A systematic review. *Journal of Experimental Criminology*, 10(4), 399–428

Graham v. Connor, 490 U.S. (1989).

- Graziano, L.M. (2019). News media and perceptions of police: a state-of-the-art-review. *Policing: An International Journal, 42*(2), 209-225.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixedmethod evaluation designs. *Educational evaluation and policy analysis*, 11(3), 255-274.
- Guo, G. & Zhao, H. (2000). Multilevel modeling for binary data. *Annual Review of Sociology*, *26*, 441-462.
- Harrell, E. & Davis, E. (2020). Contacts between Police and the Public, 2018 Statistical Tables.
- Hickman, M. J., Piquero, A. R. & Garner, J. H. (2008). Toward a national estimate of police use of nonlethal force. *Criminology & Public Policy*, 7(4), 563-604.
- Hickman, M. J., Strote, J. N., Scales, R. M., Parkin, W. S., & Collins, P. A. (2021). Police use of force and injury: Multilevel predictors of physical harm to subjects and officers. *Police Quarterly*, 24(3), 267-297.
- Hine, K. A., Porter, L. E., Westera, N. J., & Alpert, G. P. (2018). The understated ugly side of policecitizen encounters: Situation, suspect, officer, decision-making, and force predictors of officer injuries. *Policing and Society*, 28(6), 665-683.
- Hoffman, C. Y., Hinkle, J. C., & Ledford, L. S. (2021). Beyond the "Ferguson Effect" on Crime: Examining its Influence on Law Enforcement Personnel. *Crime & Delinquency*, 00111287211052440.
- Hollis, M. E. (2018). Measurement issues in police use of force: A state-of-the-art review. *Policing*, *41*(6), 844-858.
- Hurst, Y. G., & Frank, J. (2000). How kids view cops the nature of juvenile attitudes toward the police. *Journal of Criminal Justice*, *28*(3), 189-202.
- International Association of Chiefs of Police. (2017). *National Consensus Policy and Discussion Paper on Use of Force*. Alexandria, VA: Contributing Organizations. Retrieved from https://www.theiacp.org/resources/document/national-consensus-discussion-paper-on-use-offorce-and-consensus-policy.

- International Association of Chiefs of Police. (2019). *Media Relations Concepts & Issues Paper*. Retrieved from <u>https://www.theiacp.org/sites/default/files/2019-08/Media%20Paper%20-%202019%202.pdf</u>
- International Association of Chiefs of Police. (2020). *National Consensus Policy and Discussion Paper on Use of Force*. Alexandria, VA: Contributing Organizations. Retrieved from <u>https://www.theiacp.org/sites/default/files/2020-</u> 07/National Consensus Policy On Use Of Force%2007102020%20v3.pdf.
- Jackman, T. (2016, October 15). De-escalation training to reduce police shootings facing mixed reviews at launch. *The Washington Post*. Retrieved from https://www.washingtonpost.com/local/public-safety/de-escalation-training-to-reduce-police-shootings-facing-mixed-reviews-at-launch/2016/10/14/d6d96c74-9159-11e6-9c85-ac42097b8cc0_story.html.
- Jackson, J., Bradford, B., Hough, M., Myhill, A., Quinton, P., & Tyler, T. R. (2012). Why do people comply with the law? Legitimacy and the influence of legal institutions. *British Journal of Criminology*, *52*, 1051-1071.
- Jackson, J., Huq, A. Z., Bradford, B., & Tyler, T. R. (2013). Monopolizing force? Police legitimacy and public attitudes toward the acceptability of violence. *Psychology, Public Policy, and Law, 19*(4), 479–497.
- Jennings, W. G., Hollis, M. E., & Fernandez, A. J. (2019). Deadly force and deadly outcome: Examining the officer, suspect, and situational characteristics of officer-involved shootings. *Deviant Behavior*, 41(8), 969-976.
- Jennings, J. T., & Rubado, M. E. (2017). Preventing the Use of Deadly Force: The Relationship between Police Agency Policies and Rates of Officer-Involved Gun Deaths. *Public Administration Review*, 77(2), 217–226.
- Jetelina, K. K., Gonzalez, J. M. R., & Bishopp, S. A. (2018). Gradual escalation of use-of-force reduces police officer injury. *Injury prevention*, 24(1), 35-40.
- Kaminski, R. J., Digiovanni, C., & Downs, R. (2004). The use of force between the police and persons with impaired judgement. *Police Quarterly*, 7(3), 311-338.
- Kaminski, R. J., Engel, R. S., Rojek, J., Smith, M. R., & Alpert, G. (2015). A quantum of force: The consequences of counting routine conducted energy weapon punctures as injuries. *Justice Quarterly*, 32(4), 598–625.
- Kang, S. H. (2016). Spaced repetition promotes efficient and effective learning: Policy implications for instruction. *Policy Insights from the Behavioral and Brain Sciences*, *3*(1), 12–19.
- Kelle, U. (2006). Combining qualitative and quantitative methods in research practice: purposes and advantages. *Qualitative Research in Psychology*, *3*(4), 293-311.

Klahm IV, C. F., Frank, J., & Liederbach, J. (2014). Understanding police use of force: Rethinking the

link between conceptualization and measurement. *Policing: An International Journal of Police Strategies & Management*.

- Klahm, C. F., & Tillyer, R. (2010). Understanding police use of force: A review of the evidence. *Southwest Journal of Criminal Justice*, 7(2), 214-239.
- Klinger, D. A. (1995). The micro-structure of nonlethal force: Baseline data from an observational study. *Criminal Justice Review*, 20(2), 169-186.
- Klinger, D. A., & Bridges, G. S. (1997). Measurement error in calls-for-service as an indicator of crime. *Criminology*, *35*(4), 705-726).
- Klinger, D. A., & Brunson, R. K. (2009). Police officers' perceptual distortions during lethal force situations: Informing the reasonableness standard. *Criminology & Public Policy*, 8(1), 117-140.
- Knox, D., W. Lowe, and J. Mummolo. 2020. Administrative Records Mask Racially Biased Policing. *American Political Science Review*. <u>https://www.cambridge.org/core/journals/american-political-science-review/article/administrative-records-mask-racially-biased-policing/66BC0F9998543868BB20F241796B79B8</u>
- Knox, D., & Mummolo, J. (2020). Toward a general causal framework for the study of racial bias in policing. *Journal of Political Institutions and Political Economy*, 1(3), 341-378.
- Kramer, R. & Remster, B. (2018). Stop, frisk, and assault? Racial disparities in police use of force during investigatory stops. *Law & Society Review*, *52*, 960-993.
- Krueger, R.A. (1988). Focus Groups: A Practical Guide for Applied Research. Sage Publications: Newbury Park, CA.
- Lautenschlager, R. & Omori, M. (2019). Racial threat, social (dis)organization, and the ecology of police: Towards a macro-level understanding of police use of-force in communities of color, *Justice Quarterly*, 36(6), 1050-1071.
- Lee, J. (2016). Police use of nonlethal force in New York City: Situational and community factors. *Policing and Society, 26*(8), 875-888.
- Lee, H., Vaughn, M. S., & Lim, H. (2014). The impact of neighborhood crime levels on police use of force: An examination at micro and meso levels. *Journal of Criminal Justice*, 42(6), 491-499.
- Liao, T.F. (1994). *Interpreting Probability Models: Logit, Probit, and Other Generalized Linear Models.* Thousand Oaks, CA: Sage.
- Lin, Y. S., & Jones, T. R. (2010). Electronic control devices and use of force outcomes: Incidence and severity of use of force, and frequency of injuries to arrestees and police officers. *Policing: An International Journal of Police Strategies & Management, 33*(1), 152-178.

Lum, C., Koper, C. S., Gill, C., Hibdon, J., Telep, C. W., & Robinson, L. (2016). An evidence-

assessment of the recommendations of the President's Task Force on 21st Century Policing— Implementation and research priorities. Alexandria: International Association of Chiefs of Police.

- MacDonald, J.M., Kaminski, R.J., & Smith, M.R. (2009). The effect of less-lethal weapons on injuries in police use of force events. *American Journal of Public Health*, 99, 2268-2274.
- Maxfield, M.G. & Babbie, E. (2001). Research Methods for Criminal Justice and Criminology. 3rd Ed. Wadsworth: Belmont, CA.
- McLean, K., Wolfe, S. E., Rojek, J., Alpert, G. P., & Smith, M. R. (2020a). Randomized controlled trial of social interaction police training. *Criminology & Public Policy*, 19(3), 805-832. <u>https://doi.org/10.1111/1745-9133.12506</u>
- McLean, K., Wolfe, S. E., Rojek, J., Alpert, G. P., & Smith, M. R. (2020b). Police officers as warriors or guardians: Empirical reality or intriguing rhetoric?. *Justice Quarterly*, *37*(6), 1096-1118.
- Mesloh, C., Henych, M., & Wolf, R. (2008). Less lethal weapon effectiveness, use of force, and suspect & officer injuries: A five-year analysis. National Criminal Justice Reference Service.
- Morabito, E. V., & Doerner, W. G. (1997). Police use of less-than-lethal force: Oleoresin Capsicum (OC) spray. *Policing: An International Journal of Police Strategies & Management*, 20, 680-697.
- Morabito, M. S., & Socia, K. M. (2015). Is dangerousness a myth? Injuries and police encounters with people with mental illnesses. *Criminology & Public Policy*, 14(2), 253-276.
- Morabito, M. S., Socia, K., Wik, A., & Fisher, W. (2017). The nature and extent of police use of force in encounters with people with behavioral health disorders. *International Journal of Law and Psychiatry*, *50*, 31-37.
- Morgan, D.L. (1996). Focus Groups. Annual Review of Sociology, 22,129-152.

