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Leon County Community-Based Violence Intervention and Prevention Initiative: Phase I Report

Prepared for the Leon County Sheriff's Office



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Tallahassee, Florida

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Report**

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EXECUTIVE SUMMARY

In recent years, Leon County has seen an increase in the number of homicides and nonfatal shootings. To address this problem, the Leon County Sheriff's Office (LCSO) has established a community-wide effort to reduce gun violence. Through a partnership, Florida State University's College of Criminology and Criminal Justice's Center for Criminology and Public Policy (FSU) is contributing to and documenting the various stages of developing a Community-Based Violence Intervention and Prevention Initiative (CVIPI). This report presents FSU's findings from the planning phase of this project. During the planning phase, FSU was tasked with determining the scope of the violent crime problem in Leon County, conducting a systematic literature review of violence intervention strategies, and providing recommendations for evidence-based intervention strategies to the CVIPI Planning Team.

FSU completed an update and expansion of LCSO's (2021) Anatomy of a Homicide report, conducting detailed analyses of LCSO and Tallahassee Police Department (TPD) case files for 733 homicides and nonfatal shootings committed in Leon County over the past four years (June 4, 2019 – June 4, 2023). The sample included 70 homicide incidents, 101 attempted homicides, 356 aggravated assaults with a firearm, and 206 missiles fired into dwellings or conveyances. Suspect(s) were identified in less than half of all incidents, and approximately one-third of cases were officially cleared. One-third of incidents involved arguments, most commonly regarding petty disputes or perceptions of disrespect. Domestic violence and victim use of a weapon both occurred in about 10% of incidents.

Gun violence impacted a total of 1,255 victims in Leon County during the study period, most frequently black males in their mid to late twenties. Most victims were physically uninjured during the incident, and four-fifths cooperated with law enforcement officers over the course of the investigation. LCSO and TPD identified a total of 414 known suspects during the study period, typically black males in their late twenties. Less than a third were affiliated with gangs, and one-fifth served as accomplices. Over 40% of offenders were acquainted with their victims and over 45% were strangers to their victims.

Homicides and nonfatal shootings were not evenly distributed across Leon County. Neighborhoods with high levels of socioeconomic disadvantage and divorce experienced significantly greater incidence rates of gun violence, while those with more racial/ethnic heterogeneity and residential stability experienced significantly lower rates. Approximately four-fifths of incidents clustered in the 32301, 32303, 32304, and 32310 ZIP codes, specifically the Providence, Bond, Frenchtown, and Southside neighborhoods. The rate of gun violence in Providence and Bond in particular was five times higher than that of other communities in Leon County.

In addition to the quantitative assessment of gun violence, FSU conducted a systematic review of the literature for violence intervention strategies aimed at addressing community gun violence to guide the recommendations for a violent crime reduction strategy for Leon County. Specifically, FSU conducted an extensive search of CrimeSolutions.gov and peer-reviewed journals for interventions targeting gun violence and violent assaults. The review largely focused on identifying interventions that have been deemed effective or promising. For each intervention, the review focused on the: (1) intervention activities; (2) methods used for identification of the target population for intervention; (3) intervention effects on gun violence and violent offending behaviors; and (4) barriers to intervention implementation. Additionally, demographic and crime

statistic data were collected by intervention year and location, which was used to inform which intervention strategies may prove effective in Leon County.

Taken together, the quantitative assessment and systematic review indicated focused deterrence, hot spots policing with problem-oriented strategies, and community-oriented policing as strategies with potential for producing the strongest near-term violent crime reduction effects for Leon County. **The primary intervention the CVIPI Planning Team should consider is a focused deterrence strategy that targets both identifiable offender groups and individuals.** A group violence focused deterrence intervention may be helpful in targeting offenders with gang associations as well as the more informal networks involved with acquaintance victimizations, while targeting individuals may be better suited for those incidents perpetrated against strangers. Importantly, given the high rate of argument-based gun violence incidents, the call-in meeting element of focused deterrence should include messaging and connection to services aimed at addressing conflict resolution skills.

To support the focused deterrence strategy, **the CVIPI Planning Team should consider adapting and incorporating elements of hot spots policing, problem-oriented policing, and community-oriented policing.** Given the high concentration of gun violence in certain zip codes and neighborhoods, hot spots policing can help identify the target areas most in need of intervention. Elements of problem-oriented policing, particularly the SARA model (scanning, analysis, response, and assessment), should be considered to assist in identifying those groups and individuals most likely to be involved in gun violence for intervention. Notably, focused deterrence strategies often utilize the SARA model in identifying their target population. Importantly, we found gun violence incidents were more likely to be cleared when victims and witnesses cooperated with the police investigation. Thus, the CVIPI Planning Team should also consider incorporating intervention elements that will bolster community-police relations. Community-oriented policing focuses on developing community-police relationships to identify and respond to local crime problems. In addition to increasing clearance rates, improving community-police relations can help ensure the success of the implemented intervention(s). Specifically, if community residents are resistant to the intervention(s), the intervention(s) may not have their intended effects.

To ensure long-term sustained effects aimed at reducing gun violence, **the CVIPI Planning Team should consider implementing gun violence related prevention programs after implementation of the intervention(s) strategy.** Promising prevention strategies identified by FSU address social/emotional learning and include therapy-based programs, school-based/early childhood prevention programs, and mentoring programs.

Once the CVIPI Planning Team selects their intervention(s) and begins implementation, FSU will evaluate the implementation process. Through a combination of surveys, focus groups, and in-depth individual interviews, FSU will assess fidelity to the intended intervention model(s), participation rates, barriers to implementation, and early indicators of gun violence reduction. These various methods of data collection will include all relevant groups involved in the implementation process, including law enforcement personnel, program participants (i.e., community members at-risk for involvement in gun violence), service providers, and community members. This evaluation will be iterative and interactive, providing immediate feedback to the involved groups to quickly address barriers to successful implementation and bolster effective strategies.

I. INTRODUCTION

In recent years, Leon County¹ has seen an increase in the number of homicides, aggravated batteries, and assaults involving the use of firearms. To address this problem, the Leon County Sheriff's Office (LCSO) has established a community-wide effort to reduce gun and homicide violence. This effort involves a collaborative partnership between LCSO, the Council on the Status of Men and Boys (CSMB), Florida State University's College of Criminology and Criminal Justice's Center for Criminology and Public Policy Research (FSU), the Tallahassee Police Department (TPD), the National Institute for Criminal Justice Reform (NICJR), and SalterMitchell PR. Through this partnership, FSU is describing and assessing the various stages of Leon County's Development of a Community-Based Violence Intervention and Prevention Initiative (CVIPI).

This report describes FSU's role in the planning phase of this project and presents our description and assessment findings. During the planning phase, FSU was tasked with determining the scope of the violent crime problem in Leon County, conducting a systematic literature review of violence intervention strategies, and providing recommendations for an evidence-based intervention strategy to the CVIPI Planning Team.

In Section II of the report, we provide our methods and findings of the quantitative assessment of gun violence in Leon County. FSU determined the scope of the violent crime problem by analyzing the patterns and prevalence of violent crime. Specifically, using data from LCSO and TPD, FSU identified the types of individuals and communities most at risk for violence within Leon County, explored how these risk factors differentially impact specific forms of violence (e.g., fatal vs. non-fatal shootings, domestic vs. non-domestic crimes, etc.), and determined how violent crime in Leon County compares with other counties in Florida.

In Section III of the report, we present the methods and findings of the systematic review of the literature. FSU conducted a systematic review of the scholarly literature and reports from other jurisdictions to identify and evaluate existing evidence-based intervention and prevention programs, including law enforcement-based, partnership-oriented, community-based, youth-focused, and hospital-based interventions. The literature review describes the programs, such as their target population(s), target outcome(s), implementation processes, and their effectiveness for reducing violent crime. Additionally, demographic and crime statistic data were collected for each intervention site.

In Section IV of the report, we present our intervention recommendations that are based upon both the crime data analysis and review of evidence-based interventions. Further, we consider the demographic and crime statistic data for each intervention site that support particular intervention strategies as a good fit based on similarities between Tallahassee's demographics and those of successful intervention sites. Additionally, in making our recommendations, we describe the resources and methods necessary to implement the recommended interventions.

In Section V of the report, we conclude with discussion of our implementation evaluation plan for the intervention phase of the project.

¹ Unless otherwise noted, "Leon County" refers to the unincorporated areas of Leon County as well as the city of Tallahassee.

II. QUANTITATIVE ASSESSMENT OF GUN VIOLENCE

FSU conducted several analyses of gun violence in Leon County to inform the development of the CVIPI. First, we utilized descriptive statistics to provide a broad overview of fatal and nonfatal gun violence in Leon County, both over time and relative to other counties and the state of Florida as a whole. Second, we conducted a detailed review and analysis of the incident, suspect, and victim characteristics of homicides and nonfatal shootings in Leon County over a four-year period based on case files provided by LCSO and TPD. Finally, we examined the spatial distribution of homicides and nonfatal shootings across Leon County at multiple levels of analysis, including ZIP code, census block group, and locally defined neighborhoods. Negative binomial regression models were employed to explore the neighborhood characteristics associated with higher incidence rates of gun violence in Leon County. Although the CVIPI will target gun violence in particular, we included homicides committed with other weapons in all of the quantitative analyses to be consistent with LCSO's Anatomy of a Homicide (2021) report.

Gun Violence in Leon County: Historical Trends and Cross-County Comparisons

Using the most recent data from the Florida Department of Law Enforcement (2020), we examined trends in the overall homicide rate, firearms homicide rate, and firearms assault rate per 100,000 population from 1996 to 2020. Figures 1 to 3 show these trends for Leon County, the state of Florida, and the county most similar to Leon in terms of population size and sociodemographic characteristics, Alachua County.²

As shown in Figure 1, Leon County's homicide rate was well below the state average from the late 1990s until 2010, with a historic low of 1.83 homicides per 100,000 population in 2007. However, over the past decade the homicide rate nearly doubled from 5.46 in 2010 to 9.68 in 2020, at or above the state average for every year (with the exception of 2016). In comparison, Alachua County's homicide rate mirrored that of Leon until 2007, when it experienced a shorter increase in homicide followed by a longer decline, peaking just below the state average with 5.89 homicides per 100,000 in 2020.

Figure 2 compares the firearm homicide rate across Leon County, Alachua County, and the State of Florida with largely similar patterns. Over the past twenty years, Leon County's firearm homicide rate has steadily increased from a low of 0.84 in 1999 to 6.34 in 2020, again surpassing the state average in 2010. In contrast, the firearm homicide rate in Alachua County increased from 1999 until 2010, subsequently declining to a low of 0.39 in 2015; Alachua County's firearm homicide rate just barely surpassed that of the state in 2020 at 4.79 per 100,000.

Figure 3 examines the firearm assault rate, which includes aggravated assaults, aggravated batteries, and missiles fired into dwellings or conveyances (sometimes known as "drive-bys"). In contrast to fatal violence, the nonfatal shooting rate exhibited similar patterns across Leon County, Alachua County, and the State of Florida. Peaking in the late 1990s, the firearm assault rate in all three areas substantially declined until 2003 or 2004, increased moderately until 2007, and subsequently declined until the mid 2010s. Trends in nonfatal shootings diverged across areas in 2014, when Leon County's rate skyrocketed, reaching a high

² Alachua County was identified as the most suitable counterpart for Leon County based on population size, socioeconomic disadvantage, racial/ethnic heterogeneity, and residential instability; each is defined below.

of 168.05 incidents per 100,000 the following year; this spike was not seen in either the State of Florida or Alachua County, which both experienced modest increases. Although Leon County's nonfatal shooting rate returned to levels similar to those of Alachua County in the late 2010s, both counties experienced substantial increases in 2020, remaining well above the state average.

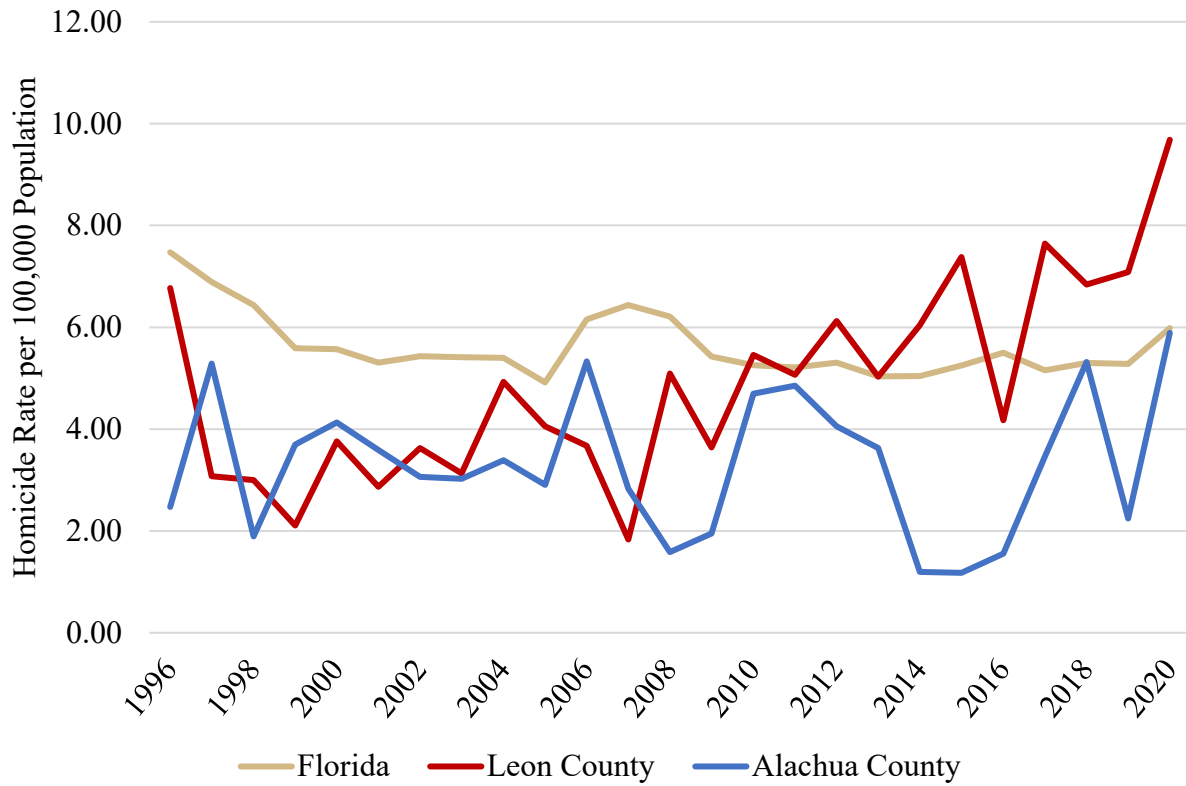
Next, we utilized data from the U.S. Census Bureau's American Community Survey (ACS, 2017-2021 five-year estimates) to compare contextual risk factors across Leon County and the other 66 counties of Florida, including: population size, socioeconomic disadvantage, racial/ethnic heterogeneity, residential instability, familial disruption or percent divorced, percent male, percent aged 18 to 24, and the three crime rates (homicide, firearm homicide, and firearm assault). Consistent with the neighborhood effects literature, socioeconomic disadvantage was calculated as a weighted factor score of five indicators from the ACS: proportion of the population aged 18 to 64 living below the poverty line, proportion of the civilian workforce unemployed, proportion of single female-headed households with children, percentage of the population aged 25 or older with less than a high school degree, and median household income (last item reverse-coded). Principal components factor analysis suggested a one-factor solution with a first eigenvalue of 3.21 (all others below 1) and all factor loadings above 0.62.

Blau's (1977) index was used to calculate racial/ethnic heterogeneity, a measure of a county's racial diversity. The equation for this measure is $1 - \sum p_i^2$, where p_i is the proportion of the population in each racial/ethnic group (White, Black, Hispanic, Asian, and other). This equation creates a variable ranging from 0 to 1 that considers both the relative sizes of the groups and the number of groups in the population. Higher values reflect greater levels of racial/ethnic heterogeneity (Sampson, 1984).

Residential instability (or population turnover) was measured as the weighted factor regression score of the proportion of the population living in renter-occupied housing and the proportion of the population who did not live in the same house as the previous year. Principal components factor analysis suggested a one-factor solution with a first eigenvalue of 1.36.