Morgan, D.L. (1988). Focus group as qualitative research. Newbury Park, CA: Sage Publications.

- Morgan, M. A., Logan, M. W., & Olma, T. M. (2020). Police use of force and suspect behavior: An inmate perspective. *Journal of Criminal Justice*, 67, 101673.
- Morin, R., Parker, K., Stepler, R., & Mercer, A. (2017). Behind the Badge: Amid protests and calls for reform, how police view their jobs, key issues, and recent fatal encounters between Blacks and Police. Pew Research Center.
- Mourtgos, S. M., & Adams, I. T. (2020). Assessing public perceptions of police use-of-force: Legal reasonableness and community standards. *Justice Quarterly*, *37*(5), 869-899.
- Mourtgos, S. M., Adams, I. T., & Baty, S. R. (2021). Challenging the Ordinality of Police Use-of-Force Policy. *Criminal Justice Policy Review*, 08874034211038346.

Mourtgos, S. M., Mayer, R. C., Wise, R. A., & O'Rourke, H. (2020). The overlooked perspective of

police trust in the public: Measurement and effects on police job behaviors. *Criminal Justice Policy Review*, *31*(5), 639-672.

- Mugford, R., Corey, S., & Bennell, C. (2013). Improving police training from a cognitive load perspective. *Policing: An International Journal of Police Strategies & Management*, 36(2), 312– 337.
- Nagin, D. S., & Telep, C. W. (2017). Procedural justice and legal compliance. *Annual Review of Law* and Social Science, 13, 5–28. https://doi.org/10.1111/1745-9133.12499
- National Conference of State Legislatures. (2022). *Law Enforcement Legislation: Significant Trends*. Retrieved from <u>https://www.ncsl.org/research/civil-and-criminal-justice/law-enforcement-</u>legislation-significant-trends-2021.aspx
- Nix, J., Campbell, B. A., Byers, E. H., & Alpert, G. P. (2017a). A bird's eye view of civilians killed by police in 2015. *Criminology & Public Policy*, *16*(1), 309-340.
- Novak, K. J. (2009). Reasonable officers, public perceptions, and policy challenges. *Criminology & Public Policy*, 8, 153.
- Oberfield, Z. W. (2012). Socialization and self-selection: How police officers develop their views about using force. *Administration & Society*, 44(6), 702-730.
- Olsson-Collentine, A., M. van Assen, M.A., & Hartgerink, C.H. (2019). The prevalence of marginally significant results in psychology over time. *Psychological Science*, *30*: 576-586.
- Paoline, E. A., Terrill, W., & Ingram, J. R. (2012). Police use of force and officer injuries: Comparing conducted energy devices (CEDs) to hands- and weapon-based tactics. *Police Quarterly*, 15(2), 115-136.
- Paoline III, E. A., Terrill, W., & Somers, L. J. (2021). Police officer use of force mindset and street-level behavior. *Police Quarterly*, 24(4), 547-577.
- Papachristos, A.V., Meares, T.L., & Fagan, J. (2012b). Why do criminals obey the law? The influence of legitimacy and social networks on active gun offenders. *The Journal of Criminal Law and Criminology*, 102, 397-440.
- Peck, J.H. (2015). Minority perceptions of the police: A state-of-the-art review. *Policing: An International Journal, 38*(1), 173-203.
- Phillips, S. W., & Sobol, J. J. (2011). Police attitudes about the use of unnecessary force: An ecological examination. *Journal of Police and Criminal Psychology*, *26*(1), 47-57.
- Police Executive Research Forum. (2015a). Critical Issues in Policing Series: Re-Engineering Training on Police Use of Force. Washington, DC: Police Executive Research Forum.
- Police Executive Research Forum. (2015b). *Defining Moments for Police Chiefs*. Washington, DC: Author.

- Police Executive Research Forum (March 2016). *Guiding Principles on use of force*. Washington, DC: Author. https://www.policeforum.org/assets/30%20guiding%20principles.pdf
- Police Executive Research Forum (February 2020). *Refining the role of less-lethal technologies: Critical thinking, communications, and tactics are essential in defusing critical incidents.* Washington, DC: Author. <u>https://www.policeforum.org/assets/LessLethal.pdf</u>
- Police Executive Research Forum. (2021). *What police chiefs and sheriffs need to know about collecting and analyzing use-of-force data*. Washington, DC: Police Executive Research Forum. Available: https://www.policeforum.org/assets/CollectingAnalyzingUOFData.pdf
- President's Task Force on 21st Century Policing. (2015). *Final Report of the President's Task Force on 21st Century Policing*. Washington, DC: Office of Community Oriented Policing Services.
- Raudenbush, S.W. & Bryk, A.S. (2002). *Hierarchical Linear Models, 2nd Edition*. Newbury Park, CA: Sage.
- Reisig, M. D., Mays, R. D., & Telep, C. W. (2018). The effects of procedural injustice during policecitizen encounters: A factorial vignette study. *Journal of Experimental Criminology*, 14(1), 49-58.
- Reisig, M. D., & Parks, R. B. (2000). Experience, quality of life, and neighborhood context: A hierarchical analysis of satisfaction with police. *Justice Quarterly*, *17*(3), 607-630.
- Ridgeway, G. (2007). Analysis of Racial Disparities in the New York Police Department's Stop, Question, and Frisk Practices. Santa Monica, CA: Rand Corporation.
- Ridgeway, G., & MacDonald, J. (2010). Methods for assessing racially biased policing. In S. K. Rice & M. D. White (Eds.), *Race, ethnicity, and policing: new and essential readings* (pp. 180–204). NYU Press. https://doi.org/10.18574/nyu/9780814776155.003.0007
- Rosenbaum, D. P., Schuck, A. M., Costello, S. K., Hawkins, D. F., & Ring, M. K. (2005). Attitudes toward the police: The effects of direct and vicarious experience. *Police Quarterly*, 8(3), 343-365.
- Ross, C. T., Winterhalder, B., & McElreath, R. (2020). Racial Disparities in Police Use of Deadly Force Against Unarmed Individuals Persist After Appropriately Benchmarking Shooting Data on Violent Crime Rates. *Social Psychological and Personality Science*.
- Ross, M. B., Kalinowski, J. J., & Barone, K. (2020). Testing for disparities in traffic stops: Best practices from the Connecticut model. *Criminology & Public Policy*, *19*(4), 1289-1303.
- Rossler, M. T., & Terrill, W. (2017). Mental illness, police use of force, and citizen injury. *Police Quarterly*, 20(2), 189–212.

- Sampson, R. J., & Laub, J. H. (2003). Desistance from crime over the life course. In *Handbook of the life course* (pp. 295-309). Springer, Boston, MA.
- Shadish, W.R., Cook, T.D. & Campbell, D.T. (2002). Experimental and Quasi-Experimental Designs for Generalized Casual Inference. Houghton Mifflin Co: New York.
- Shjarback, J. A., & Nix, J. (2020). Considering violence against police by citizen race/ethnicity to contextualize representation in officer-involved shootings. *Journal of Criminal justice*, 66, 101653.
- Shjarback, J. A., White, M. D., & Bishopp, S. A. (2021). Can police shootings be reduced by requiring officers to document when they point firearms at citizens? *Injury Prevention*, doi:10.1136/injuryprev-2020-043932.
- Skogan, W. G. (2019). Advocate: Community policing. In (D. Weisburd & A. A. Braga Eds.), *Police innovation: Contrasting perspectives*, Second edition (pp. 27–44). Cambridge University Press.
- Skogan, W. G. (2006). Asymmetry in the impact of encounters with police. *Policing & Society*, *16*(2), 99-126.
- Smith, D. (1986). The neighborhood context of police behavior. In A. Reiss and M. Tonry (Eds.), *Crime and justice: A review of research*. Chicago: University of Chicago Press.
- Smith, M.R., Kaminski, R.J., Rojek, J., Alpert, G.P., & Mathis, J. (2007). The impact of conducted energy devices and other types of force and resistance on officer and suspect injuries. *Policing: An International Journal of Police Strategies & Management*, 30, 423-446.
- Smith, M. R., & Petrocelli, M. (2002). The effectiveness of force used by police in making arrests. *Police Practice and Research*, 3(3), 201-215.
- Smith, M. R., Tillyer, R., & Engel, R. S. (2021). An investigation of the use of force by the Fairfax County Police Department. Retrieved from https://wcmdevaks01.fairfaxcounty.gov/policeauditor/sites/policeauditor/files/Assets/reports/RE VISED%20FINAL%20UTSA%20Report%207-6-21.pdf
- Somers, L. J., Terrill, W., Rossler, M. T., & Ingram, J. R. (2020). Examining the Effectiveness of TASERS® at Gaining Citizen Compliance. *Criminal Justice Policy Review*, 31(8), 1234-1255.
- Sparger, J. R., & Giacopassi, D. J. (1992). Memphis revisited: A reexamination of police shootings after the *Garner* decision. *Justice Quarterly*, 9(2), 211-225.
- Stewart, Greg; Henning, Kris R.; and Renauer, Brian, "Public Perceptions Regarding the Use of Force by Police in Portland, Oregon" (2012). Criminal Justice Policy Research Institute Research Research Briefs. <u>https://pdxscholar.library.pdx.edu/cjpri_briefs/3/</u>
- Stroshine, M. S, & Brandl, S. G. (2019). The use, effectiveness, and hazards associated with police use of force: The unique case of weaponless physical force. *Police Practice and Research*, *1-18*.

- Sunshine, J., and Tyler, T. R. (2003). The role of procedural justice and legitimacy in shaping public support for policing. Law & Society Review, 37(3), 513–548.
- Taylor, B., Alpert, G., Kubu, B., Woods, D., & Dunham, R. G. (2011). Changes in officer use of force over time: A descriptive analysis of a national survey. *Policing: An International Journal of Police Strategies & Management*, 34(2), 211-232.
- Taylor, B., & Woods, D. J. (2010). Injuries to officers and suspects in police use-of-force cases: A quasi-experimental evaluation. *Police Quarterly*, 13(3), 260-289.

Tennessee v. Garner, 471 U.S. 1 (1985).

- Terrill, W., & Mastrofski, S. D. (2002). Situational and officer-based determinants of police coercion. *Justice Quarterly*, 19(2), 215-248.
- Terrill, W. & Paoline, E.A. (2012). Examining less lethal force policy and the force continuum: Results from a national use-of-force study. *Police Quarterly*, *16*, 38-65.
- Terrill, W., & Paoline, E. A. (2012). Conducted energy devices (CEDs) and citizen injuries: The shocking empirical reality. *Justice Quarterly*, *29*(2), 153-182.
- Terrill, W., & Paoline, E. A. (2017). Police use of less lethal force: Does administrative policy matter? *Justice Quarterly*, 34(2), 193-216.
- Terrill, W., Paoline, E. A., & Ingram, J. R. (2018). Beyond the final report: A research note on the assessing police use of force policy and outcomes project. *Policing*, *41*(2), 194-201.
- Terrill, W., & Reisig, M. (2003). Neighborhood context and police use of force. *Journal of Research in Crime and Delinquency*, 43, 291-321.
- Trahan, A., & Stewart, D. M. (2013). Toward a pragmatic framework for mixed-methods research in criminal justice and criminology. *Applied Psychology in Criminal Justice*, 9(1).
- Tregle, B., Nix, J., & Alpert, G.P. (2019). Disparity does not mean bias: Making sense of observed racial disparities in fatal officer-involved shootings with multiple benchmarks. *Journal of Crime and Justice*, 42, 18-31.
- Trinkner, R., Mays, R. D., Cohn, E. S., Van Gundy, K. T., & Rebellon, C. J. (2019). Turning the corner on procedural justice theory: Exploring reverse causality with an experimental vignette in a longitudinal survey. *Journal of Experimental Criminology*, doi:10.1007/s11292-019-09358-1
- Turchan, B. (2021). A high-profile police-involved shooting, civil unrest, and officers' perceptions of legitimacy: insights from a natural experiment. *Journal of Experimental Criminology*, 17(3), 507-518.
- Tyler, T. R. (1990). *Why People Obey the Law? Procedural Justice, Legitimacy, and Compliance*. New Haven, CT: Yale Univ. Press

Tyler, T.R., & Huo, Y. (2002). Trust in the law. New York: Russell Sage.

- Tyler, T. R., & Jackson, J. (2014). Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation, and engagement. *Psychology, Public Policy, and Law, 20*(1), 78-95.
- Usher, L., Watson, A. C., Bruno, R., Andriukaitis, S., Kamin, D., Speed, C., & Taylor, S. (2019). *Crisis intervention team (CIT) programs: A best practice guide for transforming community responses to mental health crises.* CIT International.
- Walters, G. D., & Bolger, P. C. (2019). Procedural justice perceptions, legitimacy beliefs, and compliance with the law: A meta-analysis. *Journal of Experimental Criminology*, 15(3), 341-372.
- Weitzer, R., & Tuch, S. A. (2005). Racially biased policing: Determinants of citizen perceptions. *Social Forces*, *83*(3), 1009-1030.
- Weitzer, R., & Tuch, S. A. (2006). *Race and policing in America: Conflict and reform*. Cambridge University Press.
- Wheeler, A. P., Phillips, S. W., Worrall, J. L., & Bishopp, S. A. (2018). What factors influence an officer's decision to shoot? The promise and limitations of using public data. *Justice Research* and Policy, 18, 48–76.
- Wheelock, D., Stroshine, M. S., & O'Hear, M. (2019). Disentangling the relationship between race and attitudes toward the police: Police contact, perceptions of safety, and procedural justice. *Crime & Delinquency*, *65*(7), 941-968.
- Whichard, C., & Felson, R. B. (2016). Are suspects who resist arrest defiant, desperate, or disoriented? Journal of Research in Crime and Delinquency, 53(4), 564-591.
- White, M. D., Mora, V. J., Orosco, C., & Hedberg, E. C. (2021). Moving the needle: Can training alter officer perceptions and use of de-escalation? *Policing: An International Journal*.
- White, M. D., & Ready, J. (2007). The TASER as a less lethal force alternative: Findings on use and effectiveness in a large metropolitan police agency. *Police Quarterly*, 10(2), 170-191.
- White, M. D., & Ready, J. (2010). The impact of the Taser on suspect resistance: Identifying predictors of effectiveness. *Crime & Delinquency*, 56(1), 70-102.
- Willits, D. W., & Makin, D. A. (2018). Show me what happened: Analyzing use of force through analysis of body-worn camera footage. *Journal of research in crime and delinquency*, 55(1), 51-77.
- Wolf, R., Mesloh, C., Henych, M., & Thompson, L. F. (2009). Police use of force and the cumulative force factor. *Policing: An International Journal of Police Strategies & Management*, 32(4), 739-757.
- Wolfe, S., Rojek, J., McLean, K., & Alpert, G. (2020). Social interaction training to reduce police use of force. *The ANNALS of the American Academy of Political and Social Science*. 687(1), 124-145.

- Worrall, J.L. (2000) In defense of the "quantoids": More on the reasons for the quantitative emphasis in criminal justice education and research, *Journal of Criminal Justice Education*, 11(2), 353-361.
- Worrall, J. L., Bishopp, S. A., & Terrill, W. (2021). The effect of suspect race on police officers' decisions to draw their weapons. *Justice Quarterly*, *38*(7), 1428-1447.
- Worden, R. E., and McLean, S. J. (2018). Measuring, managing, and enhancing procedural justice in policing: Promise and pitfalls. Criminal Justice Policy Review 2018, 29(2) 149 –171.
- Worden, R. E., and McLean, S. J. (2017b). Research on police legitimacy: The state of the art. *Policing: An International Journal of Police Strategy and Management, 40*(3), 480–513.

APPENDICES

Appendix A. Project Team

John R. "Rick" Brown



John R. "Rick" Brown is a former Lieutenant Colonel and Deputy Commissioner for Administration and Professional Responsibility of the Pennsylvania State Police (PSP). During his over 29-year tenure, Brown oversaw the PSP's reform and accountability efforts in the areas of personnel misconduct, sexual harassment, use of force, and early intervention/risk management initiatives. He developed the PSP's Equal Employment Opportunity Office's statewide liaison program and had oversight of citizen complaints that alleged discrimination or disparate treatment. Brown also oversaw the PSP's fiveyear Police-Citizen Contact Project, which utilized applied research techniques to assess the extent to which PSP officers engaged in racial or biased-based policing. Brown subsequently oversaw the implementation of proactive training and operational strategies to monitor and prevent racial profiling. In 2010, following a distinguished career in law enforcement, Brown created Transparency Matters, LLC that focuses on building transparent policing policies and process change that provides organizational efficiencies, accountability, diversity, community education, training, and monitoring. Brown is a federal court certified use of force expert.

Robin S. Engel, Ph.D.



Robin S. Engel, Ph.D. is Professor of Criminal Justice and Director of the IACP/UC Center for Police Research and Policy at the University of Cincinnati. She engages in police research and evaluations designed to reduce harm in communities and make police-citizen encounters safer, promoting best practices through academic-practitioner partnerships. Dr. Engel has served as Principal Investigator for over eighty research grants, totaling over twenty-five million dollars, and has published over sixty research articles, books, and chapters, along with dozens of technical reports for practitioners. She has previously been ranked among the top academics, and the number one female in the field of criminal justice/criminology based on publications in prestigious peerreviewed journals. Her work on community violence reduction resulted in several prominent team awards including the 2008 IACP/Motorola Webber Seavey Award for Excellence in Law Enforcement, the 2009 IACP/West Award for Excellence in Criminal Investigations, and the 2008 National Criminal Justice Association's Outstanding Criminal Justice Program Award. Dr. Engel has conducted statistical analyses examining racial/ethnic disparities in policing outcomes for over a dozen jurisdictions. She has served as an expert on policing and violence reduction for panels convened at the White House and 10 Downing Street. In 2017 Dr. Engel was awarded the Distinguished Alumni Award from the School of Criminal Justice at the University of Albany, and in 2022, the O.W. Wilson Award from the Academy of Criminal Justice Sciences. She currently serves as a governor-appointed member of the Ohio Collaborative Community-Police Advisory Board, and as the co-chair of the International Association of Chiefs of Police Research Advisory Committee. She is a consultant on police training for the Ohio Attorney General and serves as a member of the National Police Initiative's Council on Policing Reforms and Race.