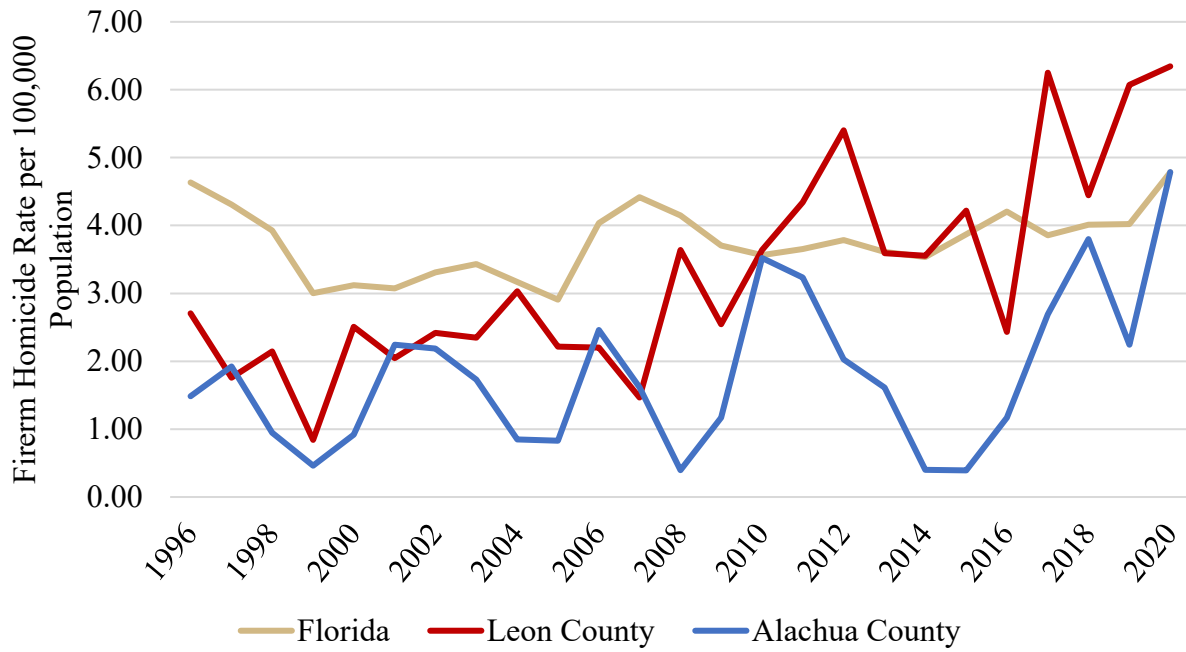
Table 1 shows the raw estimate and percentile of each measure and its component indicators for Leon County, as well as the mean, standard deviation, and range for the other 66 counties in Florida. Percentiles indicate the percentage of counties in Florida at or below Leon County's estimate, and thus provide an easily interpretable snapshot of how Leon County compares to the rest of the state. With a population of nearly 300,000, Leon County ranks in the 67th percentile, indicating that it is equally or more populated than 67% of counties in Florida. Leon County is more socioeconomically disadvantaged than 63% of counties, driven primarily by high rates of poverty (85th percentile) and unemployment (76th percentile). Leon County is also diverse, outranking 82% of counties in the rest of the state; the county has relatively large black and Asian populations, and relatively small white and Hispanic populations. Most notable is Leon County's level of residential instability and age distribution—the county ranks first in the state for population turnover and percentage of residents aged 18 to 24. This is likely due in part to the large student population, as there were approximately 65,000 students enrolled at Florida State University, Florida A&M University, and Tallahassee Community College in 2022. In terms of gun violence, Leon County experienced a higher homicide rate per 100,000 population than 90% of counties, higher firearm homicide rate than 79% of counties, and a higher firearm assault rate than 88% of counties in Florida in 2020.

Figure 1: Homicide rate per 100,000 population, 1996-2020



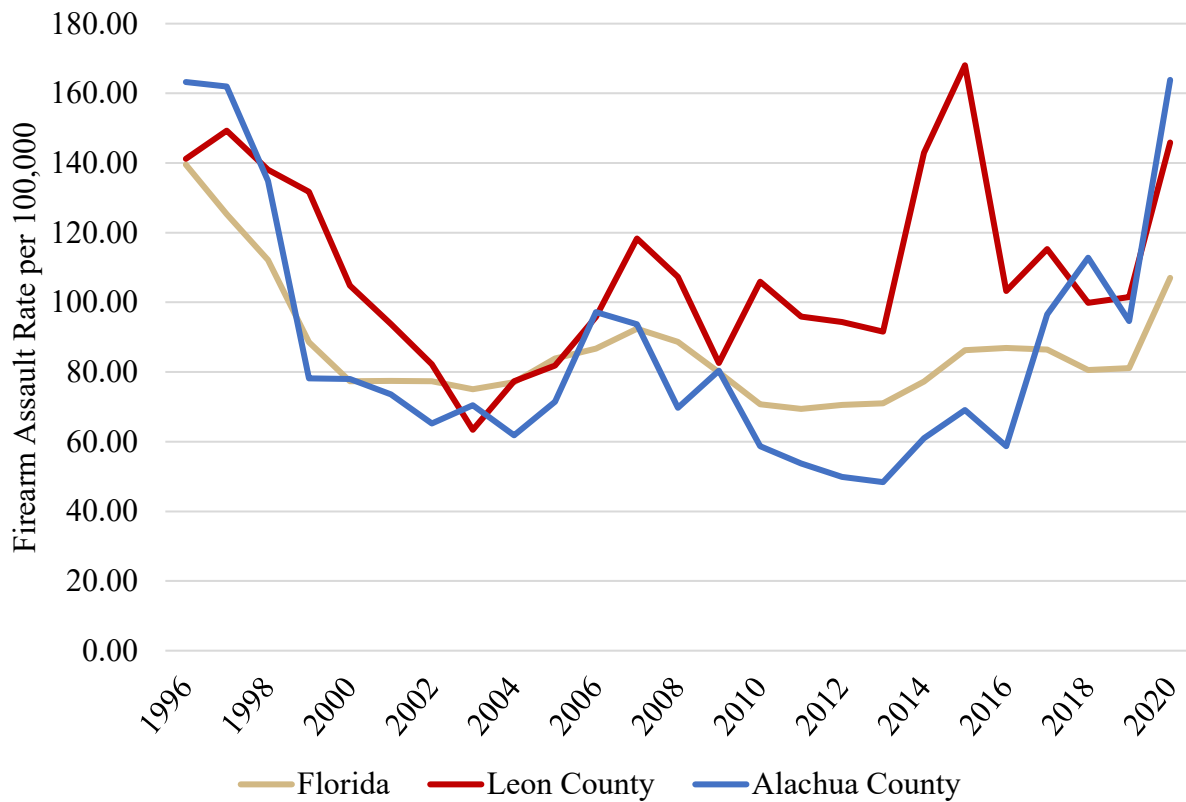
Source: Florida Department of Law Enforcement, 2020

Figure 2: Firearm homicide rate per 100,000 population, 1996-2020



Source: Florida Department of Law Enforcement, 2020

Figure 3: Firearm assault rate per 100,000 population, 1996-2020



Source: Florida Department of Law Enforcement, 2020

Homicides and Nonfatal Shootings in Leon County, 2019-2023

FSU next conducted a detailed review of law enforcement case files for all homicides and nonfatal shootings perpetrated in Leon County between June 4th, 2019 and June 4th, 2023.³ To be consistent with LCSO's Anatomy of a Homicide report (2021), we included all homicides in the analysis, regardless of weapon used. After discussion with LCSO, we defined nonfatal shootings as all incidents in which shots were fired with the intent to harm another person, including aggravated assault, aggravated battery, and missiles fired into dwellings and conveyances. This definition specifically excludes incidents related to self-harm, justifiable self-defense, accidents or negligence, police use of force, and unsubstantiated incidents (e.g., witness reports gunfire but no corroborating evidence is found). Although they are technically classified as aggravated assaults, cases in which a firearm was brandished, used to threaten, or used to strike ("pistol whip") without being discharged were also excluded.

Supervised by one of the co-principal investigators, two trained research assistants served as interns at LCSO to screen and code LCSO and TPD case files using the Tyler records management system. First, data on all incidents potentially fitting the study definition and occurring within the study period were exported from Tyler into Microsoft Excel; research assistants directly exported this information at LCSO, and were provided exported files by TPD. A total of 1,930 homicides, aggravated assaults with a firearm, aggravated batteries with a firearm, and missiles fired into dwellings and conveyances were identified for potential inclusion. The research assistants subsequently used Tyler to review all available case files, marking each case for inclusion or exclusion, noting the rationale for exclusion if applicable. Research assistants also kept a running tabulation of cases that were unclear or difficult to code; these were discussed and resolved periodically during the data collection process by one of the co-principal investigators and the research assistants as a group. In total, 9.74% (N = 188) of all potential incidents were flagged for further review, 37.77% of which (N = 71) were excluded from the sample. Table 2 shows the results of this screening process by agency. The final sample contained 733 incidents, including 70 homicides, 101 attempted homicides, 356 aggravated assaults, and 206 missiles into dwellings or conveyances.

³ We began data collection on June 4th, 2019 as this was the first day in which both LCSO and TPD used Tyler Technologies as a law enforcement records management system (LERMS), eliminating potential artifacts of using alternate data management systems.

Table 1: Comparison of sociodemographic characteristics and crime rates for Leon County and Florida (N = 66 counties)

<i>Variable</i>	Leon County		Florida		
	<i>Estimate</i>	<i>Percentile</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>
Population	290,965	67th	318,921.20	501,156.80	[7,987-2,690,113]
Socioeconomic disadvantage	0.25	63rd	0.00	1.01	[-1.77-2.51]
Percent poverty	21.67%	85th	14.56%	4.87	[5.62-26.80]
Percent unemployed	6.19%	76th	5.53%	1.61	[3.27-11.35]
Percent single female-headed households	8.24%	63rd	7.32%	2.13	[2.38-13.89]
Percent less than high school education	6.80%	4th	13.74%	6.22	[5.30-30.68]
Median household income	\$57,359	51st	\$56,345	11,891	[38,088-88,794]
Racial/ethnic heterogeneity	0.59	82nd	0.47	0.12	[0.24-0.71]
Percent white	55.54%	21st	66.34%	15.56	[13.26-86.91]
Percent black	30.67%	93rd	13.46%	9.14	[2.35-55.22]
Percent Hispanic	6.74%	36th	15.08%	13.33	[2.90-68.51]
Percent Asian	3.60%	93rd	1.65%	1.40	[0.13-5.98]
Percent other	3.44%	60th	3.47%	1.24	[0.96-6.84]
Residential instability	2.86	99th	-0.04	0.94	[-1.60-2.56]
Percent renter-occupied	47.34%	97th	26.67%	7.52	[12.92-48.09]
Percent not in same house	22.52%	97th	14.67%	3.53	[6.57-26.99]
Percent divorced	10.62%	6th	13.30%	1.58	[9.38-17.25]
Percent male	47.50%	2nd	51.61%	3.70	[47.41-65.52]
Percent aged 18 to 24	21.23%	99th	7.52%	2.12	[2.74-20.34]
Homicide rate	9.68	90th	5.06	4.17	[0.00-20.71]
Firearm homicide rate	6.34	79th	3.74	3.30	[0.00-13.80]
Firearm assault rate	145.92	88th	79.00	50.14	[8.43-285.52]

NOTE: SD = standard deviation. Rates calculated per 100,000 population based on data from 2020 from the Florida Department of Law Enforcement (2020). All other estimates derived from the American Community Survey, 2017-2021.

Table 2: Number of incidents by exclusion status and rationale, by agency

Status	LCSO	TPD	Total
Excluded	253	944	1197
Self-harm	3	6	9
Accident	7	15	22
Self-defense	6	18	24
No shots fired	193	720	913
Unsubstantiated	41	173	214
Other	3	12	15
Included	124	609	733
Total	377	1553	1930

For the 733 included incidents, research assistants closely reviewed all available case files in Tyler, including law enforcement reports, witness statements, medical examiner reports, and ballistics reports. Data were collected at two levels of analysis, including the incident level and the person level (victim and/or suspect). All data were initially coded in a narrative text format; after the completion of data collection, the co-principal investigator reviewed the deidentified data files for consistency and recoded each variable into the most common and/or theoretically relevant categories. Table 3 lists all the variables directly exported from Tyler and/or created based on case file information in the current study.

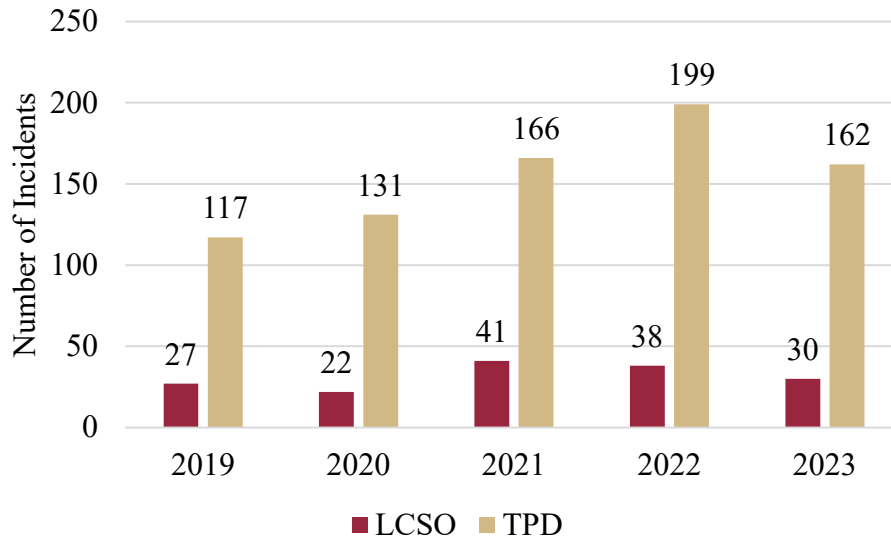
Table 3: Variables collected from LCSO and TPD case files

<i>Incident Characteristics</i>	<i>Suspect/Victim Characteristics</i>
• Date and time • Location type and XY coordinates • Case status and disposition • Statute(s) and UCR code(s) • Number of victims and suspects • Target or direction of gunfire • Weapon type • Circumstances ○ Gang activity ○ Drug activity ○ Argument ○ Domestic violence ○ Victim precipitation/weapon use	• Age, race/ethnicity, and sex • Victim-suspect relationship • Home address ZIP code • Extent of injury and vital status • Marital status and dependents • Educational background • Occupation • Gang affiliation • Military history • Criminal and victimization history • Physical illness and mental health history • Suicidal ideation/behavior • Substance use (during incident and history) • Cooperation with officers (victim only) • Role in incident (suspect only)

Incident Characteristics

The 733 incidents involved a total of 1,255 victims and 414 identified suspects. Incidents involved an average of 1.71 victims (standard deviation = 1.22; range = 1-11) and 1.35 suspects (standard deviation = 0.67; range = 1-4). Figure 4 shows the number of homicides and nonfatal shootings per year by agency; data for the two incomplete years (2019 and 2023) were extrapolated based on average counts per missing month from 2020-2022. Over four-fifths of all incidents occurred within TPD's jurisdiction, including three-fourths of all homicides. Homicides and nonfatal shootings steadily increased over the five-year period, peaking in 2022 with 237 incidents in total, including 18 homicides and 219 nonfatal shootings. Projections for the remainder of 2023 suggest a modest decline in gun violence for both agencies.

Figure 4: Homicides and shootings by agency, 2019-2023



Note: Data for 2019 and 2023 projected based on monthly data from 2020-2022.

Figure 5 presents the number of incidents by time of day, in half-hour intervals. Incidents most frequently occurred in the early hours of the morning, between 1:00 and 3:00 am. In contrast to nonfatal shootings, homicides were much more equally dispersed over the course of a day; the highest number of incidents (4) occurred between 6:30 and 7:30 pm. Figure 6 shows the average number of incidents by month for the three years with complete data, 2020-2022. December, April, and July experienced the most incidents, averaging between 18 and 20 annually; February experiences the fewest with an average of 11.

Descriptive statistics for homicides, nonfatal shootings, and the sample in total are presented at the incident level in Table 4. The total number of observations without missing data is included for each variable, and we urge caution in interpreting descriptive statistics with high levels of omissions. Overall, suspect(s) were identified in 42.56% (N = 312) of incidents; homicides were significantly more likely to be solved (81.43%, N = 57) than assaults (38.46%, N = 255). Approximately one-third of cases were cleared by arrest or exceptional/administrative means during the study period; homicides were significantly more likely to be cleared (71.43%, N = 50) than nonfatal shootings (28.05%, N = 186), likely a reflection of the increased investigative resources these cases receive. Over 80% of incidents occurred in private residences

(including homes and apartment complexes) or on the street, in parking lots, or inside parking garages. Nonfatal shootings were significantly more likely to take place at home (42.88%, N = 280) or on the street (39.51%, N = 258) than homicides, although these two locations remained the most common.