Jennifer Calnon Cherkauskas, Ph.D.



Dr. Jennifer Cherkauskas is a senior research associate at the University of Cincinnati Center for Police Research and Policy. She holds a doctorate in Crime, Law, and Justice from The Pennsylvania State University. Dr. Cherkauskas currently works with police agencies across the country as part of research projects that examine police use of force, traffic stops disparities, and violence reduction. She spent three years as the project manager and liaison to the external monitor for the University of Cincinnati Police Division's voluntary reform agenda. Over the last twenty years, she has worked with the Pennsylvania State Police, the Arizona Department of Public Safety, the Ohio State Highway Patrol, the Nebraska State Patrol, and the Tulsa Police Department. She has published articles in *Justice Quarterly, Journal of Crime and Justice, Police Quarterly*, and *Policing*.

Nicholas Corsaro, Ph.D.



Dr. Nicholas Corsaro is an Associate Professor of Criminal Justice at the University of Cincinnati. He holds a PhD in Criminal Justice from Michigan State University. He has published over 30 articles on police interventions, strategies, and organizational processes. He has served as a principal investigator for a number of projects across various urban police agencies and has worked to develop rigorous evidence regarding the most viable, effective, and efficient practices that police have used to address serious crime problems.

Jon D. Kurtz



Jon Kurtz is a Senior Consultant for Transparency Matters, LLC. He is a former/retired Lieutenant Colonel (LTC) and Deputy Commissioner of Staff for the Pennsylvania State Police (PSP). Over a nearly twenty-seven-year career, he served in various areas of the state in patrol, criminal investigation, vice/intelligence, and administrative capacities. LTC Kurtz's contributions to noteworthy events include the State Correctional Institution, Camp Hill, PA Prison Riots, creation of the Pennsylvania Criminal Intelligence Center (PaCIC) and Watch Center, Pittsburgh G-20 Summit, and command of the 2006 Amish School Shooting in Lancaster County. Since retirement from the PSP, LTC Kurtz has divided his time between the assessment of police policies and practices with a focus on use of force, internal investigations, and discipline and the assessment of risk and vulnerability at large venues. LTC Kurtz is a nationally recognized speaker on the topic of school violence. He also is a published author of three novels.

Appendix B: TMLLC Scope of Work

In response to *Request for Proposal, Consultant Services (R20-093 IP), Assessment of Colorado Springs Police Department's Use of Force* issued by the City of Colorado Springs on July 20, 2020, the TMLLC research team submitted an original research proposal for consideration. The overarching purpose of the originally proposed project was to identify patterns and trends in use of force activities by the CSPD with emphasis on any racial, ethnic, gender, or similar disparities across subpopulations.

The specific components of the original proposal were based on a mixed-methods approach and included:

- Robust quantitative analyses of two years of arrest, use of force, and injury data (January 2018-December 2019) to examine the rate and level of force used by officers, while accounting for relevant subject, officer, situational, and community-level factors that have demonstrated predictive validity in previous use of force research studies. Statistical techniques proposed included:
 - Descriptive analyses
 - Bivariate analyses
 - o Multivariate and hierarchical linear modeling analyses
 - Benchmark analyses (including multiple comparison data sources)
 - Group based trajectory modeling comparisons of ten years of data (if available) across peer agencies
- Supplementary qualitative methods to provide additional context to the statistical findings, including:
 - Document reviews (e.g., written CSPD policies/General Orders, and procedures related to the use of force) by national use of force experts
 - Semi-structured interviews of CSPD Chief of Police and other officials responsible for training, policy, and investigations as well as union leadership
 - Focus groups facilitated by TMLLC with 2-3 groups of police officers
- The development of appropriate recommendations based on the quantitative and qualitative findings to further reduce racial/ethnic disparities in police use of force and improve use of force-related policies and procedures.

Based on TMLLC's conversations with the CSPD, it was determined that data from January 1, 2017 to December 2020 would be the most consistent for analysis purposes and the quantitative analyses of this final report reflect this longer time frame. Furthermore, as part of the original scope of work, the TMLLC team was tasked with providing a comparison of the frequency of CSPD use of force incidents to nine peer agencies with similar residential populations, racial/ethnic diversity, agency size, and crime rates. However, there are several significant limitations – documented within Section 2 – that call into question the interpretation and value of these types of comparisons. Therefore, we instead compared CSPD's force policies and practices across peer agencies.

The following study components were added during the RFP process or throughout the course of the study:

- Community Survey and Focus Group
 - During the RFP process, the evaluation team questioned whether an assessment of community perceptions of CSPD or their use of force could be included in TMLLC's proposed research design. CSPD and TMLLC agreed that community perceptions of CSPD were critical to consider.
 - The TMLLC team presented two primary options for gathering information on community perceptions to CSPD leadership for consideration.
 - The scientific standard is a random sample of community members (via phone, online, or mail) to enhance representativeness, but it is more cost-prohibitive, time-intensive, and can be difficult to obtain an acceptable response rate. This approach was complicated by the COVID-19 pandemic, and overall decline in responses rates generally across all types of survey administration.
 - The second option was to conduct a survey based on a convenience sample of any interested community members and obtain more in-depth information from a focus group interview with community members. This is the approach that was recommended by the TMLCC team, and ultimately selected by the CSPD.
- Officer Survey
 - During TMLLC's meeting with the Police Protective Association (PPA), a request for an officer survey was made to more systematically account for officers' perspectives regarding use of force. CSPD leadership agreed.
 - Much of the information gleaned from the focus group discussions with CSPD officers was used to develop this survey.
- In-Depth Review of Pointing of Firearm Incidents
 - Given the limitations of the data collected for pointing of firearms, the CSPD leadership requested a more in-depth qualitative review of a sample of pointing of firearm incidents. The TMLLC team reviewed and assessed a random sample of 140 reports of pointing of firearms incidents from February 3, 2017 to December 31, 2020.

Appendix C: CSPD Reports: Pointing of Firearm, Use of Force, and K9 Use of Force

Figure C.1 CSPD Pointing of Firearm Report (page 1)

Colorado Springs Police Department Pointing Of Firearm Report

Incident Details

Print

Date Received	Date of Occurrence	Time of Occurrence
Record ID Number	CFS Ø	IA #
Date/Time Entered	Entered By	

Incident Summary

Case Report Number:

Supervisor who was notified: Notified Supervisor was an Acting Sergeant (Yes/No) Responding Supervisor responded to scene (Yes/No)

The following factors resulted in a pointing of a firearm:

- · Why and how the contact occurred:
- · Describe the specific safety concern that led to the pointing of a firearm at a person:
- Type of Firearm Pointed:

(Officers with multiple "Reporting Party" will only select PoF Multiple Reporting Parties in the Categories section)

Incident Location

Reporting/Involved Citizen

 Date of Birth:
 Race:
 Ethnicity:
 Gender:

 Addresses [None Entered]

Phone Numbers [None Entered] Role: Suspect

Charges Against Citizen

.

Incident Employees

Assignment at time of incident: Role: Involved Officer Video Footage.

Figure C.1 CSPD Pointing of Firearm Report (page 2)

Tasks

No tasks to show

Running Sheet Entries

No running sheet entries to show

Attachments

No Attachments

Assignment History

No assignment history

Chain of Command History

Author Signature Line

Figure C.2 CSPD Use of Force Report (page 1)

Colorado Springs Police Department Use Of Force Report

Print

Incident Details

Date Received	Date of Occurrence	Time of Occurrence
Record ID Number	CFS #	IA #
Date/Time Entered	Entered By	

Incident Summary

Case Report Number:

The following factors resulted in a use of force:

- · Why and how the contact occurred:
- Describe the force/resistance used against the officer or others:
- Describe the force used by the officer against the individual (If UoF combined with PoF add type of firearm pointed):

Notified Supervisor was an Acting Sergeant: (Yes/No) Responding Supervisor responded to scene: (Yes/No) Photos in DIMS: (Yes/No)

(Officers with multiple "Involved Citizen" will only select UoF TVI or Crowd Control Incident Multiple Involved Citizens in the Categories section)

Incident Location

7100100000

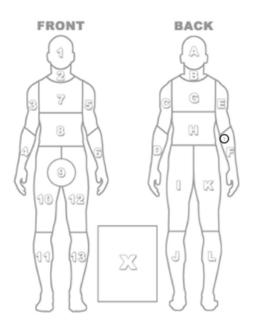
Use of Force Details		
Reason For Using Force	Service Being Rendered	More Than 1 Citizen Involved
Weather Condition	Light Condition	Distance to Citizen
Citizen Injured	Citizen Hospitalized	Citizen Arrested
Citizen Build	Citizen Height	Citizen Influence Assessment
Employee(s) Injured	Employee(s) Taken to Hospital	

Reporting/Involved Citizen

Figure C.2 CSPD Use of Force Report (page 2)