Figure 5: Time of incident for homicides and nonfatal shootings, 2019-2023

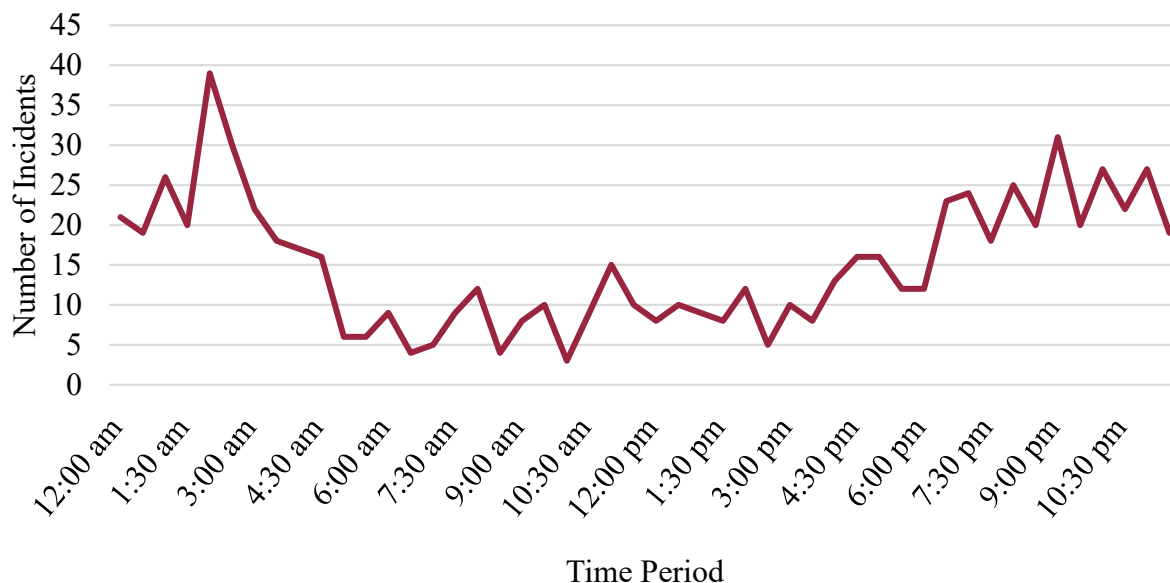
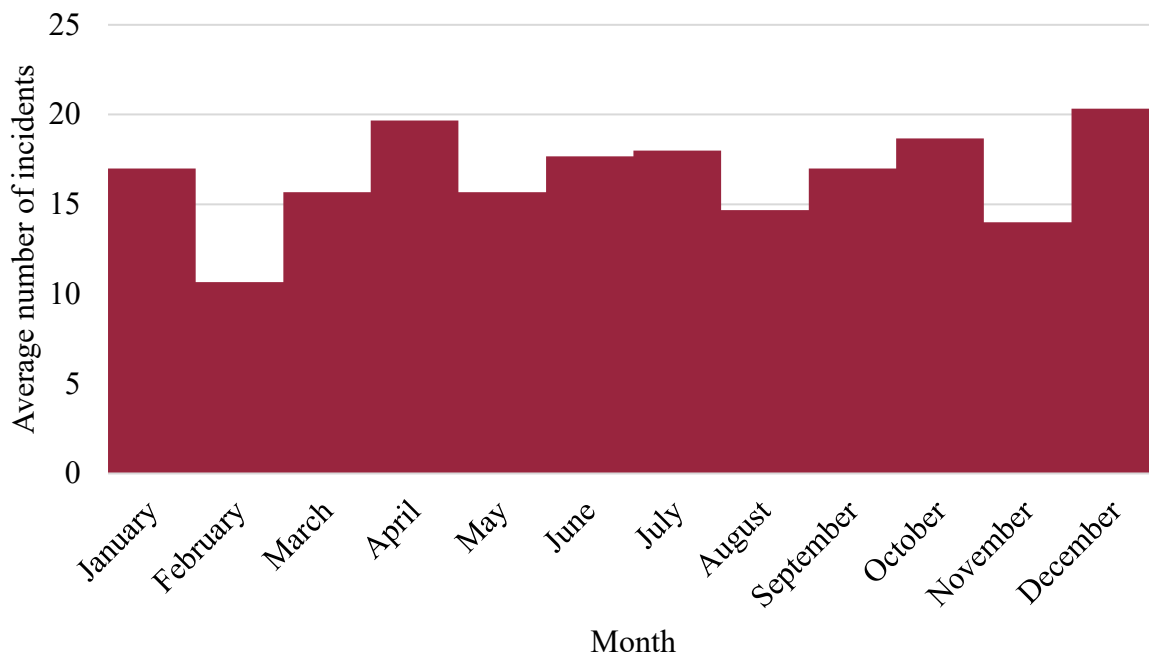


Figure 6: Average number of homicides and nonfatal shootings by month, 2020-2022



Detailed weapon information was often unavailable, but handguns were the most frequent for both homicides and nonfatal assaults. Seven homicides involved weapons other than firearms, including four stabbings, one bludgeoning, and two strangulations. Less than half of all

incidents involving a suspect firing directly at another person (48.69%, N = 334), though this was significantly more common among homicides (86.89%, N = 53) than assaults (44.96%, N = 281). Less than 10% of nonfatal assaults involved warning shots fired into the air, at the ground near a person, or at an object intended to scare the victim(s).

We also collected information on motivating circumstances, including whether the incident was related to an argument, gang warfare, drug trading or usage, domestic violence, or victim precipitation (e.g., when the victim possesses or uses a weapon to instigate a dispute). These circumstances are not mutually exclusive (more than one can be coded per case), and percentages were calculated treating missing data as a true negative (or the absence of the circumstance). Due to high levels of missing data on these variables, we urge caution in their interpretation, as some circumstances likely suffer from systematic underreporting (e.g., gang and drug activity) and it is highly unlikely that all or even most cases with missing circumstance information were true negatives. It is also of limited utility to compare circumstances across homicides and nonfatal assaults, as the latter are substantially more likely to remain unsolved, and thus have higher levels of missing data and underreporting. Accordingly, we focus primarily on homicide circumstances because of the higher quality data available for this crime type.

With these limitations in mind, relatively few cases involved confirmed gang- or drug-related violence (6.28%, N = 46 for gangs and 13.51%, N = 99 for drugs). Nevertheless, both circumstances were significantly more common among homicides than nonfatal assaults: 17.14% (N = 12) of homicides involved gang warfare and 41.43% (N = 29) involved drug trafficking and/or usage. Among homicides involving drugs, 18 were drug-related robberies or deals gone wrong, illegal drugs were found at the scene of the crime in 9 cases, and another 2 incidents were suspected to be related to the drug trade. Domestic violence occurred in 10.50% (N = 77) of incidents, mostly involving intimate partners (8.59%, N = 63). A smaller proportion of homicides were related to domestic violence (7.14%, N = 5), almost all of which were perpetrated by intimate partners. Victims used or possessed weapons in 9.82% of incidents (N = 72), 77.78% of which were firearms (N = 56); homicide victims were significantly more likely to possess or use weapons during the altercation than nonfatal assaults (25.71%, N = 18), nearly 90% of which were firearms.

Arguments were the most common circumstance underlying incidents, for the sample in total (33.02%, N = 242) as well as for homicides (40.00%, N = 28) and assaults (33.81%, N = 214). The subject of the argument was unknown for approximately one quarter of these cases (27.69%, N = 67). Of arguments with known subjects, 15.70% (N = 38) involved jealousy or perceived infidelity, 4.96% (N = 12) were related to illegal drugs, 7.44% (N = 18) were motivated by theft or robbery, 8.68% (N = 21) involved financial and property disputes, and 9.50% (N = 23) centered on various other topics. A small number of cases were not immediately precipitated by an argument (5.79%, N = 14), but involved ongoing conflicts (“beefs”) among the suspect(s) and victim(s). The most common type of known argument was caused by petty disagreements, often motivated by perceived disrespect (20.3%, N = 59). Examples included taking too long at the cash register; cutting in line; moving plants without permission; refusing to leave a room or property when asked; looking at the suspect(s); honking excessively; stealing a parking space; and criticizing the suspect(s)’ clothing. The use of violence—even lethal violence—over minor conflicts to defend one’s reputation is consistent with the “code of the street” mentality frequently endorsed by youth in disadvantaged, urban areas (Anderson, 1999).

Table 4: Incident characteristics of homicides and nonfatal shootings, 2019-2023

Variable	Homicide		Assault		Total	
	(N = 70)		(N = 633)		(N = 733)	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Agency						
LCSO	16	22.86%	108	16.29%	124	16.92%
TPD	54	77.14%	555	83.71%	609	83.08%
Total	70	100.00%	663	100.00%	733	100.00%
Year						
2019	10	14.29%	55	8.30%	65	8.87%
2020	21	30.00%	132	19.91%	153	20.87%
2021	17	24.29%	190	28.66%	207	28.24%
2022	18	25.71%	219	33.03%	237	32.33%
2023	4	5.71%	67	10.11%	71	9.69%
Total	70	100.00%	663	100.00%	733	100.00%
Suspect(s) identified*						
Yes	57	81.43%	255	38.46%	312	42.56%
No	13	18.57%	408	61.54%	421	57.44%
Total	70	100.00%	663	100.00%	733	100.00%
Case Cleared*						
Yes	50	71.43%	186	28.05%	236	32.20%
No	20	28.57%	477	71.95%	497	67.80%
Total	70	100.00%	663	100.00%	733	100.00%
Location*						
Residence	16	25.40%	280	42.88%	296	41.34%
Street/parking lot	20	31.75%	258	39.51%	278	38.83%
Business	8	12.70%	40	6.13%	48	6.70%
Public place	6	9.52%	9	1.38%	15	2.09%
Other	6	9.52%	32	4.90%	38	5.31%
Multiple	7	11.11%	34	5.21%	41	5.73%
Total	63	100.00%	653	100.00%	716	100.00%
Weapon*						
Handgun	24	34.78%	293	44.19%	317	43.31%
Rifle	1	1.45%	31	4.68%	32	4.37%
Shotgun	0	0.00%	9	1.36%	9	1.23%
Unspecified firearm	32	46.38%	293	44.19%	325	44.40%
Other	7	10.00%	0	0.00%	6	0.82%
Multiple	6	8.70%	37	5.58%	43	5.87%
Total	70	100.00%	663	100.00%	732	100.00%

Variable	Homicide		Assault		Total	
	(N = 70)		(N = 633)		(N = 733)	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Target of gunfire*						
Air, ground, or object	0	0.00%	53	8.48%	53	7.73%
Vehicle	5	8.20%	131	20.96%	136	19.83%
Structure	3	4.92%	160	25.60%	163	23.76%
Person	53	86.89%	281	44.96%	334	48.69%
Total	61	100.00%	625	100.00%	686	100.00%
Circumstance ^a						
Gang-related*	12	17.14%	34	5.37%	46	6.28%
Drug-related*	29	41.43%	70	11.06%	99	13.51%
Domestic violence	5	7.14%	72	11.37%	77	10.50%
Victim used weapon*	18	25.71%	54	8.53%	72	9.82%
Argument	28	40.00%	214	33.81%	242	33.02%

NOTE: Chi square and Fisher's exact tests were used to examine whether each variable significantly varied across homicide and nonfatal shootings; statistically significant differences ($p < 0.01$) are marked next to the variable name with an asterisk.

^a Percentages calculated assuming missing data is a true negative. Interpret with caution.

Victim Characteristics

Table 5 presents descriptive statistics for 1,253 victims involved in homicide and nonfatal shooting incidents in Leon County, 2019 to 2023; information on two homicide victims was unavailable. Victims of gun violence tended to be in their late twenties, with an average age of 28.86 (standard deviation = 13.60; range = 0-92). Examining age groups, 12.92% were under 18, 35.30% were between 18 and 24, 42.57% were between 25 and 49, and 9.21% were above the age of 50. The majority of victims identified as non-Hispanic black (82.11%, $N = 982$), followed by non-Hispanic white (13.13%, $N = 157$); less than 5% of victims identified as Hispanic, Asian, or some other race/ethnicity. There were no significant differences in age or race/ethnicity across victims of homicide and assault. Approximately three-fifths of all victims were male (59.67%, $N = 725$), but homicide victims were significantly more likely to be male (89.71%, $N = 61$) than victims of nonfatal shootings (57.89%, $N = 664$). Females were significantly more likely to be victims of drive-by shootings or missiles into dwellings (43.67%, $N = 214$) than their male counterparts (22.48%, $N = 163$). Over half of all victims (56.64%, $N = 627$) lived in the same ZIP code in which the incident occurred, including 57.05% of nonfatal shooting victims ($N = 599$) and 49.12% of homicide victims ($N = 28$).

A relatively large proportion of victims of both homicides and nonfatal assaults are suspected gang members (41.90%, $N = 525$). These figures should be interpreted with caution, however, as research assistants were unable to confirm most gang affiliations exported from the Tyler data management system in the actual case files; this discrepancy may be due to the maintenance of separate gang-specific databases to which FSU did not have access. Accordingly, we were unable to identify the specific gang(s) each victim was affiliated with in nearly 98% of cases.

Among victims of nonfatal shootings, most experienced no physical injury (56.73%, N = 430). Women (74.83%), white persons (70.97%), juveniles (62.64%), and individuals over 50 (74.14%) were least likely to be shot or injured during nonfatal assaults. Approximately four-fifths of assault victims cooperated with law enforcement (e.g., provided verbal and/or written statements, participated in line-ups, identified suspect(s), etc.), yet 18.37% (N = 165) refused to aid the investigation. Victims who did not cooperate with law enforcement typically refused to give statements at all, lied or provided information that contradicted physical evidence, and/or refused to identify known suspect(s) due to fear, stigma against snitching, or a desire to retaliate. Victims of missiles shot into dwellings or conveyances were significantly more likely to cooperate with law enforcement (85.92%, N = 238) than victims of aggravated assault (75.41%, N = 322) or attempted homicide (79.17%, N = 133). Assault victims who were male (74.44%, N = 367), non-Hispanic black (79.33%, N = 545), and aged 18 to 24 (77.29%, N = 245) were significantly less likely to cooperate with law enforcement than other sociodemographic groups. Cases in which victims cooperated with law enforcement were significantly more likely to be cleared than incidents without cooperation⁴.

Suspect Characteristics

Table 6 displays descriptive statistics for all identified suspects (N = 414) involved in homicides and nonfatal shootings in Leon County, 2019-2023. Like their victims, perpetrators of gun violence tended to be in their mid to late twenties, with an average age of 27.27 (standard deviation = 11.38; range = 13-77). Examining age groups, 11.80% were under 18, 41.02% were between 18 and 24, 41.55% were between 25 and 49, and 5.63% were above the age of 50. The vast majority of suspects identified as non-Hispanic black (83.82%, N = 316), followed by non-Hispanic white (13.26%, N = 50); less than 3% of suspects identified as Hispanic, Asian, or some other race/ethnicity. Most suspects were male (87.41%, N = 354), especially homicide perpetrators (93.90%, N = 77). There were no significant differences in age, race/ethnicity, or sex between homicide and assault suspects. Unlike their victims, most suspects offended outside of their own ZIP codes (57.20%, N = 155); homicide perpetrators, however, were significantly more likely than their counterparts to offend close to home (73.33%, N = 33).

Relative to their victims, a smaller proportion of suspects were suspected gang members (28.02%, N = 116); nonfatal shooters were significantly more likely to be affiliated with gangs (30.00%, N = 99) than homicide offenders (20.24%, N = 17). Nevertheless, these statistics should be interpreted with caution for the data limitations discussed earlier.

Suspects varied in their extent of criminal involvement, with a small number acting in an accessory capacity (e.g., persons who drove getaway vehicles, helped to dispose of evidence, engaged in planning, etc.). Most suspects played a major role in their crimes (82.69%, N = 277), although homicide offenders were significantly more likely to serve as accomplices (25.68%, N = 19) than assault perpetrators (14.94%, N = 39).

⁴ Due to high levels of missing data, we were unable to provide accurate descriptive statistics for the other victim risk factors listed in Table 3.

Table 5: Characteristics of homicide and nonfatal shooting victims, 2019-2023

Characteristic	Homicide		Assault		Total	
	N = 69		N = 1184		N = 1253	
	<i>N/Mean</i>	<i>Percent/SD</i>	<i>N/Mean</i>	<i>Percent/SD</i>	<i>N/Mean</i>	<i>Percent/SD</i>
Age	30.00	13.22	28.79	13.62	28.86	13.60
Race/ethnicity						
White	11	16.18%	146	12.94%	157	13.13%
Black	52	76.47%	930	82.45%	982	82.11%
Hispanic	3	4.41%	39	3.46%	42	3.51%
Asian	2	2.94%	10	0.89%	12	1.00%
Other	0	0.00%	3	0.27%	3	0.25%
Total	68	100.00%	1128	100.00%	1196	100.00%
Sex*						
Male	61	89.71%	664	57.89%	725	59.67%
Female	7	10.29%	483	42.11%	490	40.33%
Total	68	100.00%	1147	100.00%	1215	100.00%
Same ZIP code						
Yes	28	49.12%	599	57.05%	627	56.64%
No	29	50.88%	451	42.95%	480	43.36%
Total	57	100.00%	1050	100.00%	1107	100.00%
Gang affiliation						
Yes	35	50.72%	490	41.39%	525	41.90%
No/Unknown	34	49.28%	694	58.61%	728	58.10%
Total	69	100.00%	1184	100.00%	1253	100.00%
Injury						
Fatal	--	--	0	0.00%	--	--
Nonfatal	--	--	328	43.27%	--	--
None	--	--	430	56.73%	--	--
Total	--	--	758	100.00%	--	--
Cooperated						
Yes	--	--	714	79.51%	--	--
No	--	--	165	18.37%	--	--
Not applicable	--	--	19	2.12%	--	--
Total	--	--	898	100.00%	--	--

ABBREVIATION: SD = standard deviation.

NOTE: Victim information unavailable for two homicides. Chi square, Fisher's exact, and t tests were used to examine whether each variable significantly varied across victims of homicide and assault; statistically significant differences ($p < 0.001$) are marked next to the variable name with an asterisk.

Table 6: Characteristics of identified homicide and nonfatal shooting suspects, 2019-2023

Characteristic	Homicide N = 84		Assault N = 330		Total N = 414	
	N/Mean	Percent/SD	N/Mean	Percent/SD	N/Mean	Percent/SD
Age	26.25	9.06	27.52	11.87	27.27	11.38
Race/ethnicity						
White	8	10.67%	42	13.91%	50	13.26%
Black	65	86.67%	251	83.11%	316	83.82%
Hispanic	2	2.67%	7	2.32%	9	2.39%
Asian	0	0.00%	0	0.00%	0	0.00%
Other	0	0.00%	2	0.66%	2	0.53%
Total	75	100.00%	302	100.00%	377	100.00%
Sex						
Male	77	93.90%	277	85.76%	354	87.41%
Female	5	6.10%	46	14.24%	51	12.59%
Total	82	100.00%	323	100.00%	405	100.00%
Same ZIP code*						
Yes	33	73.33%	104	46.02%	116	42.80%
No	12	26.67%	122	53.98%	155	57.20%
Total	45	100.00%	226	100.00%	271	100.00%
Gang affiliation*						
Yes	17	20.24%	99	30.00%	116	28.02%
No/Unknown	67	79.76%	231	70.00%	298	71.98%
Total	84	100.00%	330	100.00%	414	100.00%
Role*						
Primary offender	55	74.32%	222	85.06%	277	82.69%
Accomplice	19	25.68%	39	14.94%	58	17.31%
Total	74	100.00%	261	100.00%	335	100.00%

ABBREVIATION: SD = standard deviation.

NOTE: Chi square, Fisher's exact, and t tests were used to examine whether each variable significantly varied across victims of homicide and assault; statistically significant differences (p<0.05) are marked next to the variable name with an asterisk.

Victim-Suspect Relationship

Table 7 shows the victim-suspect relationship across homicide and nonfatal shootings in Leon County, 2019-2023. Percentages were calculated based on the total number of victim-suspect pairs with a known relationship (N = 713).⁵ The most common relationship was strangers (45.43%, N = 293), followed by acquaintances (40.16%, N = 259), intimate partners

⁵ For example, there are a total of six victim-suspect pairs for an incident with two victims and three suspects. These percentages will not exactly match related variables at the incident or person level (such as domestic violence) as the unit of analysis is distinct.

(9.77%, N = 63), and family members (4.65%, N = 30). Homicides were significantly more likely to involve acquaintances (52.48%, N = 53) than nonfatal assaults ($p < 0.05$).

Table 7: Victim-suspect relationship for homicides and nonfatal shootings, 2019-2023

Victim-suspect relationship	Homicide		Assault		Total	
	N = 154		N = 559		N = 713	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Intimate partner	3	2.97%	60	11.03%	63	9.77%
Family member	4	3.96%	26	4.78%	30	4.65%
Acquaintance	53	52.48%	206	37.87%	259	40.16%
Stranger	41	40.59%	252	46.32%	293	45.43%
Total	101	100.00%	544	100.00%	645	100.00%

Spatial Analysis of Homicides and Nonfatal Shootings in Leon County, 2019-2023

Using location information provided by LCSO and TPD, we geocoded all incidents with valid addresses ($N = 727$) and mapped them onto block groups as defined by the 2020 U.S. Census using ArcGIS Pro. We subsequently used this information to merge contextual information at the block group level from the American Community Survey (ACS, 2017-2021) in order to examine neighborhood effects on gun violence in Leon County.

Table 8 shows the number of homicides and nonfatal shootings per ZIP code, as well as the rate per 10,000 population. Four-fifths of incidents occurred in four ZIP codes (32301, 32303, 32304, and 32310) despite representing just under half of Leon County's population. ZIP Code 32310 has the highest rate of gun violence in the county at 84.46 incidents per 10,000 population, greater than the next highest by a factor of 1.63.

Table 8: Number of homicide and nonfatal shooting incidents and rate per 10,000 population by ZIP code

ZIP Code	N	Rate
32310	119	84.46
32304	238	51.91
32301	112	34.54
32305	68	32.67
32303	121	23.91
32308	18	8.03
32311	16	7.54
32312	24	7.51
32307	1	5.69
32309	8	2.39
32317	2	1.38
32306	0	0.00

We also linked incidents to specific neighborhoods in Tallahassee, using the designations for block groups established by the City of Tallahassee Neighborhood Revitalization Strategy Area Plan (2021). The number of gun violence incidents as well as the rate per 10,000 population are shown in Table 9 for four neighborhoods located in downtown Tallahassee. Providence and Bond are located within the 32310 ZIP code; Frenchtown spans parts of 32303 and 32304; and Southside is located in 32301. Although Frenchtown (located just north of Florida State University) had the largest number of incidents with 76, Providence experienced the highest rate with 163.01 incidents per 10,000 population. The Providence and Bond neighborhoods have a rate of gun violence five times higher than other neighborhoods, while the Southside and Frenchtown neighborhoods have a rate between two and three times greater. In sum, these results suggest that gun violence interventions should be geographically targeted in these areas.

Table 9: Number of homicide and nonfatal shooting incidents and rate per 10,000 population by neighborhood

Neighborhood	N	Rate
Providence	29	163.01
Bond	55	151.68
Southside	26	83.15
Frenchtown	76	74.81
Other	541	30.29

To visualize the spatial distribution of gun violence, Figure 7 plots all homicides (shown in red) and nonfatal shootings (shown in black) on a map of Leon County; yellow lines represent major roads and highways, while light grey lines separate block groups. As previously noted, most gun violence in Leon County occurred in the city of Tallahassee. Figure 8 shows the same map focusing on downtown Tallahassee. Incidents clustered heavily in the neighborhoods immediately north of Florida State University (Frenchtown) and surrounding Florida A&M University (Providence, Bond, and Southside). In contrast, neighborhoods in northeast Tallahassee experienced relatively little gun violence.

Figures 9 and 10 replicate these two maps, yet color block groups in darker shades of blue based on their quintiles for socioeconomic disadvantage. Socioeconomic disadvantage was calculated as a weighted factor score of four indicators from the ACS: proportion of the civilian workforce unemployed, proportion of single female-headed households with children, percentage of the population aged 25 or older with less than a high school degree, and median household income (last item reverse-coded).⁶ Both figures suggest a correlation between socioeconomic disadvantage and the spatial distribution of gun violence, as incidents were much more common in the most impoverished areas.

Figures 11 and 12 replicate these maps again, substituting darker shades of purple for increased levels of owner-occupied housing across block groups (ACS, 2017-2021). A similar pattern emerged, such that areas with greater residential stability or less population turnover appeared to experience fewer incidents of gun violence.

⁶ The percentage of the population living in poverty was not available at the block group level.

Figure 7: Map of homicides and nonfatal shootings in Leon County, 2019-2023

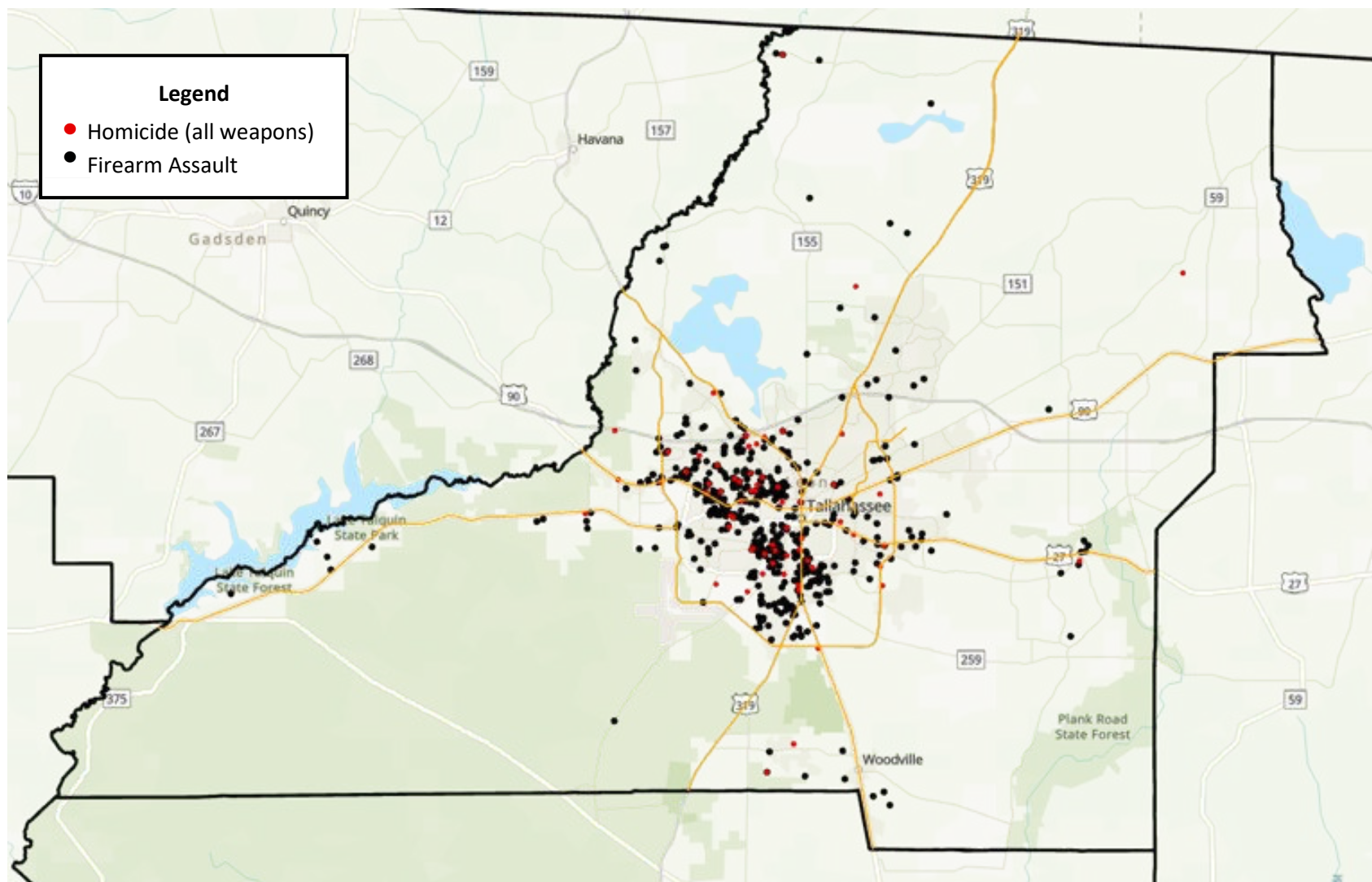


Figure 8: Map of homicides and nonfatal shootings in Tallahassee, 2019-2023

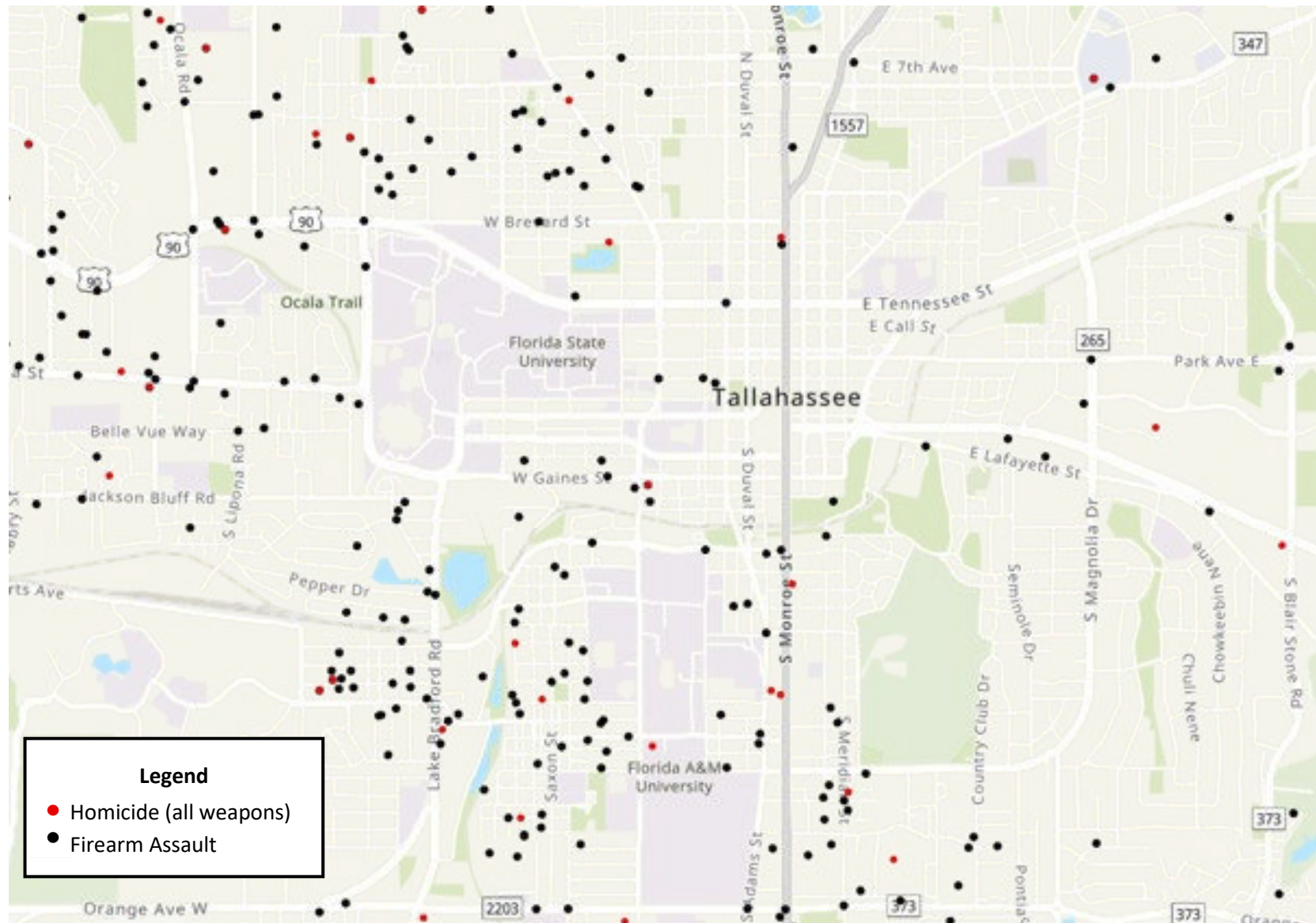


Figure 9: Map of homicides and nonfatal shootings in Leon County, 2019-2023 by block group quintile of socioeconomic disadvantage

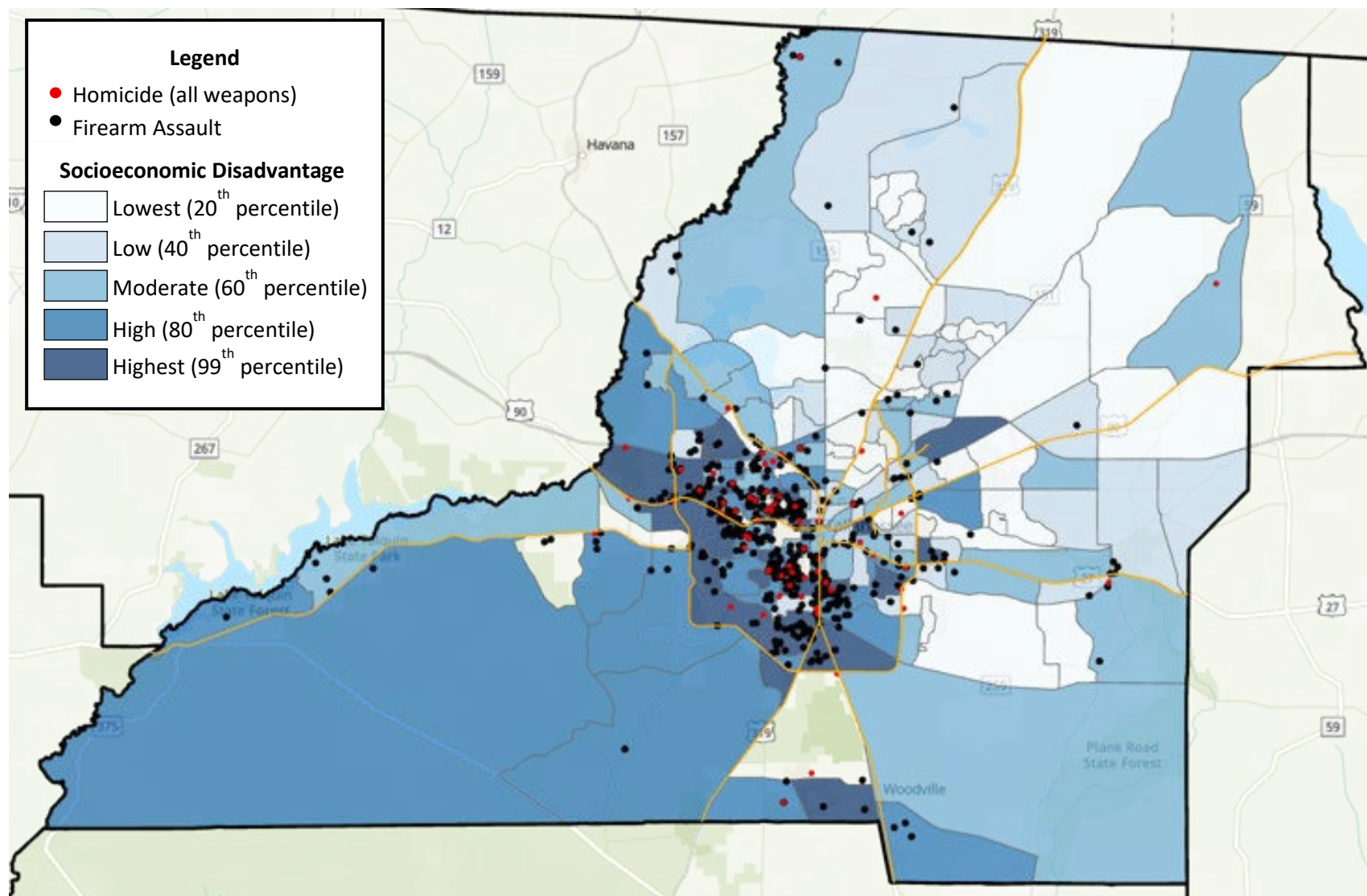


Figure 10: Map of homicides and nonfatal shootings in Tallahassee, 2019-2023 by block group quintile of socioeconomic disadvantage