Date of Birth:	Race:	Ethnicity:	Gender:
Addresses (None Enter Phone Numbers (None Role: Suspect			
ype of Resistance Citi	izen Used Against Employee		
njuries Sustained By C	itizen		
Injury		Region	Injury Location
Taser probe impact		G, I	1, 2
FRONT			
ncident Emplo			Video Footage.
tole: Involved Officer			
orce used by this Emp	oyee against Citizen		
	malayee		
njuries Sustained By E	inproyee		

Figure C.2 CSPD Use of Force Report (page 3)



Tasks

No tasks to show

Running Sheet Entries

No running sheet entries to show

Attachments

No Attachments

Assignment History

No assignment history

Chain of Command History

Author Signature Line

Figure C.3 CSPD K9 Use of Force Report (page 1)

Print	Colorado Springs P K9 Use Of Fore		
Incident Details			
Date Received	Date of Occurrence		Time of Occurrence
Record ID Number	CFS #		IA #
Date/Time Entered	Entered By		
Incident Summary Case Report Number:			
The following factors resulted in	a use of force:		
Why and how the contact occur	red:		
Describe the force/resistance u	sed against the officer or others:		
Describe the force used by the operation of the second secon	officer against the individual:		
Responding Supervisor:			
Incident Location			
Canine Utilization De	etails		
Canine deployed released off le	eash	Utilization type	
Utilization result		Canine name	
Suspect was bitten		Suspect bite severity	
Handler was bitten		Handler bite severity	
Bystander was bitten		Bystander bite severity	
Other Employee was bitten		Other Employee bite seve	rity
Canine was injured		Canine injury severity	

Figure C.3 CSPD K9 Use of Force Report (page 2)

Reporting/Involved Citizen

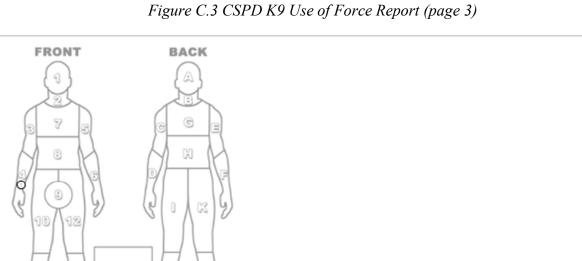
Date of Birth:	Race	Ethnicity: '	Cender:
Addresses [None Entered] Phone Numbers [None Enter Role: Suspect	ared)		

Type of Resistance Citizen Used Against Employee

Injuries Sustained By Citizen Injury Region njury Location Bodily Injury or Pain Only 13, J 1, 2 FRONT BACK 1 C 7 3 9 0 K 9 0 ΣZ Charges Against Citizen

Incident Employees

Assignment at time of incident:			Video Footage:				
Role:							
Force used by this Employee against Citizen							
less lethal force used by this Employee against Citizen							
Force Used	Force Effective	Region	Point of Contact				



Region

Injury Location

Injury

Tasks

No tasks to show

Running Sheet Entries

13

Injuries Sustained By Employee

No injuries noted or visible

ΣZ

No running sheet entries to show

Attachments

No Attachments

Assignment History

No assignment history

Chain of Command History

Author Signature Line

Appendix D. Community Survey Instrument



Colorado Springs Police Department (CSPD) Community Survey



А

lot

To a great

extent

The CSPD has proactively partnered with Transparency Matters, LLC to conduct an independent, comprehensive assessment of the department's use of force. As part of a holistic approach to understanding use of force activities, the CSPD additionally contracted the Transparency Matters research team to develop and independently analyze a survey of community members. This survey is designed to assess your perceptions of, and understand your experiences with, the CSPD. Thank you in advance. Your feedback and time are greatly appreciated.

Section 1: General Attitudes and Perceptions of the CSPD

Please indicate your perceptions of the performance of the CSPD for each of the following questions.						
To what extent	Not at all	A little	Somewhat			
1do CSPD officers treat people fairly?						

1.	do CSPD officers treat people fairly?					
2.	are CSPD officers respectful during interactions with members of the public?					
3.	is the CSPD responsive to the concerns of community members?					
4.	do you trust the CSPD?					
5.	does the CSPD develop relationships with community members (e.g., residents, organizations, and groups)?					
6.	does the CSPD regularly communicate with community members (e.g., websites, e-mails, or public meetings)?					
7.	does the CSPD make it easy for community members to provide input (e.g., comments, complaints, etc.)?					
8.	does the CSPD work together with community members to solve local problems?					
9.	does the CSPD treat people of color in your neighborhood just as fairly as White people?					
10.	is CSPD protection about the same for neighborhoods predominantly composed of people of color as in neighborhoods predominantly composed of White people?					
11.	does the CSPD hold officers accountable for misconduct when it occurs?					
12.	are you satisfied with the overall performance of the CSPD?					
Pl	ease indicate Yes or No to the following questions.				No	Yes
13.	13. Have you ever felt that you were stopped by a CSPD officer just because of your race or ethnicity? If No, skip to Q15					
14.	If yes, did this happen to you in the past 12 months?					
15.	Has anyone in your immediate family ever told you they were stopped by a CSPI their race or ethnicity?	O officer	just beca	use of		

Section 2: Police Interactions and Use of Force

Next, we would like to learn your views on CSPD interactions that involve use of force, which includes the use of actions such as physical techniques or tactics, chemical agents, or weapons such as a Taser or firearm. Please indicate how strongly you agree with each of the following statements.

	in each of the following statements.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	There are situations where a CSPD officer would be justified in physically striking a person resisting their authority.					
	The CSPD sometimes uses more force than necessary to make an arrest.					
	The police generally use a lower level of force than they are legally entitled to in order to avoid or minimize injury.					
4.	CSPD officers use force too often.					
	CSPD officers only use deadly force when it is necessary.					
	When interacting with a CSPD officer, I do not fear being subject to police use of force.					
	The majority of CSPD officers use de-escalation tactics to avoid or minimize force when it is reasonable and safe to do so.					
	CSPD officers are equally likely to use force on White people and people of color.					
Pl	ease indicate Yes or No to the following questions.				Ν	lo Yes
9.	Have you ever experienced the use of force by a CSPD off	icer?			[
10.	Has anyone in your immediate family ever told you they ex	perienced th	e use of force by	a CSPD offi	cer? [
11.	Have you ever witnessed the use of force by a CSPD office	er?			[
				~		
_	Section 3: Personal Inte					
	This section asks questions about types of interactions you m	ay have had 0	with CSPD office 1-2 3-			
1	. How many times in the past 12 months have you had contact with the CSPD for	times	times tim		7.01	r more times
	a traffic stop or vehicle accident as a driver or passenger?					
	.911 emergency calls?				l	
	.non-emergency calls?					
	other contacts or interactions (e.g., attend a community neeting, talk to officer on patrol, etc.)?				I	

If you had zero interactions with CSPD within the last 12 months, please skip to Section 4.

2. For these interactions in the past 12 months, how many times did you	0 times	1-2 times	3-4 times	5-6 times	7 or more times
receive a ticket?					
experience an arrest?					
experience police use of force?					
file a complaint about the interaction?					

2a. If you experienced at least one incident of use of force, please indicate the type of incident, type of force experienced, whether any injuries resulted, etc.

2b. If you filed at least one complaint about an interaction in the past 12 months, please indicate the nature of the complaint(s) and how they were resolved.

	Very satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Very dissatisfied	N/A
3. In the past 12 months, to what extent are you satisfied	d with the o	utcomes of you	ur interaction	on(s) with the	e CSPD for	
traffic stops or vehicle accidents as a driver or passenger?						
911 emergency calls?						
non-emergency calls?						
other contacts or interactions (e.g., attend a community meeting, talk to officer on patrol, etc.)?						
4. In the past 12 months, to what extent are you satisfied for	d with the tr	eatment you re	eceived dur	ring interaction	on(s) with the	CSPD
traffic stops or vehicle accidents as a driver or passenger?						
911 emergency calls?						
non-emergency calls?						
other contacts or interactions (e.g., attend a community meeting, talk to officer on patrol, etc.)?						
5. Please indicate the type of interaction that was your r	nost recent	contact with th	e CSPD in	the past 12 r	nonths:	
Traffic stop or vehicle accident 911 emergen	icy call	Non-emerge	ency call	Other of	contact or inte	raction
Please indicate how strongly you agree with each of these	e statements			st recent cont		
		Strong Disagre	- Dicorre	ee Neutral	Agree Stron	0 N/A
6. The CSPD officer(s) explained their actions and proc	edures.					
Please explain what the officer did or did not do that led t	to your selec	cted response.				
7. The CSPD officer(s) treated me fairly. <i>Please explain what the officer did or did not do that led t</i>	to your selec	□ cted response.				
	243					

Pl	ease indicate how strongly you agree with each of these statements regar	ding only y	our most r	ecent con	tact with	the CSPD	
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
8.	The way the CSPD officer(s) acted toward me was influenced by:						
	a)my race and/or ethnicity.						
	b)my gender.						
	c)my sexual orientation or gender identity.						
	d) my nationality or the language I speak.						
	e)my age.						
	f)my physical, intellectual, or developmental disability.						
	g) the statements I made during the interaction.						
	h)my behavior during the interaction.						

Section 4: Open-Ended Questions

This section gives you the opportunity to provide more detailed feedback to the following question prompts.