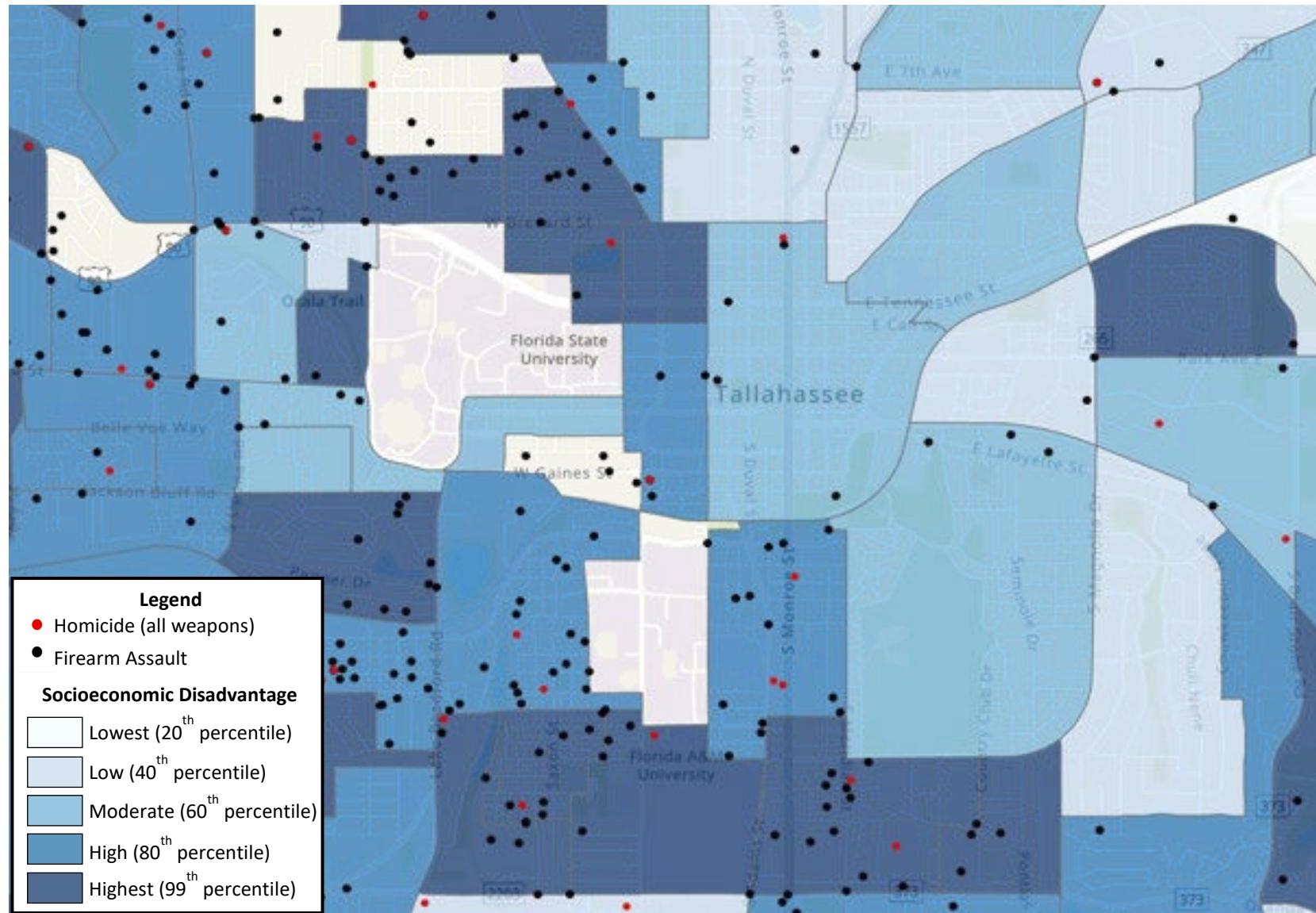


Figure 11: Map of homicides and nonfatal shootings in Leon County, 2019-2023 by block group quintile of owner-occupied housing

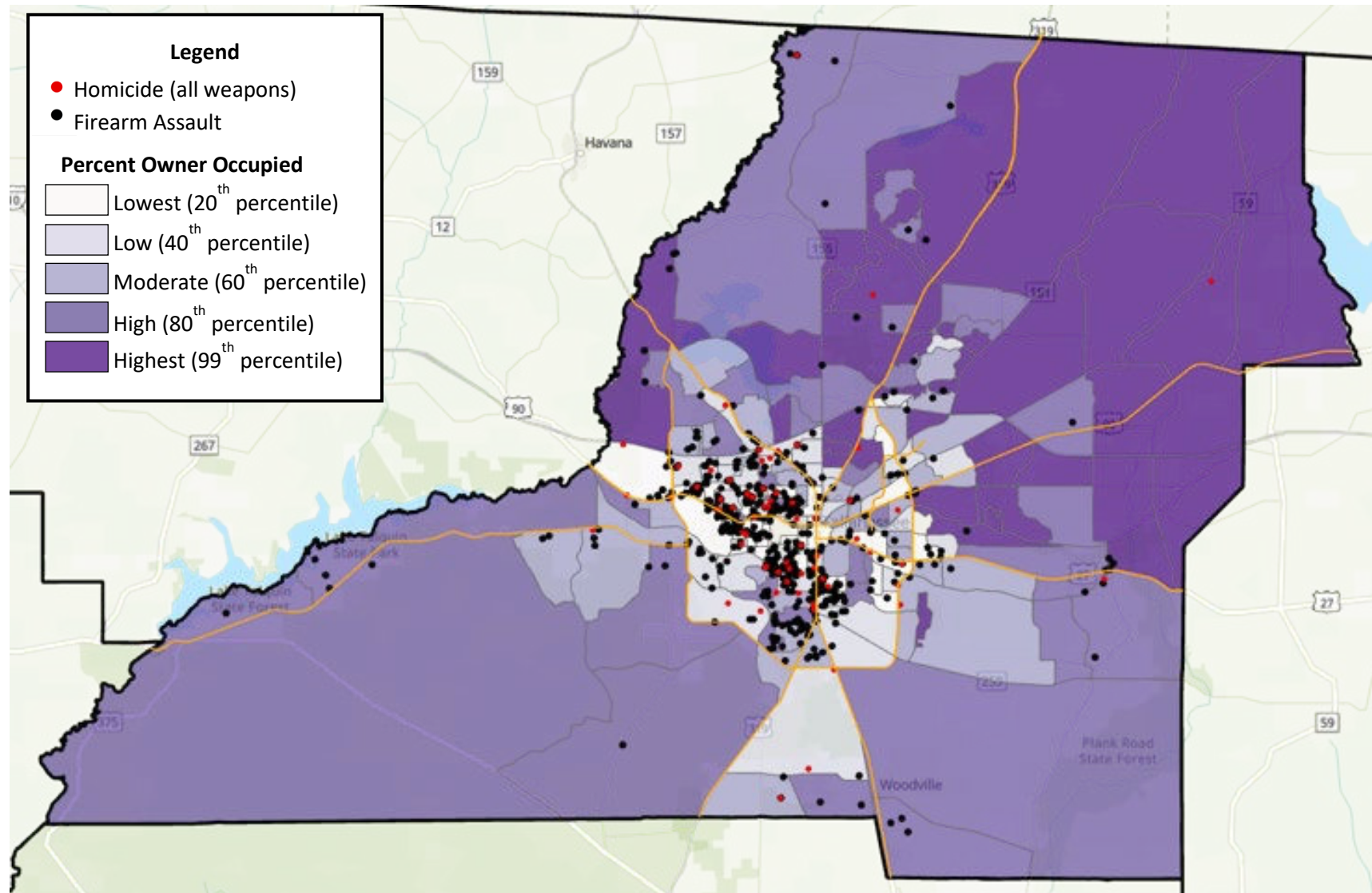
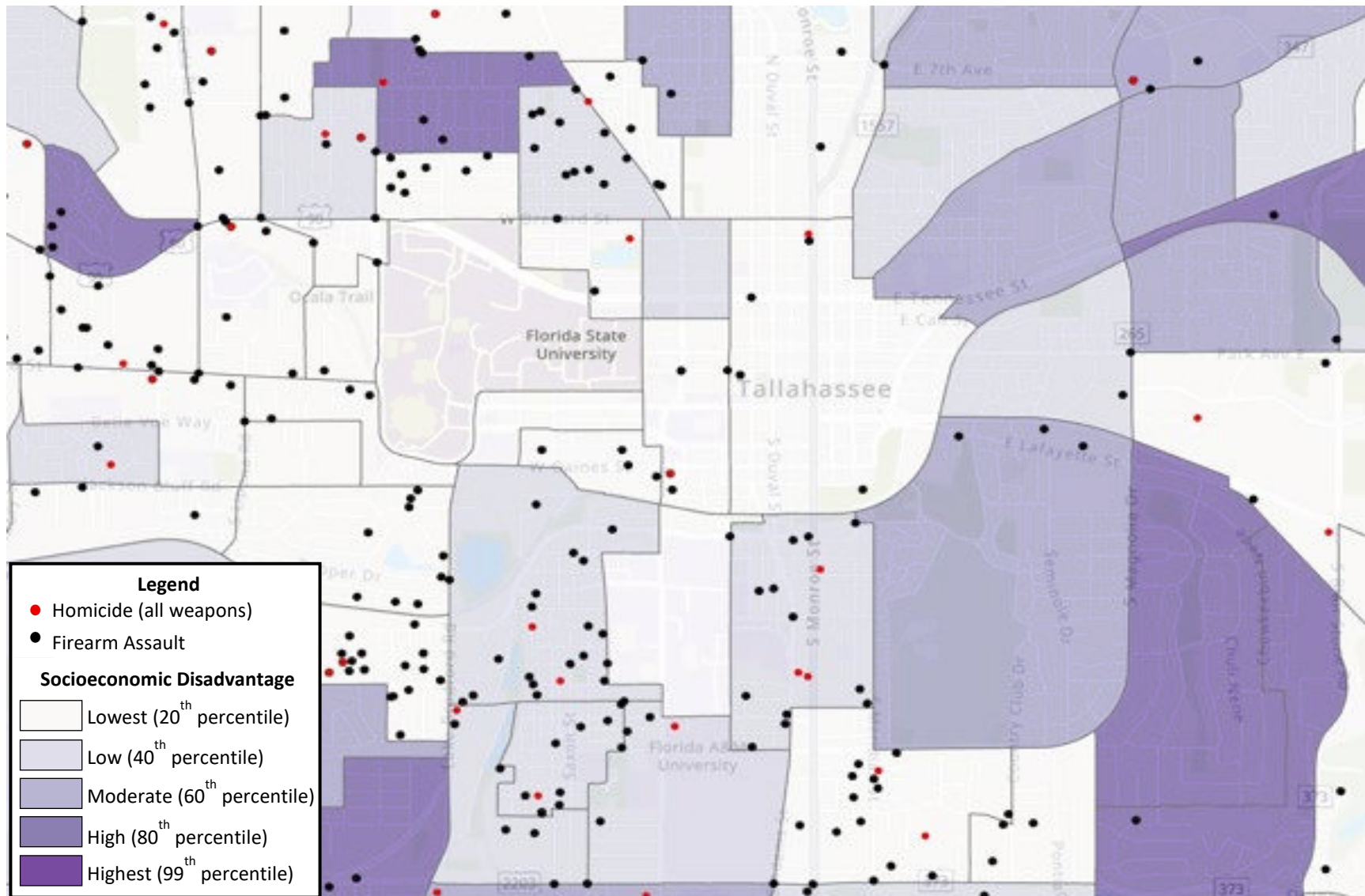


Figure 12: Map of homicides and nonfatal shootings in Tallahassee, 2019-2023 by block group quintile of owner-occupied housing



To quantify the association between neighborhood characteristics and the frequency of gun violence, a negative binomial regression model was used to predict the number of homicides and nonfatal shootings from 2019-2023 by block group (N = 191).⁷ Contextual correlates included socioeconomic disadvantage (operationalized as in Figures 9 and 10), racial/ethnic heterogeneity, residential stability (percent of the population living in owner-occupied housing) percent divorced, percent male, and percent aged 18 to 24 (see description of measures for Table 1). All measures were standardized prior to analysis, and the logged population was included as an exposure.

Table 10 presents the results of the negative binomial regression model, including incidence rate ratios (IRR) and 95% confidence intervals. Statistical significance is indicated by asterisks next to the IRR. A one-standard deviation increase in socioeconomic disadvantage was associated with a significant 72.1% increase in the incidence rate of gun violence in a block group (calculated as $(IRR - 1) * 100\%$; $(1.721 - 1) * 100\% = 72.1\%$). In contrast, one standard deviation increases in racial/ethnic heterogeneity and residential stability decreased the incidence rate of gun violence by 22.7% and 47.9%, respectively. Finally, a one standard deviation increase in the divorce rate increased the gun violence incidence rate by 24.3%. Percent male and percent aged 18 to 24 had no statistically significant impact on the incidence rate of gun violence. These results are consistent with the prior empirical research on homicide, violence, and social disorganization (Sampson et al., 1997; Land et al., 1990).

Table 10: Negative binomial regression on homicides and nonfatal shootings in 191 block groups, 2019-2023

Predictor	IRR	95% CI
Socioeconomic disadvantage	1.721***	[1.413-2.095]
Racial/ethnic heterogeneity	0.773**	[0.651-0.919]
Residential stability	0.521***	[0.404-0.671]
Percent divorced	1.243*	[1.022-1.511]
Percent male	0.956	[0.805-1.136]
Percent aged 18 to 24	1.187	[0.908-1.552]

ABBREVIATIONS: IRR = incidence rate ratio; CI = confidence interval

* p < 0.05 ** p < 0.01 *** p < 0.001

To facilitate the interpretation of these findings, we calculated the predicted number of homicides and nonfatal shootings a block group would theoretically experience (marginal effects). A block group with average levels of all model covariates is predicted to have 2.34 incidents over the four-year period. Figure 13 shows predicted numbers of incidents for a block group with average levels of all covariates except sociodemographic disadvantage (ranging from -3 to 3 standard deviations). As socioeconomic disadvantage increases above the mean (standard deviation of 0), block groups are predicted to experience more incidents of gun violence. Block groups at one standard deviation above the mean are predicted to experience 4.03 incidents, or approximately one a year; at the most extreme, block groups at three standard deviations above the mean experience nearly 12 incidents, or about 3 annually. In contrast, as socioeconomic

⁷ Sensitivity analyses using multiple imputation for chained equations (MICE) on the full sample of 206 block groups yielded virtually identical results, available upon request.

disadvantage decreases below the mean, gun violence plummets. Block groups at one standard deviation below the mean are predicted to experience 1.36 incidents, or approximately two to three a year; at the most extreme, block groups at three standard deviations below the mean experience nearly 0.46 incidents, or less than one every eight years.

Figure 13: Predicted four-year counts of homicides and nonfatal shootings per block group across levels of socioeconomic disadvantage

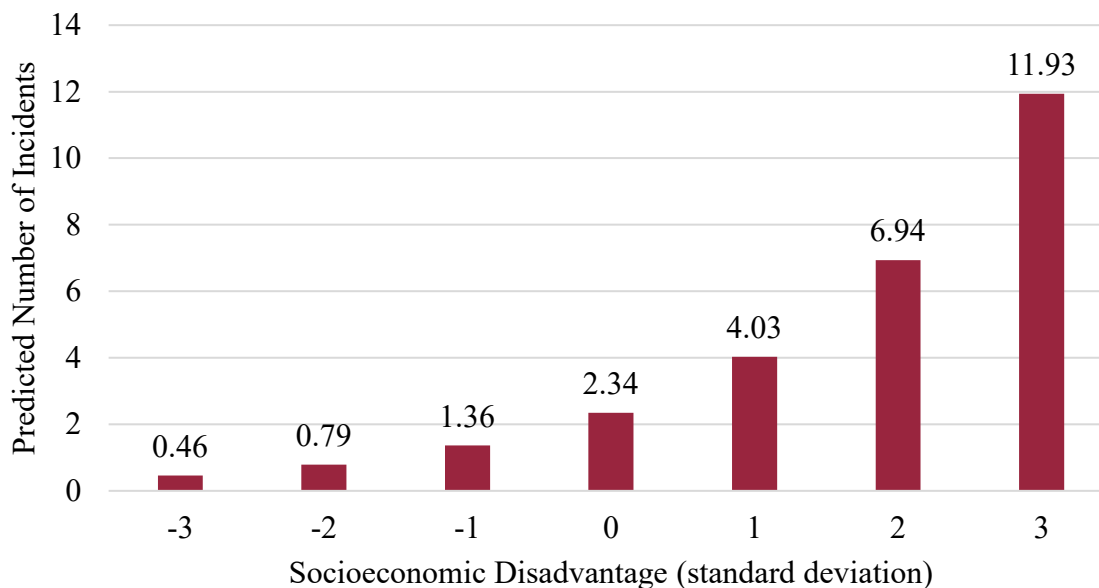


Figure 14: Predicted four-year counts of homicides and nonfatal shootings per block group across levels of residential stability

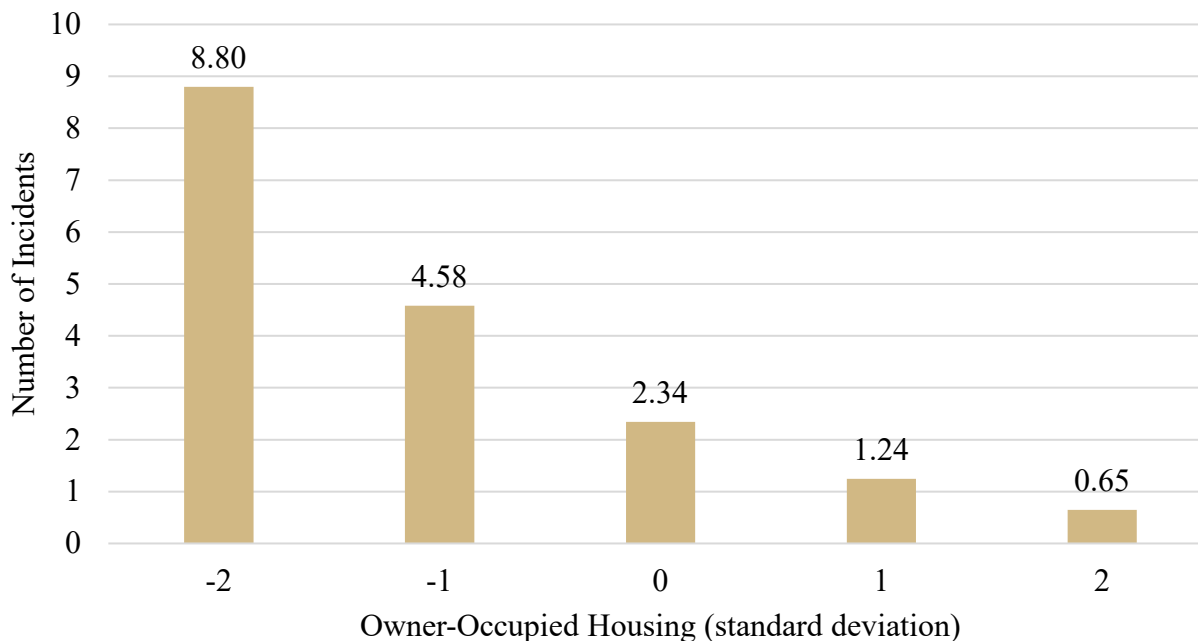


Figure 14 shows the predicted number of homicides and nonfatal shootings for a block group with average levels of all covariates except residential stability (ranging from -2 to 2 standard deviations). Neighborhoods with higher levels of owner-occupied housing experience fewer incidents: 1.24 every four years (or two to three every eight) for one standard deviation above the mean, and 0.65 every four years (or approximately one every eight) for two standard deviations above the mean.⁸ As the level of owner-occupied housing decreases, however, gun violence increases to 4.58 incidents every four years at one standard deviation above the mean, and 8.80 incidents at two standard deviations above the mean.