1. Please share any additional details you would like to provide about what the officer did or did not do that led to your selected responses to Q8a-8h above (Section 3).

2. Please share details of your most impactful experience with CSPD (if any) that may not have been addressed by previous survey questions.

3. Please share comments regarding specific ways you think that the CSPD could foster transparency, build trust, or improve interactions with the community.

4. Please share your general perceptions about policing in the U.S. that may not have been addressed by previous survey questions.

Section 5: Demographics

Answering the question and perceive the CSPD				er understanding	g about how peo	ople like you inte	eract with
	17 years or younger	18-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years or older
What is your age group?							
	Full time employment	Part time employment	Student	Retired	Unemployed (looking for work)	Unemployed (not looking for work)	Unable to work
Which describes your current employment?							
		American Indian or Alaska Native	Native Hawaiian, or other Pacific Islander	Black or African American	Asian	White	Other
What is your race? (check all that apply)							
		Yes	No				
Are you Hispanic or Latin	10?						
		Some high school	High school degree or	Trade School	Associates Degree	Bachelor's Degree	Graduate Degree
What is the highest level of education you have compl							
		Single, never married	Married or cohabitating	Divorced	Separated	Widow or widower	Other
What is your marital statu	ls?						
		Less than \$25,000	\$25,001-\$50,000	\$50,001- \$100,000	\$100,001- \$250,000	\$250,001- \$500,000	\$500,000 or higher
What is the annual income of your household?	e range						
		Male	Female	Non-binary / th	nird gender	Prefer not to sa	ıy
What is your gender?							
			Homeowner with or without mort	gage Renter	for cash	Occupied with payment of rem	
Which describes your living	g arrangement	s?					
How many years have you	lived in Color	ado Springs?					
What is your zip code?							
		EN	ND OF SUR	VEY			

Appendix E. Responses to all Community survey items

Section 1: General Attitudes and Perceptions of the CSPD

Γο what extent	Not at all	A little	Somewhat	A lot	To a great extent
5do CSPD officers treat people fairly? (n=836)	15.1%	9.3%	15.3%	20.7%	39.6%
7 are CSPD officers respectful during interactions with members of the public? (n=838)	10.6%	11.5%	16.1%	20.6%	41.2%
8is the CSPD responsive to the concerns of community members? (n=834)	16.9%	11.9%	18.1%	21.1%	32.0%
9do you trust the CSPD? (n=840)	22.4%	8.6%	10.0%	16.7%	42.4%
)does the CSPD develop relationships with community members (e.g., residents, organizations, and groups)? (n=838)	18.6%	11.2%	17.3%	23.9%	29.0%
does the CSPD regularly communicate with community members (e.g., websites, e-mails, or public meetings)? (n=829)	16.0%	15.4%	21.7%	21.0%	25.8%
2does the CSPD make it easy for community members to provide input (e.g., comments, complaints, etc.)? (n=831)	21.7%	14.2%	20.1%	20.0%	24.1%
3does the CSPD work together with community members to solve local problems? (n=828)	22.0%	12.1%	18.7%	21.1%	26.1%
4does the CSPD treat people of color in your neighborhood just as fairly as White people? (n=810)	26.7%	8.3%	8.5%	14.4%	42.1%
5 is CSPD protection about the same for neighborhoods predominantly composed of people of color as in neighborhoods predominantly composed of White people? (n=801)	29.8%	7.4%	10.5%	15.0%	37.3%
5does the CSPD hold officers accountable for misconduct when it occurs? (n=808)	29.2%	9.9%	9.5%	20.9%	30.5%
7 are you satisfied with the overall performance of the CSPD? (n=836)	23.2%	7.9%	12.4%	16.9%	39.6%
Please indicate Yes or No to the following questions.				No	Yes
8. Have you ever felt that you were stopped by a CSPD officer just because (n=846)	of your rad	ce or eth	micity?	85.5%	14.5%
P. If yes, did this happen to you in the past 12 months? (n=120)				65.8%	34.2%
). Has anyone in your immediate family ever told you they were stopped by of their race or ethnicity? (n=844)	a CSPD o	officer ju	ist because	80.6%	19.4%

Next, we would like to learn your views on CSPD interactions that involve use of force, which includes the use of actions such as physical techniques or tactics, chemical agents, or weapons such as a TASER or firearm. Please indicate how strongly you agree with each of the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12. There are situations where a CSPD officer would be justified in physically striking a person resisting their authority. (n=794)	11.6%	12.0%	10.1%	27.0%	39.4%
13. The CSPD sometimes uses more force than necessary to make an arrest. (n=788)	15.6%	17.5%	27.3%	19.4%	20.2%
14. The police generally use a lower level of force than they are legally entitled to in order to avoid or minimize injury. (n=786)	17.9%	16.2%	24.4%	23.9%	17.6%
15.CSPD officers use force too often. (n=786)	25.6%	21.1%	23.5%	14.4%	15.4%

16.CSPD officers only use deadly force whe (n=785)	n it is necessa	ry. 2	0.3% 1	1.1% 1	3.9% 21.7%	33.1%
17. When interacting with a CSPD officer, I subject to police use of force. (n=792)		5 I	8.1% 1	2.3% 8	.2% 18.3%	43.2%
 The majority of CSPD officers use de-eso avoid or minimize force when it is reason so. (n=785) 			5.3% 1	1.7% 1	9.5% 23.6%	b 29.9%
19.CSPD officers are equally likely to use for people and people of color. (n=786)	orce on White	2	2.4% 1	2.5% 1	3.9% 18.3%	33.0%
Please indicate Yes or No to the following of	questions.				N	o Yes
20. Have you ever experienced the use of fo	rce by a CSPI	D officer? (r	n=790)		89.0	0% 11.0%
 Has anyone in your immediate family ev officer? (n=792) 	ver told you th	ey experien	ced the use of	f force by a C	SPD 80.6	5% 19.4%
22. Have you ever witnessed the use of forc	e by a CSPD o	officer? (n='	797)		56.1	43.9%
Section 3	3: Personal	Interacti	ons with th	ne CSPD		
This section asks questions about types of	interactions y	ou may have	e had with CS	SPD officers in	n the past 12 me	onths.
9. How many times in the past 12 months contact with the CSPD for	-	l 0 times	1-2 times	3-4 times	5-6 times	7 or more times
a traffic stop or vehicle accident as a driver of $(n=796)$	or passenger?	71.0%	25.0%	2.6%	0.4%	1.0%
911 emergency calls? (n=795)		75.2%	19.8%	2.8%	0.5%	1.8%
non-emergency calls? (793)		56.8%	34.1%	5.0%	1.8%	2.4%
other contacts or interactions (e.g., attend a c meeting, talk to officer on patrol, etc.)? (n=796		38.7%	37.1%	12.2%	4.0%	8.0%
10. For these interactions in the past 12 m many times did you	onths, how	0 times	1-2 times	3-4 times	5-6 times	7 or more times
receive a ticket? (n=643)		83.8%	14.9%	0.8%	0.2%	0.3%
experience an arrest? (643)		95.7%	3.6%	0.3%	0.0%	0.5%
experience police use of force? (n=643)		89.6%	8.2%	1.1%	0.3%	0.8%
file a complaint about the interaction? (n=64	4)	92.4%	5.8%	1.2%	0.0%	0.6%
		Very satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Very dissatisfied
11.In the past 12 months, to what extent an	-	d with the o	utcomes of yo	our interaction	(s) with the CS	PD for
traffic stops or vehicle accidents as a driver of $(n=557)$	or passenger?	35.4%	7.4%	41.7%	4.1%	11.5%
(n=557) 911 emergency calls? (n=557)		33.2%	7.9%	41.7%	5.2%	8.6%
non-emergency calls? (n=578)		34.8%	11.6%	34.4%	6.9%	12.3%
other contacts or interactions (e.g., attend a c meeting, talk to officer on patrol, etc.)? (n=588		48.1%	8.5%	25.7%	6.3%	11.4%
12.In the past 12 months, to what extent an CSPD for	re you satisfie	d with the tr	eatment you	received durin	g interaction(s)	with the
traffic stops or vehicle accidents as a driver of (n=551)	or passenger?	36.5%	6.9%	40.7%	4.7%	11.3%
		33.9%	6.9%	46.6%	4.4%	8.2%
911 emergency calls? (n=551)						10 70/
911 emergency calls? (n=551) non-emergency calls? (n=568)		37.9%	9.0%	36.1%	6.3%	10.7%
 911 emergency calls? (n=551) non-emergency calls? (n=568) other contacts or interactions (e.g., attend a comeeting, talk to officer on patrol, etc.)? (n=578))	37.9% 47.1%	8.1%	27.2%	5.9%	11.8%
911 emergency calls? (n=551) non-emergency calls? (n=568) other contacts or interactions (e.g., attend a c)	37.9% 47.1%	8.1%	27.2%	5.9% ast 12 months:	11.8% (n=610)
 911 emergency calls? (n=551) non-emergency calls? (n=568) other contacts or interactions (e.g., attend a comeeting, talk to officer on patrol, etc.)? (n=578))	37.9% 47.1% most recent oncy call	8.1% contact with (Non-emo	27.2%	5.9% ast 12 months: Other inte	11.8%

Please indicate how strongly you agree with each of these statements	regarding o	nly your mo	st recent co	ntact with	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
 The CSPD officer(s) explained their actions and procedures. (n=507) 	15.8%	11.2%	12.2%	20.7%	40.0%
15. The CSPD officer(s) treated me fairly. (n=508)	13.8%	8.1%	13.0%	19.7%	45.5%
Please indicate how strongly you agree with each of these statements	regarding o	nly your mo	st recent co	ntact with	the CSPD.
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16. The way the CSPD officer(s) acted toward me was influenced					
b)my race and/or ethnicity. (n=493)	45.8%	11.6%	20.9%	12.2%	9.5%
b)my gender. (n=492)	45.1%	10.2%	19.9%	16.5%	8.3%
c)my sexual orientation or gender identity. (n=467)	51.4%	13.1%	26.6%	5.4%	3.6%
d)my nationality or the language I speak. (n=472)	50.6%	12.1%	23.7%	8.1%	5.5%
i)my age. (n=490)	45.1%	12.0%	20.2%	16.5%	6.1%
j)my physical, intellectual, or developmental disability. (n=456)	50.2%	13.2%	23.7%	7.9%	5.0%
k) the statements I made during the interaction. (n=495)	25.1%	8.9%	25.5%	21.4%	19.2%
l)my behavior during the interaction. (n=493)	24.1%	10.8%	21.7%	23.1%	20.3%
(n=456) k)the statements I made during the interaction. (n=495)	25.1%	8.9%	25.5%	21.4%	19

Appendix F. Responses to all Officer survey items

SECTION 1

Please indicate your level of agreement with each of the following statements about CSPD-community relations in Colorado Springs.

	olorado Springs.					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	It is important for CSPD Officers to have detailed knowledge of the people, places, and culture in the areas where they work. $(n=334)$	0.0%	0.9%	8.4%	52.1%	38.6%
2.	The CSPD does a good job of being responsive to community concerns. (n=334)	0.9%	3.3%	15.3%	61.4%	19.2%
3.	There are established police-community partnerships or programs for CSPD Officers to participate in. (n=334)	0.3%	3.9%	19.5%	56.0%	20.4%
4.	The community understands the risks and challenges CSPD Officers face on the job. (n=333)	18.3%	37.8%	21.0%	21.0%	1.8%
5.	I would like to have more training related to strengthening police-community relations. (n=333)	4.8%	16.5%	44.4%	29.4%	4.8%
6.	There are enough CSPD Officers to adequately police the community. (n=333)	85.3%	13.5%	0.6%	0.6%	0.0%
7.	CSPD Officers reflect the diversity of the communities they police. (n=333)	2.1%	14.7%	29.4%	46.9%	6.9%
8.	There is trust between the CSPD and the community. (n=333)	0.6%	7.2%	20.7%	66.7%	4.8%
9.	Due to the number of calls for service, CSPD Officers lack time for proactive work in the community. (n=333)	0.6%	0.6%	1.8%	23.1%	73.9%
10.	As a result of high-profile incidents in the national media, interactions between CSPD Officers and people of color in Colorado Springs have become more tense. (n=333)	0.6%	6.6%	21.9%	50.5%	20.4%
11.	The public understands the circumstances under which CSPD Officers may have to use force and the degree of force they may use. (n=333)	31.2%	42.0%	18.0%	8.4%	0.3%
Th	e people in the communities I routinely patrol	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	care about what happens to police officers. (n=332)	3.0%	12.4%	22.9%	58.1%	3.6%
2.	share my values and beliefs. (n=332)	1.5%	17.2%	44.9%	34.3%	2.1%
3.	are respectful in their interactions with me. $(n=332)$	1.2%	7.2%	31.3%	57.8%	2.4%
4.	can be trusted to do the right thing. $(n=332)$	2.1%	16.0%	44.0%	37.1%	0.9%
5.	are capable and willing to harm police officers. (n=332)	0.0%	15.7%	32.5%	44.0%	7.8%
6.	are willing to assist police if asked. (n=332)	1.8%	13.9%	41.9%	41.6%	0.9%
7.	are willing to call police to report suspicious or criminal activity. (n=332)	0.6%	4.5%	25.0%	63.0%	6.9%
8.	are willing to provide police with information about crime suspects. (n=332)	0.9%	10.2%	28.0%	59.3%	1.5%

Police-community relations in Colorado Springs make me feel	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1proud. (n=334)	1.2%	6.0%	34.1%	53.0%	5.7%
2frustrated. (n=334)	2.4%	29.6%	31.7%	32.9%	3.3%
3fulfilled. (n=334)	1.5%	14.4%	50.3%	30.5%	3.3%
4angry. (n=334)	8.4%	43.7%	35.3%	11.4%	1.2%
5fearful. (n=334)	12.9%	43.4%	32.9%	9.3%	1.5%

Please answer these questions about your frequency of these types of interactions with the public.

Since the beginning of the COVID-19 pandemic (March 2020), how often have you	Never	Seldom (1-5 times per year)	Occasionally (Once every 1-2 months)	Often (3-4 times per month)	Frequently (more than once a week)
1spoken to a citizens' group or school group (virtually or in-person)? (n=333)	50.5%	33.6%	10.2%	2.4%	3.3%
2been thanked by a community member for your service as a police officer? (n=333)	2.4%	12.3%	30.6%	35.1%	19.5%
3appeared at a community event (virtually or in-person)? (n=333)	46.3%	34.2%	13.5%	4.5%	1.5%
4the subject/focus of a negative verbal interaction with a community member while on duty? (n=333)	11.1%	34.2%	27.9%	18.9%	7.8%
5engaged in proactive work in partnership with community members? (n=332)	29.2%	39.8%	16.0%	9.9%	5.1%

SECTION 2 *This section asks questions related to your experiences with and attitudes toward using force.*

Since the beginning of the COVID-19 pandemic (March 2020), how often have you	Never	Seldom (1-5 times per year)	Occasionally (Once every 1-2 months)	Often (3-4 times per month)	Frequently (more than once a week)
1been confronted with circumstances that legally permitted the use of deadly force, but you resolved the situation by non-lethal means? (n=330)	48.2%	36.1%	11.2%	2.7%	1.8%
 physically struggled or fought with a suspect who was resisting arrest? (n=329) 	26.1%	41.0%	27.1%	5.8%	0.0%
3interacted directly with a person armed with a knife, baseball bat, or other weapon besides a firearm? (n=329)	31.9%	33.4%	23.7%	7.6%	3.3%
4interacted directly with a person armed with a firearm? (n=329)	31.9%	42.0%	16.7%	8.5%	0.9%
 pointed your firearm without discharging it? (n=329) 	32.2%	36.8%	21.3%	8.2%	1.5%
 6discharged your service firearm (not including during required training)? (n=329) 	93.6%	6.1%	0.3%	0.0%	0.0%

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Officers are not allowed to use as much force as is necessary to make suspects comply. (n=326)	9.2%	38.3%	22.4%	23.6%	6.4%
2. It is sometimes necessary to use more force than is technically allowable. (n=325)	17.5%	32.9%	24.0%	21.9%	3.7%
3. Police officers are often in situations where it is more appropriate to use physical force than to continue talking to a person. (n=326)	1.5%	18.7%	26.1%	43.9%	9.8%
4. Refraining from using force when you are legally able puts yourself and other officers at risk. (n=326)	1.5%	11.7%	23.9%	38.0%	24.9%
5. Not using force when you could makes suspects more likely to resist in future interactions. (n=326)	3.1%	20.6%	28.5%	31.0%	16.9%
6. Trying to talk through a tense encounter is always safer than using force. (n=326)	7.1%	38.0%	34.1%	16.6%	4.0%
7. It is important that my fellow officers trust my communication skills. (n=326)	0.6%	0.3%	4.6%	56.8%	37.7%
8. I respect officers' ability to talk suspects down rather than using force to make them comply. (n=326)	0.0%	1.2%	11.7%	55.2%	31.9%
9. Use of force should be the last resort for police officers. (n=326)	5.5%	22.1%	27.0%	34.1%	11.4%
10. Generally, if force has to be used, it is better to do so earlier in an interaction with a suspect, opposed to later. (n=326)	2.5%	11.7%	33.4%	33.7%	18.7%
11. Officers spend too much time diagnosing a situation before acting. (n=326)	4.6%	34.1%	35.0%	24.2%	2.2%
12. I have serious concerns about my physical safety when I am at work. (n=326)	9.8%	30.7%	29.1%	24.2%	6.1%
13. In tense citizen encounters, the most important thing is that I get home safely. (n=326)	2.2%	15.0%	23.3%	31.0%	28.5%

Dlagga in diagta norm land of government with again a	f the fellowing at at one on ta	, about the CCDD's was of found unlated mali	aiaa
Please indicate your level of agreement with each o	n the tollowing statements	adout the CAPD's use of force related doub	cies
i lease maleate you level of agreement white each of			eres.