Summary and Limitations

The rate of homicide and firearm assault in Leon County has steadily increased over the past two decades, well surpassing the state average as well as counties with similar demographics. To inform the development of a community violence intervention and prevention initiative (CVIPI), FSU completed an update and expansion of LCSO's (2021) Anatomy of a Homicide report, conducting detailed analyses of case files for 733 homicides and nonfatal shootings committed in Leon County over the past four years. The sample included 70 homicide incidents, 101 attempted homicides, 356 aggravated assaults with a firearm, and 206 missiles fired into dwellings or conveyances. Most incidents occurred in private residences or on the street, typically in the early hours of the morning. Suspect(s) were identified in less than half of all incidents, and approximately one-third of cases were officially cleared. In a little over half of incidents, perpetrators did not directly target another person, instead firing at the air, ground, vehicles, and/or other structures. One-third of incidents involved arguments, most commonly regarding petty disputes or perceptions of disrespect. Domestic violence and victim use of a weapon both occurred in about 10% of incidents.

Gun violence impacted a total of 1,255 victims in Leon County during the study period, most frequently black males in their mid to late twenties. Most victims were physically uninjured during the incident, and four-fifths cooperated with law enforcement officers over the course of the investigation. A little over half were victimized in their home ZIP code, and approximately two-fifths were known or suspected gang members. LCSO and TPD identified a total of 414 known suspects during the study period, typically black males in their late twenties. Less than a third were affiliated with gangs, and one-fifth served as accomplices. Most suspects offended outside of their home ZIP code. Most victims were acquaintances of or strangers to their suspects.

Homicides and nonfatal shootings were not evenly distributed across Leon County. Neighborhoods with high levels of socioeconomic disadvantage and divorce experienced significantly greater incidence rates of gun violence, while those with more racial/ethnic heterogeneity and residential stability experienced significant decreases. Approximately four-fifths of incidents clustered in the 32301, 32303, 32304, and 32310 ZIP codes, specifically the Providence, Bond, Frenchtown, and Southside neighborhoods. The rate of gun violence in Providence and Bond in particular was five times higher than other communities in Leon County.

⁸ No block groups were three standard deviations above or below the mean for residential stability in the study sample.

These findings are tempered by several limitations. First, although the research assistants coded information on many potential risk factors for offending and victimization, we were unable to provide information on these variables due to high levels of missing data. The lack of this type of information in law enforcement case files, however, poses serious challenges in this regard. Future research should attempt to merge data on victims and suspects of gun violence from alternate sources, such as education and hospital records, or conduct detailed interviews with involved individuals; both of these approaches were beyond the scope of the current project. Relatedly, we were unable to obtain information on the criminal histories of suspects in the time necessary for this report.⁹

Second, the descriptive statistics presented here have high levels of missing data, and therefore likely are under- or overestimates of the true values. This is particularly an issue for incident circumstances, victim gang affiliation, and most suspect characteristics (due to the large number of unidentified suspects). For example, it is likely that gang- and drug-related nonfatal assaults are underreported in the sample due to the difficulties inherent in investigating such cases. Descriptive statistics presented in this report should be interpreted with caution, and readers should consider the extent of missing data (based on the totals presented) when examining the prevalence of each covariate.

Third, there were some inconsistencies between information in the case files and data exported directly from the Tyler management system (especially for victim and suspect gang affiliation). We chose to report gang affiliations documented in either source, as law enforcement officers likely have additional expertise and/or information (such as gang activity databases) on local gang membership that may not be directly included in case files. Nevertheless, we urge caution in interpreting the prevalence of gang membership among victims and suspects due to our inability to confirm affiliations in the case files.

Finally, it should be noted that these findings are specific to Leon County, and may not be generalizable to other jurisdictions or even within Leon County over time. In particular, the sample covers a relatively short time period of four years, including lockdowns during the COVID-19 epidemic.

These limitations notwithstanding, our quantitative analysis of gun violence in Leon County has significant implications for developing an effective CVIPI. First, the dense clustering of homicides and nonfatal shootings in a few ZIP codes (32301, 32303, 32304, and 32310) and neighborhoods (Providence, Frenchtown, Bond, and Southside) provides strong evidence for a geographically targeted intervention approach. Second, the demographic characteristics of victims and suspects suggest that the target population for intervention is primarily composed of young, black men between the ages of 18 and 24. Third, enhancing police-community relations may be particularly effective, given that one-fifth of victims did not cooperate with law enforcement. Finally, analysis of incident circumstances indicates that successful interventions should address petty arguments and concerns about disrespect in addition to gang- and drug-related conflicts.

⁹ Data requests to the Florida Department of Law Enforcement (FDLE) are currently pending.

III. REVIEW OF VIOLENCE INTERVENTION PRACTICES AND PROGRAMS

In addition to the quantitative assessment of gun violence, to guide our recommendations for a violent crime reduction strategy for Leon County we conducted a systematic review of the literature for violence intervention strategies aimed at addressing community gun violence. Specifically, we conducted an extensive search of CrimeSolutions.gov and peer-reviewed journals for interventions targeting gun violence and violent assaults. The review focused upon identifying interventions that have been deemed effective or promising. For each intervention, the review included 1) intervention activities, 2) methods used for identification of the target population for intervention, 3) intervention effects on gun violence and violent offending behaviors, and 4) barriers to intervention implementation. Additionally, for each intervention site, demographic and crime statistic data were collected for the intervention year, which is used to inform which intervention strategies may be a good fit based on similarities between Tallahassee's demographics and those of successful intervention sites.

Prevention versus Intervention

Before discussing the intervention strategies identified in the literature review, it is important to distinguish between strategies that are *prevention* focused and strategies that are *intervention* focused and identify which is best suited to address the crime problem and project goals. **Prevention strategies** are those that aim to prevent the *onset* of crime or criminal offending and/or reduce at-risk behaviors (Bureau of Justice Assistance, 2022a; Welsh & Farrington, 2012; Office of the Surgeon General (US), 2001). Prevention strategies are often categorized in two levels, primary and secondary prevention. Primary prevention strategies often target a general/universal population that has not yet been involved in criminal activity. Secondary prevention strategies are implemented more selectively, often targeting individuals at greater risk of engaging in crime. Importantly, prevention strategies are focused on long term outcomes, seeking to prevent the onset of criminal involvement over the life course, often by targeting risk factors for offending in early childhood, adolescence, and early adulthood (Office of the Surgeon General (US), 2001; Welsh et al., 2013; Welsh & Farrington, 2012).

Intervention strategies, in contrast, are those that aim to reduce or end *further involvement* in crime or criminal offending among those already involved in offending behavior (Bureau of Justice Assistance, 2022a; Office of the Surgeon General (US), 2001). Intervention strategies seek to prevent crime in the near term by interrupting cycles of violence and improving conditions that drive violence (Bureau of Justice Assistance, 2022b; Giffords Law Center to Prevent Gun Violence, 2023). Braga (2022) has emphasized the importance of achieving near-term outcomes to support the effective operation of prevention strategies, which are often adopted to complement the selected intervention strategy (Bureau of Justice Assistance, 2022b). In sum, it is necessary to triage the problem before implementing long-term solutions.

The project goals set forth by the CVIPI Planning Team are as follows:

1. Reduce gun violence in the near term.
2. Improve outcomes of those involved in gun violence, whether a victim or perpetrator.
3. Increase and improve access and coordination of existing services and identify gaps in services for those who are high risk and closely connected individuals (including their families).

4. Identify funding sources and ways to collaborate collectively around funding opportunities.

Importantly, the primary goal of the CVIPI Planning Team is to produce results in the near term by interrupting the current violent crime problem. The additional planning team goals serve as supplements to the primary goal and are focused on long term outcomes.

As demonstrated in our quantitative assessment of gun violence, most of the gun violence in Leon County is concentrated in certain Tallahassee neighborhoods and areas of high concentrated disadvantage. Most gun violence incidents were perpetrated by non-gang-involved males in their mid- to late-twenties. One-third of incidents involved arguments, and most victims were acquaintances of or strangers to their suspects.

Based on the CVIPI goals and the quantitative assessment of gun violence, our focus was on identifying an evidence-based intervention strategy that, once implemented, could reduce gun violence in the near term. Once the intervention strategy has been implemented, it could then be supplemented with evidence-based prevention strategies to address the longer-term goals of the CVIPI Planning Team.

Violent Crime Intervention Strategies

Through our review of the literature, we identified a range of intervention strategies that can be categorized and typed into 1) law enforcement-based, 2) partnership-oriented, 3) community-based, 4) youth-focused, and 5) hospital-based interventions. Specific practices and programs within these interventions can focus on specific crimes or different target populations, such as homicide, gun violence, drugs, gangs, or high-risk youth. Additionally, specific programs can be implemented independently or mixed with other intervention strategies. Importantly, some intervention strategies may overlap in their components and may be categorized differently in prior literature. The categorization here is based on the primary or distinguishing component employed within each strategy.

The organization of the review is as follows. First, a brief description of the intervention category is provided. Next, we describe the different types of practices and programs that have been implemented and evaluated under each intervention category. This includes describing the target population, the target outcome, and the common implementation components of each program. Additionally, we review the effectiveness of the programs based on findings from independent program evaluations and meta-analyses. Lastly, we discuss some common limitations of the programs. In our intervention recommendation(s), we describe the methods and resources necessary for implementing the intervention.

Law Enforcement-Based Interventions

Law enforcement-based interventions are those which are primarily implemented by local law enforcement agencies. Law enforcement-based strategies may involve partnerships with community service providers; however, the primary practice components are delivered by the law enforcement agency. Identified practices include Hot Spots Policing, Problem-Oriented Policing, and Focused Deterrence Strategies. Although each is a distinct practice, law enforcement agencies often incorporate multiple strategies such as a mix of Hot Spots Policing with Problem-Oriented Policing and/or Community-Oriented Policing.

Hot Spots Policing

Hot Spots Policing focuses police resources on micro-geographic locations with high concentrations of crime, particularly drug and gun violence. Police departments typically use a range of aggressive order maintenance tactics within these hot spots such as directed patrol, enhanced traffic stops, foot patrol, and increased surveillance operations (Braga, 2016; National Academy of Sciences, Engineering, and Medicine (NAS), 2018). Additionally, Hot Spots Policing may be combined with Problem-Oriented Policing strategies such as situational interventions (e.g., cleaning and securing vacant lots, improving street lighting) to improve physical and social disorder that may be contributing to crime in the hot spots (Braga & Bond, 2008; Braga et al., 1999).

A systematic review of the Hot Spots Policing literature has found small but significant overall reductions in crime, with the greatest impacts on drug crimes followed by disorder outcomes, property crime outcomes, and violent crime outcomes (Braga, Turchan et al., 2019). A promising hot spots program that focused on gun violence was Kansas City, Missouri's Weed and Seed program (Sherman & Rogan, 1995). The officers in Kansas City's Weed and Seed program were directed to focus on gun detection through proactive patrol and implemented three strategies to increase gun seizures in the hot spot location: "door-to-door solicitation of anonymous tips, training police to interpret gun-carrying cues in body language, and field interrogations in gun crime hot spots" (Sherman & Rogan, 1995, p. 677). Evaluating Kansas City's Weed and Seed program, Sherman & Rogan (1995) found a 65% increase in the number of guns seized in the hot spot location and a statistically significant 49% reduction in gun crimes in the hot spot.

Moreover, some hot spots programs that have incorporated Problem-Oriented Policing strategies have generated larger crime control impacts relative to those that simply increased traditional police crime prevention actions such as directed patrol and drug enforcement (Braga, Turchan et al., 2019; Braga, 2016; NAS, 2018). For example, results from the St. Louis, MO Firearm Violence Program found a significantly larger reduction in firearm violence in hot spots that employed self-initiated activities (e.g., arrests, pedestrian checks, building checks, vehicle checks, foot patrol, and problem solving) compared to hot spots that only employed directed patrols (Rosenfeld et al., 2014). Similarly, results from the Lowell, MA Policing Disorder program found a significant decrease in calls for service in treatment places that received situational strategies (e.g., cleaning and securing vacant lots, improving street lighting, performing code inspections; Braga & Bond, 2008). However, an evaluation of hot spots receiving problem-oriented policing interventions compared to hot spots receiving saturation/directed patrol interventions in Jacksonville, FL found no significant differences between the treatment groups on violent or property crime during treatment (Taylor et al., 2011).

Prior research has identified several limitations of Hot Spots Policing that may contribute to the limited effectiveness of the practice. Notably, officers are often given extensive discretion about which proactive activities to engage in; however, evaluations of hot spots policing programs often fail to measure which types and dosage of activities officers are engaging in within their hot spot locations, making it difficult to know which activities are affecting the outcomes (Rosenfeld et al., 2014; Taylor et al., 2011; Schaefer et al., 2021). Further, evaluations that have included measures of intervention dosage have found dosage levels to vary by the degree of officer buy-in and have shown dosage levels to decay over the life of the intervention

(Taylor et al., 2011; Schaefer et al., 2021). Additionally, among hot spots programs that also engage in Problem-Oriented Policing, the problem analysis engaged in by officers is generally weak, with officers having limited time and data resources to adequately diagnose the problems, resulting in less focused interventions (Taylor et al., 2011; Braga & Bond, 2008). Lastly, most analyses focus on the immediate impact of hot spots interventions, thus long-term effects are unclear (see, however, Taylor et al., 2011 for post-intervention effects).

Problem-Oriented Policing

Problem-Oriented Policing (POP) seeks to identify the underlying causes of crime problems and to frame appropriate responses using a wide variety of methods and tactics (NAS, 2018). POP uses the SARA model (scanning, analysis, response, and assessment) to identify problems, carefully analyze the conditions contributing to the problem, develop a tailored response to target these underlying factors, and evaluate outcome effectiveness (Hinkle et al., 2020). Depending on the identified problem, the focus of the program might be on gun violence, drugs, or homicide and it might target gangs or violent individuals (NAS, 2018; Eck & Gallagher, 2016). Importantly, police agencies are encouraged to work with community residents, businesses, and organizations to develop effective responses (Maguire et al., 2015). Responses to the problems may range from arrest of offenders, modification of the physical environment, to engagement with community members (NAS, 2018; Hinkle et al., 2020).

Systematic evaluations of POP programs have found significant reductions in overall crime and disorder. However, POP appears to be more effective in reducing property crime and disorder offenses, while reductions in violent crimes were often not significant (Hinkle et al., 2020; Weisburd et al., 2010; Eck & Gallagher, 2016; Reisig, 2010; NAS, 2018). For example, an evaluation of problem-oriented policing implemented in Jersey City, NJ hot spots found significant reductions in robbery and property crime incidents, though no significant reductions in nondomestic assault incidents (Braga et al., 1999). However, Braga and colleagues (1999) found varying effects on social and physical disorder, finding no significant decreases in narcotics and disorder incidents, though observations of the treatment areas indicated significant alleviation of social and physical disorder in 10 of the 11 treatment locations.

There are several notable pitfalls with problem-oriented policing. Namely, POP programs are often characterized by partial implementations of the SARA model (Hinkle et al., 2020; Eck & Gallagher, 2016; Cordner & Biebel, 2005). Specifically, problem analyses are often small-scale, with little formal analysis or assessment. This may be attributed to a lack of training or understanding of the SARA model and insufficient resources to engage in problem analyses. For example, the Jacksonville Sheriff's Office Hot Spots and Problem-Oriented Policing program had an intervention period of 90 days, giving POP officers little time to diagnose problems and implement solutions (Taylor et al., 2011). Further, many POP programs lack formal assessment of the effectiveness of their responses (Maguire et al., 2015; Cordner & Biebel, 2005). Some POP programs may also be hindered by a lack of intervention buy-in (Hinkle et al., 2020). In their review of POP programs, Hinkle and colleagues (2020) found some police departments expressed little interest in the intervention and thus provided little administrative support and police training. Further, there may be some resistance from stakeholders, community partners, and community residents who are unwilling to cooperate with the problem analyses or proposed interventions. Lastly, it is unclear what specific initiatives engaged in by POP officers are producing the outcomes (Braga et al., 1999; Maguire et al., 2015).

Focused Deterrence

The focused deterrence practice is designed to change the behavior of chronic offenders and violent groups through partnerships between law enforcement, social services, and community organizations (Braga & Kennedy, 2021). Focused deterrence programs use activities consistent with POP's SARA model to identify key offenders and/or groups of offenders for intervention and to understand the underlying violence-producing dynamics and conditions. Once identified, focused deterrence programs use offender notification strategies to send target offenders and/or groups a double message, pairing offers of assistance with threats of punishment if offending behavior continues.

There are three main operational variations of focused deterrence: 1) Group Violence Intervention, 2) Drug Market Intervention, and 3) Individual Offender Strategies (Braga & Kennedy, 2021). The primary difference between these variations is their intervention target. Specifically, as their names imply, group violence intervention is focused on gangs and other criminal groups, drug market interventions address violence and disorder resulting from drug markets, and individual offender strategies target individual chronic and serious offenders. A systematic review of focused deterrence programs found an overall significant, moderate crime reduction effect (Braga & Kennedy, 2021). However, effect sizes varied by program type, with group violence reduction strategies generating larger crime reduction impacts, high-risk individual programs generating moderate effects, and drug market interventions producing the smallest effect (Braga & Kennedy, 2021; Braga, Weisburd, & Turchan, 2019; NAS, 2018). This review will focus on group violence interventions and individual offender strategies.

Group Violence Intervention. Group Violence Intervention (GVI) strategies are a type of focused deterrence solution to gun violence centered around the insight that the vast majority of gun violence is perpetrated by incredibly small and easily identifiable segments of a given community (Giffords Law Center to Prevent Gun Violence, 2016; Crandall & Wong, 2012). GVI works by identifying groups most at risk for gun violence and inviting individuals of these groups to a “call-in” meeting consisting of local community members, law enforcement officers, and social service providers to convey a powerful message that gun violence must stop. Additionally, during the call-ins, social service providers connect at-risk individuals with needed resources to reduce violent behavior. Importantly, if the gun violence does not stop, then law enforcement will use all available legal action against the groups and individuals responsible.

Successful GVI programs include Operation Ceasefire, the Group Violence Reduction Strategy (GVRS), and the Indianapolis Violence Reduction Partnership (IVRP). GVI originated with Operation Ceasefire in Boston, MA in 1996, which focused on reducing gang-related gun violence among youth (Braga et al., 2001; Braga & Kennedy, 2021). The original Operation Ceasefire initiative involved two elements to reduce violence: (1) a direct law enforcement attack on illicit firearms traffickers supplying youth with guns and (2) an attempt to generate a strong deterrent to gang violence by reaching out directly to gangs with the message that violence will not be tolerated, and every legally available sanction will be used should violence occur (Braga et al., 2001). Additionally, community organizations worked simultaneously with the law enforcement agencies to offer services and other help to group members. Importantly, replications of the Operation Ceasefire initiative in other cities have primarily focused on the second element and partnerships with community organizations to provide services.

Evaluations of Operation Ceasefire in Boston, MA (Braga et al., 2001; Braga et al., 2014) and Oakland, California (Braga, Barao, et al., 2019) have found significant reductions in gun assault incidents, gun homicides, and gang-involved shootings. Specifically, Boston's initial implementation of Operation Ceasefire in 1996 resulted in statistically significant reductions in the monthly number of youth homicides (63%), the monthly number of citywide gun assault incidents (25%), monthly number of citywide shots-fired calls (32%), and monthly number of youth gun assaults in a high-risk police district (44%; Braga et al., 2001). Operation Ceasefire was reconstituted in Boston in 2007 and significantly reduced gang-involved shootings by approximately 31% (Braga et al., 2014). Oakland's Operation Ceasefire produced similar results, significantly reducing gun homicide counts by 31.5% and treated gang shootings by 27% (Braga, Barao, et al., 2019).

The GVRs are similar to Operation Ceasefire, targeting violence disproportionately driven by gangs and groups through a pulling-levers deterrence message (Braga, Weisburd, & Turchan, 2019). The distinguishing feature of GVRs compared to Operation Ceasefire is the reliance on call-in attendees to deliver the deterrence message to other members of their gang or group, and if the violence does not stop, then law enforcement action would be taken against the whole gang or group. GVRs have shown to have promising effects on reducing gang and gun violence, significantly reducing shooting victimizations, firearm homicides, and firearm assaults (Braga, Weisburd, & Turchan, 2019). Promising GVR programs include Chicago GVRs (Papachristos & Kirk, 2015), New Orleans GVRs (Corsaro & Engel, 2015), and Kansas City No Violence Alliance (NoVA; Fox & Novak, 2018). For instance, New Orleans' GVR program produced statistically significant reductions in total homicides (17%), gang member-involved homicides (32%), firearm homicides (17%), and nonfatal firearm assaults (17%; Corsaro & Engel, 2015).

The IVRP has slight differences compared to Operation Ceasefire and GVRs, aiming to address homicide and gun assault problems by targeting illegal gun carrying and use among known groups of chronic offenders who are often involved in the drug trade (McGarrell et al., 2006; Corsaro & McGarrell, 2009). A key element of the IVRP strategy involves face-to-face meetings with groups of high-risk probationers and parolees, where criminal justice officials and community members provide a deterrence message and explain the severe penalties for continuing to engage in firearm crimes. Evaluation of IVRP found an immediate 34.3% reduction in city-wide monthly homicides (McGarrell et al., 2006). Additionally, gang homicides experienced a statistically significant 38.1% reduction following intervention, though reductions in non-gang homicides were non-significant (Corsaro & McGarrell, 2009).

Overall, GVI programs show promise for reducing gun assault incidents, gun homicides, and gang-involved shootings. However, there are several notable limitations of these programs. Most notably, many evaluations lack specificity on which of the GVI program mechanisms are responsible for the observed outcomes (Braga et al., 2001; Braga, Zimmerman, et al., 2019; Circo et al., 2020; Braga, Weisburd, & Turchan, 2019). In their evaluation of Detroit's Ceasefire initiative, Circo and colleagues (2020) found call-in attendees were significantly less likely to be rearrested for any offense and for violent crimes up to three years following the meeting. However, it remains unclear whether or to what degree the deterrence message, legal sanctions, or social service utilizations are producing the crime reduction effects. Additionally, it is unclear how the deterrence message affects individual behavior, as most evaluations focus on city-wide and group-related gun violence outcomes rather than individual gun violence outcomes (Braga et al., 2014; Circo et al., 2020). Additional limitations are more program specific. Namely,

implementation of Operation Ceasefire has faced challenges in sustaining the initiatives over an extended period, often resulting from instability in program leadership and lack of resources (Braga et al., 2014; Braga, Barao, et al., 2019; Circo et al., 2021). Evaluation of IVRP found the crime reduction effects were concentrated among the targeted gangs, with no significant crime reduction effects on non-gang crimes (McGarrell et al., 2006; Corsaro & McGarrell, 2009). Lastly, GVRs has shown some evidence of a decay effect over time (Fox & Novak, 2018).

Individual Offender Strategies. Individual Offender Strategies are a type of focused deterrence strategy aimed at preventing repeat offending by high-risk individuals (Braga, Weisburd, & Turchan, 2019). These strategies generally warn offenders that their next offense will bring extraordinary legal attention and a wide range of legal tools will be used. Additionally, community “moral voices” provide offenders with a clear message that violence is unacceptable. Further, these strategies often provide social support services, connecting individuals to treatment, housing, employment, and educational opportunities (Clark-Moorman et al., 2019). Project Safe Neighborhoods and the Rockford Area Violence Elimination Network are examples of individual offender strategies that show promise for reducing violent crime.

Project Safe Neighborhoods (PSN) is a federally funded anti-gun crime initiative that brings together law enforcement with researchers and community organizations (McGarrell et al., 2010). PSN operates through a task force composed of U.S. Attorneys’ Offices, local, state, and federal law enforcement, local prosecutors, probation and parole, local government, service providers, neighborhood leaders, and the faith community. PSN also utilizes a research partner, whose role is to analyze the local gun crime problem and assist the task force in tailoring the strategy to the local problem (McGarrell et al., 2010). The task force emphasizes both deterrence and incapacitation frameworks. Through offender notification meetings, a deterrence message is delivered to high-risk offenders, warning them that continued involvement in illegal gun possession and violent, gang, and drug related offenses involving a firearm will result in federal prosecution (Papachristos et al., 2007; Grunwald & Papachristos, 2017; McGarrell et al., 2010). In addition to the deterrence message provided by local law enforcement, offenders are also provided with messaging by ex-offenders on how they stayed out of jail and away from guns and are presented with various programming opportunities by local community service agencies (Papachristos et al., 2007; Grunwald & Papachristos, 2017). To promote PSN’s incapacitation framework, “gun teams” are developed to increase federal prosecutions of gun offenders and increase law enforcement efforts to recover illegal guns (Braga & Kennedy, 2021; Papachristos et al., 2007; Grunwald & Papachristos, 2017).

A national evaluation of PSN found cities that received PSN treatment experienced a 4.1% reduction in violent crime compared to non-PSN cities, which experienced a 0.9% decline (McGarrell et al., 2010). Further, cities with a higher dosage of PSN treatment experienced significant, modest declines in violent crime when compared with cities that received low doses of PSN. Analyzing the effect of PSN dosage on annual firearm related homicides, McGarrell and colleagues (2010) found high dosage sites experienced significant reductions in firearm homicides (-10.5%), while medium dosage sites experienced no change, and low dosage and non-treatment sites experienced increases in firearm homicides (14.0% and 11.1%, respectively).

Independent evaluations of PSN have also found substantial reductions in total homicides and gun homicides, with notable effects in Chicago, IL (Papachristos et al., 2007; Grunwald & Papachristos, 2017; Wallace et al., 2016), Tampa, FL (Fox et al., 2022), Lowell, MA (Braga,

Pierce et al., 2008; McDevitt et al., 2007), St. Louis, MO (Decker et al., 2007), and Montgomery, AL (McGarrell et al., 2007). For example, an evaluation of Chicago's PSN program found a statistically significant 37% decrease in the number of homicides in the treatment district compared to the control districts during the observation period (2002-2004; Papachristos et al., 2007). Significant decreases were also found for quarterly homicide rates, gun homicide rates, and aggravated assaults and batteries, however gang homicides were not significantly affected (Papachristos et al., 2007). Similarly, Tampa's PSN program was associated with a 24.4% reduction in violent crime rates and a 24.0% reduction in gun crime rates between the pre- and post-test periods (Fox et al., 2022).

Papachristos and colleagues (Papachristos et al., 2007; Grunwald & Papachristos, 2017; Wallace et al., 2016) evaluated the effects of the specific PSN components in Chicago, finding the offender notification meetings produced the largest effect on homicides and recidivism. Specifically, Papachristos and colleagues (2007) found that for every one percent increase in the percentage of offenders in a beat attending a forum, there was a significant 13% decrease in the homicide rate, 15% decrease in gun homicide rates, and 12% decrease in gang homicide rates. The effects of gun seizures and federal prosecutions on overall homicides and gun homicides, while significant, were much smaller than the effect of the offender notification meetings. Examining the impact of the offender notification meetings on the offending behaviors of attendees, Wallace and colleagues (2016) found meeting participants were 30% less likely to commit new offenses compared to similar offenders in the non-treatment comparison group. Across crime types, meeting participants were significantly less likely than non-treatment offenders to recidivate on murder, drug possession, weapons offenses, and violent crime (Wallace et al., 2016).

Overall, Project Safe Neighborhoods shows promise for reducing gun violence and violent crime. However, there are some notable limitations. First, the processes used to identify high-risk offenders for intervention vary greatly across implementation sites and are often not evidence-based (Fox et al., 2022). Second, there is some evidence that the effects of PSN may decay over time (Fox et al., 2022; McGarrell et al., 2010; Grunwald & Papachristos, 2017). For example, Grunwald and Papachristos (2017) examined the long-term impacts of Chicago's PSN and found that, while the first three years (2002-2004) produced a 37% reduction in homicides, the homicide rates in the treatment beats began to increase slightly from 2006 to 2010. Grunwald and Papachristos (2017) also found treatment dosage became diluted over time when PSN was expanded to other areas of the city, resulting in non-significant effects of forum participation and PSN prosecutions on homicide rates in the new treatment locations. Lastly, more information is needed on the specific program mechanisms responsible for the observed outcomes (McGarrell et al., 2010; Braga et al., 2008). While Papachristos et al. (2007) and Wallace et al. (2016) showed the impact of offender notification meetings on homicides and recidivism, the effect of the other PSN components is mixed (Grunwald & Papachristos, 2017). Additionally, the offender notification meetings consist of three separate messages, and more information is needed on which of these messages are contributing to the observed outcomes.

The Rockford Area Violence Elimination Network (RAVEN) is another individual offender focused deterrence strategy that was implemented in Rockford, Illinois. RAVEN utilizes the PSN-style call-ins to target firearm violence among recently released parolees and probationers at risk of being involved in future violence (Clark-Moorman et al., 2019; Braga & Kennedy, 2021). During the call-in meetings, parolees are welcomed back to the community and

are given a message that they now have an opportunity to contribute positively to society and avoid further involvement in crime (Clark-Moorman et al., 2019). Additionally, parolees are warned about the steps that law enforcement agencies are taking to monitor high-risk parolees and reduce gun crime. Lastly, parolees are connected to social support services, such as educational and employment opportunities. An evaluation of RAVEN by Clark-Moorman and colleagues (2019) found significant reductions of 21% in gun robberies, 16% in gun assaults, and 29% in non-gun robberies. However, gun homicides, non-gun homicides, and non-gun assaults did not experience significant declines. Examining the limitations of RAVEN, Clark-Moorman and colleagues (2019) noted there were challenges enrolling participants in case management and social support services, thus, the analysis primarily focused on the impact of the deterrence message parolees received during the call-in meetings. Additionally, similar to the other focused deterrence strategies, Clark-Moorman and colleagues (2019) were not able to discern which specific mechanisms of the program contributed to the observed outcomes.

Partnership-Oriented Interventions

Partnership-oriented interventions involve a stronger focus on partnerships between law enforcement and community and/or business partners working together to prevent crime and disorder. The key distinction between partnership-oriented interventions and the focused deterrence law enforcement-based interventions is the equal involvement of law enforcement agencies and community partners. Specifically, while the focused deterrence strategies draw on community partners to offer services, partnership-oriented interventions leverage community engagement to assist with program delivery. Identified partnership-oriented interventions include Third-Party Policing and Community-Oriented Policing.

Third-Party Policing

Third-Party Policing emphasizes coordination between law enforcement agencies and local institutions to prevent crime and disorder (NAS, 2018; Mazerolle et al., 2000). Police engage residents, landlords, business owners, regulators, inspectors, licensing authorities, and others, encouraging them to help prevent crime and violence in hot spots by threatening the use of civil remedies such as fines, civil orders, injunctions, and evictions. Third-party policing may target certain categories of people (e.g., young people, gang members, or drug dealers) or specific places (e.g., crime hot spots). For example, police may threaten nuisance abatement actions against property owners to encourage property owners to address drug-related problems by evicting offending tenants (NAS, 2018; Eck & Wartell, 1998). Police may also use civil remedies to coerce property owners to address the physical decay of their properties that is contributing to crime and disorder (NAS, 2018; Mazerolle & Roehl, 1999).

While there have only been a few evaluations of third-party policing programs, findings show statistically significant short-term reductions in crime and disorder (NAS, 2018; Mazerolle & Roehl, 1999; Eck & Wartell, 1998). For example, Oakland's Beat Health Program focused on addressing physical decay conditions contributing to drug and disorder problems by enforcing housing, fire, and safety codes, sending warning letters to property owners, assisting property owners with evicting troublesome tenants, and ordering property cleanups (Mazerolle & Roehl, 1999; Mazerolle et al., 2000). In their evaluation of Beat Health, Mazerolle & Roehl (1999) found a statistically significant 7% reduction in service calls for drug-related crime in treatment areas, while drug calls increased 55% in non-treatment areas. Social observations of the treatment areas revealed decreases in signs of disorder and drug sales and increases in signs of

civil behavior in public places (Mazerolle et al., 2000). However, other categories of service calls were not significantly reduced, and the program tended to be more effective in residential areas than commercial areas (Mazerolle & Roehl, 1999; Mazerolle et al., 2000).

While third-party policing shows promise for addressing drug and disorder problems, there are several limitations. Importantly, third-party policing does not directly address violent crime problems. Third-party policing may also suffer from a lack of buy-in by community members and businesses. Specifically, some residents and third parties may find the civil remedy approaches to be unacceptable (Mazerolle & Roehl, 1999). Further, the use of coercive mechanisms to influence business and housing owners may raise privacy concerns and produce unintended harmful consequences for community members (NAS, 2018). Lastly, more attention is needed to long-term maintenance and effects after the initial civil interventions are applied (Mazerolle et al., 2000; NAS, 2018).

Community-Oriented Policing

Community-Oriented Policing (COP) emphasizes bringing the police and community together to make communities safe by working with community members to identify, understand, and address the social issues driving crime, disorder, and fear (NAS, 2018; Gill et al., 2014; Reisig, 2010). COP programs typically take a more holistic crime reduction approach, targeting whole communities and involving partnerships, organizational transformation, and problem-solving. COP activities may include problem-oriented policing, community meetings, foot patrols, crime newsletters, door-to-door visits, responding to social and physical disorder, and forging positive relationships with residents, among others (Gill et al., 2014).