	SPD's use of force policy and/or reporting use of force olicy	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	assists and directs officer decision-making. (n=325)	0.6%	6.5%	21.5%	63.4%	8.0%
2.	is effective in keeping me safe. (n=325)	3.1%	14.2%	43.7%	37.2%	1.9%
3.	is too restrictive. (n=325)	4.0%	28.3%	44.0%	20.6%	3.1%
4.	provides clear guidance for when force can and cannot be used. $(n=325)$	0.6%	9.2%	26.2%	59.1%	4.9%
5.	provides clear guidance regarding how to apply force in situations where it may be necessary. (n=325)	1.2%	14.2%	33.5%	48.9%	2.2%
6.	provides clear guidance for when a force report should be completed. $(n=325)$	0.9%	5.9%	12.9%	64.0%	16.3%
7.	has redundant reporting requirements. (n=325)	0.6%	10.5%	23.4%	43.1%	22.5%
8.	provides for fair supervisory review of use of force reports. (n=325)	2.8%	8.6%	28.0%	55.4%	5.2%
9.	provides for fair investigations into complaints of excessive force. (n=325)	3.4%	11.7%	26.8%	52.0%	6.2%
10.	decreases the likelihood of potential citizen injuries. (n=325)	2.8%	12.9%	44.9%	35.4%	4.0%

A	s a result of the passage of SB 217	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I am confused as to my ability to legally use force. $(n=325)$	8.6%	44.6%	19.1%	22.2%	5.5%
2.	my CSPD peers are confused as to their ability to legally use force. $(n=325)$	1.9%	21.9%	22.5%	44.0%	9.9%
3.	I have become more reluctant to use force even when it is legally appropriate. $(n=325)$	3.4%	21.2%	13.9%	38.2%	23.4%
4.	my CSPD peers have become more reluctant to use force even when it is legally appropriate. $(n=325)$	0.6%	4.9%	11.7%	52.6%	30.2%
5.	I have become more concerned about my safety. (n=325)	1.9%	15.4%	14.8%	44.0%	24.0%
6.	my CSPD peers have become more concerned about their safety. (n=325)	0.9%	4.3%	13.9%	50.8%	30.2%

Please indicate your level of agreement with each of the following statements about recent state legislative changes.

Please indicate your level of agreement with each of the following statements about CSPD supervisors and administrators.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	CSPD first-line supervisors provide adequate tactical and strategic direction related to using force. (n=323)	2.8%	16.7%	30.0%	47.4%	3.1%
2.	CSPD first-line supervisors look out for the personal welfare of his or her subordinates. $(n=322)$	3.4%	7.1%	18.3%	57.5%	13.7%
3.	The CSPD protects its officers from unreasonable lawsuits and accusations. (n=323)	9.0%	18.0%	37.2%	34.1%	1.9%
4.	The CSPD is transparent with the public. (n=323)	2.8%	12.4%	22.3%	4.8%	14.2%
5.	The CSPD provides timely information to the public after critical use of force incidents. (n=323)	6.2%	15.2%	22.9%	44.3%	11.5%

SECTION 3

This section asks for your general perceptions of training and the specific adequacy and usefulness of the CSPD's training related to use of force. Please indicate your level of agreement with each of the following statements.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I consider myself "open" to using new training in my everyday work. (n=322)	0.0%	0.6%	6.5%	66.8%	26.1%
2.	Police officers receive significant amounts of training that is irrelevant to their work. (n=322)	3.7%	27.0%	24.2%	28.9%	16.2%
3.	It is important for police agencies to continually add innovative training. (n=322)	0.0%	0.9%	8.1%	64.9%	26.1%
4.	Training makes me more effective in my work. (n=322)	0.0%	0.9%	7.5%	60.9%	30.8%
5.	Officers can be trained to increase the likelihood of positive encounters with citizens. (n=322)	0.0%	2.5%	15.5%	61.5%	20.5%
6.	Officers can be trained to improve their ability to de-escalate citizen encounters. (n=322)	0.0%	1.2%	6.2%	70.8%	21.7%
7.	Officers can be trained to improve their ability to identify officer safety risks in citizen encounters. (n=322)	0.0%	0.3%	3.7%	72.4%	23.6%
8.	Prior to COVID-19 related restrictions on in-person training, the CSPD provided enough hands-on or interactive learning during training. (n=322)	14.9%	29.8%	24.5%	28.3%	2.5%
9.	In the last six months, the CSPD provided enough hands-on or interactive learning during training. (n=322)	21.1%	35.1%	22.4%	19.6%	1.9%
10.	I would like to have more training related to use of force to perform my job. (n=322)	0.3%	4.7%	21.4%	47.5%	26.1%

These questions ask you to self-assess your skills and/or behaviors for handling interactions with the public by indicating your level of agreement with each statement. For questions related to persons in crisis, this refers to individuals that may be behaving erratically due to circumstances such as mental health, substance use, situational stress, and/or disabilities.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I can recognize when an individual is experiencing a crisis. (n=321)	0.3%	0.0%	3.7%	72.0%	24.0%
2.	I know how to slow down an encounter with a person in crisis. (n=321)	0.3%	0.3%	4.4%	76.0%	19.0%
3.	I know how to resolve conflict between people. (n=321)	0.0%	0.3%	4.1%	75.7%	19.9%
4.	I am comfortable changing my approach with a person in crisis if my initial approach is ineffective. (n=321)	0.0%	0.6%	2.2%	72.9%	24.3%
5.	I am good at identifying officer safety risks in citizen encounters. (n=321)	0.0%	0.0%	4.1%	72.0%	24.0%
6.	I am good at de-escalating encounters with citizens. (n=321)	0.0%	0.3%	5.0%	71.3%	23.4%
7.	I am aware of my own emotional state (i.e., having high emotions) during tense interactions. (n=321)	0.0%	0.6%	3.7%	68.5%	27.1%
8.	I feel confident when using my communication skills. (n=321)	0.0%	0.3%	3.1%	62.0%	34.6%

Now we're going to ask several questions about a series of topics you may have been trained on.²⁷⁵ Thinking about each of these training topics individually, please answer each of the following questions:

Training Topic: Firearms training involving shoot/don't	shoot scenario	DS			
		Never trained on this topic	Within past 6 months	Within past 12 months	than 1
When did you receive this training? (n=321)		0.0%	53.0%	24.0%	23.1%
	Strongly Disagree	Incorree	Neutral	Agree	Strongly Agree
This training increased my skills or knowledge. (n=320)	0.6%	4.7%	14.4%	64.1%	16.3%
This training was directly applicable to my job. (n=320)	0.3%	1.9%	6.6%	64.4%	26.9%
This topic should receive additional training. (n=320)	0.0%	0.3%	8.4%	50.3%	40.9%
Training Topic: Non-lethal use of force weapons training	ng and tactics	;			
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=321)		0.0%	63.6%	31.2%	5.3%

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This training increased my skills or knowledge. (n=320)	3.1%	10.6%	22.8%	52.8%	10.6%
This training was directly applicable to my job. (n=320)	2.5%	4.4%	9.1%	66.9%	17.2%
This topic should receive additional training. (n=320)	0.9%	4.1%	14.7%	52.5%	27.8%

²⁷⁵ If an officer selected "never trained on this topic" for any of the training topics, the three questions asking more specific questions about that training topic were automatically skipped in the electronic survey.

Training Topic: Defensive tactics					
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=321)		0.0%	56.1%	30.8%	13.1%
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This training increased my skills or knowledge. (n=320)	4.7%	18.1%	25.9%	42.5%	8.8%
This training was directly applicable to my job. (n=320)	4.4%	4.4%	14.7%	59.1%	17.5%
This topic should receive additional training. (n=320)	0.0%	2.8%	13.4%	47.8%	35.9%
Training Topic: Crisis Intervention					
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=320)		10.6%	19.4%	26.6%	43.4%
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This training increased my skills or knowledge. (n=285)	0.7%	4.2%	20.4%	53.7%	21.1%
This training was directly applicable to my job. (n=285)	0.7%	1.8%	6.7%	64.6%	26.3%

Training Topic: De-Escalation					
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=320)		2.8%	26.3%	34.7%	36.3%
	Strongly	D .			Strongly
	Disagree	Disagree	Neutral	Agree	Agree
		Disagree 7.1%	Neutral 19.0%	Agree 56.5%	01
This training was directly applicable to my job. (n=310)	Disagree	8		0	Agree

Training Topic: Cultural Diversity / Bias-free policing					
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=320)		0.0%	71.9%	25.3%	2.8%
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This training increased my skills or knowledge. (n=319)	14.4%	28.2%	25.7%	26.7%	5.0%
This training was directly applicable to my job. (n=319)	9.4%	13.2%	21.9%	48.3%	7.2%
This topic should receive additional training. (n=319)					

Training Topic: Legitimacy and procedural justice					
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=320)		12.5%	54.1%	24.1%	9.4%
	Strongly				Strongly
	Disagree	Disagree	Neutral	Agree	Agree
This training increased my skills or knowledge. (n=279)		Disagree 4.7%	Neutral 22.9%	Agree 59.5%	•••
This training increased my skills or knowledge. (n=279) This training was directly applicable to my job. (n=279)	Disagree	U		U	Agree

Training Topic: Interpersonal Communication					
		Never trained on this topic	Within past 6 months	Within past 12 months	More than 1 year ago
When did you receive this training? (n=320)		14.1%	25.9%	29.4%	30.6%
	Strongly	D'			Strongly
	Disagree	Disagree	Neutral	Agree	Agree
This training increased my skills or knowledge. (n=275)	•••	7.3%	Neutral 34.2%	Agree 45.8%	0.
This training increased my skills or knowledge. (n=275) This training was directly applicable to my job. (n=275)	Disagree	0		0	Agree