Overall, evidence on the effectiveness of COP programs on crime prevention is mixed due to various definitions and implementation strategies across locations (Gill et al., 2016; Gill et al., 2014; Reisig, 2010). A meta-analysis of COP programs found limited effects on reducing crime, though the findings suggest a slightly larger reduction in violent crimes than property crimes (Gill et al., 2014). There is stronger evidence of the positive effect of COP programs on citizen satisfaction, perceptions of disorder, and police legitimacy (NAS, 2018; Gill et al., 2014; Connell et al., 2008). Several evaluations have attempted to identify which COP program activities contribute to reductions in crime, however, their findings are mixed (NAS, 2018; Gill et al., 2014; Sherman & Eck, 2002; National Research Council, 2004). For example, Sherman and Eck (2002) found COP program activities that increased community participation in planning and priority setting and involved door-to-door visits were more effective at reducing crime and victimization than newsletters, education programs, or community meetings. Similarly, a study by the National Research Council (2004) found broad-based activities (e.g., community meetings, newsletters, education programs) were not effective for reducing crime. Comparing COP programs that had a problem-solving component to COP programs without a problem-solving component, Gill and colleagues (2014) found no significant difference in the overall effect on crime.

Independent evaluations of COP programs produce similar results, finding moderate reductions in violent crime, mixed effects on property crime, and limited effects on drug crimes (Cordner et al., 1999; Uchida, et al., 1992a; 1992b; Connell et al., 2008). For example, a suburban police department (population 1,853) near a major metropolitan city implemented a community-oriented policing program that involved four key components: accountability, collaboration, decentralization, and problem-solving (Connell et al., 2008). Officers were

expected to collaborate with business owners, area schools, service agencies, and apartment managers to identify problems and use problem-solving skills to come up with creative solutions to those problems that involved assistance from community members. Additionally, officers were given broad discretion to find solutions to problems and were held accountable through weekly meetings in which officers gave updates on their progress and were rated on their ability to incorporate problem solving, teamwork, and community interaction into their daily operations (Connell et al., 2008). In their evaluation of the program, Connell and colleagues (2008) found a significant small effect on violent crime (decrease of 1-2 violent crimes per month) and a significant moderate effect on property crimes (decrease of approximately 8 property crimes per month). Monthly drug crimes also experienced a significant decrease of approximately 9 drug crimes per month, however, drug crimes also significantly declined in the two comparison sites. Conversely, in an evaluation of door-to-door community policing initiatives in Oakland, CA and Birmingham, AL, Uchida and colleagues (1992a; 1992b) found decreases in violent crime but slight increases in property crime.

As mentioned previously, the evidence on the effectiveness of community-oriented policing is limited due to various definitions and implementation strategies of community-oriented policing (Gill et al., 2014; Gill et al., 2016). Specifically, there are no criteria or set guidelines for implementing community policing, and the specific tactics deployed under community policing vary substantially and may not have been rigorously tested. Additionally, community policing as a philosophy is often not fully adopted by police departments, which may result in partial implementation of community-oriented policing strategies (Gill et al., 2016; Uchida et al., 1992a, 1992b).

Community-Based Interventions

Community-based interventions are often led by community members or non-law enforcement social service organizations. The community-based violence intervention (CVI) approach aims to reduce violence using evidence-informed strategies through tailored community-centered initiatives (Bureau of Justice Assistance, 2022b). Tailored, community-centered initiatives engage individuals and groups to prevent and disrupt cycles of violence and retaliation, establish relationships between individuals and community assets to deliver services, and bolster community resources to improve community conditions. Importantly, the CVI approach actively engages community residents and stakeholders to gain insight into violence in the community and build trust and relies on community collaboration between partners with complimentary missions and skill sets to provide needed services. These partners include public health partners (i.e., hospital and health services), public sector partners (i.e., law enforcement, courts, schools, and other government entities), community-based partners (i.e., wraparound service providers and victim service organizations), and other service providers and private entities.

There are a variety of CVI strategies that have been implemented to reduce gun violence, and these typically focus on high-risk individuals, gang and gun violence, and historical and structural challenges contributing to community violence (Bureau of Justice Assistance, 2022b). Common CVI strategies that show promise for reducing gun violence include Street Outreach programs (Giffords Law Center to Prevent Gun Violence, 2016), Place-Making strategies (LISC, 2017), and Therapy-Based programs (Feucht & Holt, 2016).

Street Outreach Programs

Street outreach programs seek to mediate violent disputes (resolving them before they turn deadly), connect potentially violent individuals to services, and change norms and attitudes about violence using media campaigns (Abt, 2019; Giffords Law Center to Prevent Gun Violence, 2016). Street outreach programs typically involve the following components: (1) violence interrupters that engage with the community to identify and mediate potentially violent conflicts, (2) outreach workers who identify and connect high-risk individuals to appropriate social services, and (3) mobilization of the community to change social norms surrounding the use of violence through public messaging (Giffords Law Center to Prevent Gun Violence, 2016). Promising street outreach programs include Cure Violence, the Safe and Successful Youth Initiative (SSYI), and the Gang Reduction and Youth Development (GRYD) program.

Cure Violence is a public health approach to violence reduction that seeks to change the behaviors and attitudes of those at greatest risk for gun violence and mediate potentially violent conflicts (Butts et al., 2015; Ransford & Slutkin, 2017). The key component of the Cure Violence program is the use of credible messengers—trusted individuals from the community who often have a history of criminal justice system involvement and can use that history to connect and build rapport with at-risk individuals (Butts et al., 2015; Ransford & Slutkin, 2017; Giffords Law Center to Prevent Gun Violence, 2016). Cure Violence incorporates the three main components of street outreach: (1) violence interrupters, (2) outreach workers, and (3) antiviolence messaging (Butts et al., 2015; Giffords Law Center to Prevent Gun Violence, 2016). Violence interrupters (VIs) establish relationships with high-risk young people, monitor ongoing disputes, and intervene to prevent acts of retaliation by introducing alternative conflict resolution skills. Outreach workers (OWs) also establish relationships with high-risk individuals and use their relationships to connect these individuals to positive community resources and opportunities, including employment, housing, education, and recreational services. To address community social norms about gun violence, other Cure Violence staff implement antiviolence messaging campaigns—which may involve media campaigns, billboards, or antiviolence marches—to build community consensus against violence.

Several studies have evaluated Cure Violence programs in Chicago, Illinois (Skogan et al., 2009; Henry et al., 2014), Baltimore, Maryland (Webster et al., 2013), and Brooklyn, New York City (Picard-Fritsche & Cerniglia, 2013; Delgado et al., 2017), finding significant reductions in rates of gun violence (Butts et al., 2015; Giffords Law Center to Prevent Gun Violence, 2016; Ransford & Slutkin, 2017). Notably, however, effects varied across neighborhoods receiving the intervention. For example, Skogan and colleagues (2009) evaluated Chicago's 1999 Cure Violence program and found the program only produced statistically significant declines in shooting incidents in four out of seven neighborhoods that received the intervention, ranging from 17% to 24% reduction. In an evaluation of Baltimore's Safe Streets program, Webster and colleagues (2013) reported similar variations in the effects of the program on homicides and nonfatal shootings across the four intervention neighborhoods. Specifically, Webster and colleagues (2013) found only one of the four neighborhoods experienced significant reductions in both homicides (56%) and nonfatal shootings (34%); the second neighborhood experienced a significant reduction in homicides (53%) but no significant change in shootings; the third neighborhood saw no significant reductions in homicides, but shootings significantly reduced by 34%; and in the fourth neighborhood, homicides increased 2.7 times but nonfatal shootings decreased 44%.

Importantly, while the effectiveness of Cure Violence on gun violence is mixed, qualitative assessments show the positive impact of the programs on community attitudes and participants (Butts et al., 2015; Giffords Law Center to Prevent Gun Violence, 2016). For example, examining Brooklyn's (NYC) Cure Violence programs, Delgado and colleagues (2017) found young male residents' (ages 18 to 30) in neighborhoods with a Cure Violence program were significantly less likely to express violence-endorsing norms for both serious and petty disputes than young males in neighborhoods without Cure Violence programs. Similarly, Milam and colleagues (2016) found exposure to "Stop the Shooting" signs in Baltimore's Safe Streets programs significantly reduced endorsement of violent attitudes toward personal conflict resolution in both the intervention and control communities.

Overall, Cure Violence shows promise for reducing gun violence and improving community attitudes towards gun violence. However, there are some notable limitations. Many of the Cure Violence programs faced challenges implementing the full program with fidelity (Giffords Law Center to Prevent Gun Violence, 2016; Butts et al., 2015). For example, in Chicago, some neighborhoods struggled with hiring and maintaining staff to implement the program, lacked community buy-in, and had inconsistent funding (Skogan et al., 2009). Similarly, in Baltimore, each intervention site was supposed to have its own staff; however, during parts of the intervention, outreach staff were asked to work across multiple intervention sites, and this contributed to non-significant effects on the outcomes (Webster et al., 2013). Variations in the frequency of conflict mediations may also have contributed to the differing outcomes across neighborhoods, with Webster and colleagues (2013) finding the largest effects in the neighborhoods with the highest frequency of conflict mediation. Further, while Cure Violence is intended to change both individuals and communities, evaluations have not examined the impact on program participants (Butts et al., 2015). Additionally, more research is needed on the specific program mechanisms that are responsible for the observed outcomes, such as whether connection to social services is necessary (Butts et al., 2015).

Two additional promising street outreach programs include the Safe and Successful Youth Initiative (SSYI) and the Gang Reduction and Youth Development (GRYD) program. The SSYI has been implemented in 11 high-violence cities across Massachusetts, targeting adolescents and young adults between the ages of 14 and 24 at proven risk for being involved with firearms (Petrosino et al., 2014; 2017; Campie et al., 2014). SSYI uses street outreach workers to engage with at-risk youth and connect them to comprehensive case management to assess their current needs and link youth to services. Services offered at SSYI sites include job training, subsidized employment, GED prep classes, high school re-enrollment assistance, college or vocational prep support, mental health and substance abuse treatment, housing assistance, and assistance for family members (Campie et al., 2014). Evaluations of SSYI found significantly lower rates of victimization for violent crimes, aggravated assaults, and homicides in cities with SSYI (Petrosino et al., 2014; 2017). Additionally, Campie and colleagues (2014) found youth who received SSYI services were 63% less likely to be incarcerated than youth who did not receive SSYI services. Further, among those receiving SSYI services, youth who were actively engaged in the services had a significant 58% decrease in incarceration odds compared to youth who were not actively engaged (Campie et al., 2014).

The GRYD is a street outreach program targeting gang involvement and violence in Los Angeles, CA (Brantingham et al., 2017). The GRYD's violence interruption practice involves responding to incidents when they occur and engaging in ongoing proactive peacemaking efforts

within the community. The GRYD providers coordinate with the Los Angeles Police Department (LAPD) to reduce the potential for retaliation and offer support to victims and families. Specific activities include information gathering, community response (e.g., diffusion of rumors, crowd control), referrals to services (e.g., GRYD services, victim assistance), negotiation of peace treaties/ceasefire agreements, and peacemaking (Brantingham et al., 2017). Comparing responses to gang crime by both GRYD and LAPD to those responded to only by LAPD, Brantingham and colleagues (2017) found the combined response resulted in significantly fewer incidents of gang retaliation than the LAPD-only response.

While both SSYI and GRYD show promise for reducing violent crime, there are some limitations to the program designs and evaluations. Across both programs, the inclusion and exclusion criteria may result in missing certain high-risk individuals that would benefit from the intervention. For example, the SSYI sites experienced great variation in their methods for identifying at-risk youth, with some sites not following the general guidelines for identifying at-risk youth and others not updating their lists of at-risk youth over time (Campie et al., 2014). The GRYD was limited to high-profile, gang-related violence (Brantingham et al., 2017). Further, the evaluation of SSYI illustrated some potential negative effects of targeting high-risk individuals, finding those who were identified for participation in SSYI but did not receive services were twice as likely to be incarcerated as youth with similar risk characteristics that were not chosen for SSYI (Campie et al., 2014). Lastly, similar to the evaluations of Cure Violence, most of the evaluations of SSYI and GRYD were not focused on participant-level impacts; rather, they examined the impacts of the program on community-level crime (Petrosino et al., 2014; Brantingham et al., 2017).

Place-Making Strategies

Place-Making Strategies are another type of community-based intervention that is based on the principles of crime prevention through environmental design (CPTED). CPTED argues that the physical environment can be adapted to mitigate the opportunity for crime, including changing the physical environment to discourage access, enhancing natural surveillance, and establishing boundaries between public and private areas (Crowe & Zahm, 1994; Schneider, 2005). These adaptations may include cosmetic improvements to hot spots (e.g., street lighting, landscaping, fencing), improving high-crime areas by addressing low occupancy, vacant lots and buildings, and restoring and improving public services and areas (Crowe & Zahm, 1994; Abt, 2021; Local Initiatives Support Corporation (LISC), 2017; Guerette et al., 2016). The overall effectiveness of these “cleaning and greening” programs remains inconclusive, but some programs show promise for addressing violent crime (Welsh et al., 2022; Welsh et al., 2020; Guerette et al., 2016; Branas et al., 2016). Common and promising place-making strategies include the use of closed-circuit television (CCTV) surveillance (Welsh & Farrington, 2009; Piza et al., 2019; Welsh et al., 2020), improvements in street lighting (Welsh et al., 2022), and neighborhood revitalization (Branas et al., 2016; LISC, 2017).

In a meta-analysis of the effects of street lighting on crime prevention, Welsh and colleagues (2022) found street lighting interventions significantly reduced total crime by 14% in treatment areas compared to control areas. However, when the effects were disaggregated by violent and property crimes, street lighting interventions were found to significantly reduce property crimes but not violent crimes (Welsh et al., 2022). A meta-analysis on the effect of CCTV surveillance for crime prevention found modest (13%) significant reductions in crime in

experimental areas compared to control areas, however, effects varied across location and crime type (Piza et al., 2019). Across locations, crime was significantly reduced in car parks (37%) and residential areas (12%), but no significant effects were found for city and town centers, housing complexes, public transport, or other settings (Piza et al., 2019). Across crime types, CCTV had the largest effect on drug crimes (20%), property crimes (14%), and vehicle crimes (14%), though no significant reductions were observed for violent crime or disorder (Piza et al., 2019). Additionally, Piza and colleagues (2019) report that the effects of CCTV surveillance on crime are increased when they involve active monitoring of the surveillance cameras and the use of multiple complementary interventions. Welsh and colleagues (2020) further found the effect of CCTV surveillance may be greater when monitored by civilian security personnel compared to monitoring by sworn police officers only or a combination of sworn police officers and civilian security personnel.

Neighborhood revitalization is also a common practice that has shown to reduce crime in hot spots locations (LISC, 2017; Branas et al., 2016). For example, the Byrne Criminal Justice Innovation (BCJI) program helps to address crime in hot spots by employing diverse crime prevention, resident engagement, and neighborhood revitalization strategies, such as vacant lot remediation, lighting improvements, beautification projects, housing development, and procurement of social services and supports for residents (LISC, 2017). The BCJI neighborhood revitalization program has shown to reduce crime in revitalized communities in Milwaukee, WI, Evansville, IN, Philadelphia, PA, and Dayton, OH (LISC, 2017). In another example, Branas and colleagues (2016) examined two urban blight remediation programs—abandoned building remediation and vacant lot remediation—in Philadelphia, PA, that targeted firearm and nonfirearm violence outcomes. The abandoned building remediation required owners of abandoned buildings to install working doors and windows in all structural openings and clean the facades of the buildings; the vacant lot remediation required property owners to remove trash and debris, plant grass and trees, and install fences. Branas and colleagues (2016) found abandoned building remediation significantly reduced firearm assaults at or near the area by 39%, though had no significant effect on total assaults or nonfirearm assaults. Vacant lot remediation was found to significantly reduce firearm assaults at or near the area by 4.5% and total assaults by 2.2% but had no effect on nonfirearm assaults.

Overall, the place-making strategies have shown to produce small to moderate crime reduction effects, however, they are generally more effective in addressing property crimes than violent crimes. Additionally, the strategies are not equally effective across implementation locations. Another limitation includes concerns about displacement of crime to nearby areas (Guerette et al., 2016; Branas et al., 2016). The evidence on crime displacement is mixed, with some evaluations included in the meta-analyses of CCTV and street lighting showing displacement effects (Welsh et al., 2022; Piza et al., 2019). There are also concerns that some neighborhood revitalization tactics might result in the gentrification and displacement of residents due to increased property taxes from luxury housing or upscale parks and recreation facilities (Branas et al., 2016). However, Branas and colleagues (2016) showed very few of the remediated properties were developed into luxury homes or commercial businesses. Further, the housing development projects by BCJI were primarily in partnership with Habitat for Humanity to bring in affordable housing (LISC, 2017).

Therapy-Based Programs

Therapy-based programs, such as cognitive behavioral therapy (CBT) and functional family therapy (FFT), are widely used with delinquents and young adult offenders to reduce recidivism and address problematic behavior (Fagan, 2016; Feucht & Holt, 2016). Systematic evaluations of therapy-based programs find those that focus on the highest-risk offenders and are stand-alone or the primary feature of the program are most effective for addressing problematic behavior (Landenberger & Lipsey, 2005; Feucht & Holt, 2016; Gottfredson et al., 2018). Promising therapy-based programs that have been evaluated for their effects on violent crime include functional family therapy (FFT), Chicago's Becoming a Man (B.A.M.) and Roca, Inc.

Functional family therapy is an evidence-based intervention that targets at-risk youth and their families (Fagan, 2016; Gottfredson et al., 2018). FFT is designed to improve family functioning and targets parenting skills, youth compliance, and a wide range of cognitive and emotional behaviors (Blueprints for Healthy Youth Development, 2023). FFT is often delivered in a home setting to both targeted youth and their caregivers and typically involves 12 to 15 one-hour long face-to-face sessions (Gottfredson et al., 2018). Gottfredson and colleagues (2018) evaluated an FFT program in Philadelphia, Pennsylvania that was adapted for use with gang-involved youth or those deemed to be at risk for gang membership (FFT-G). Analyses of self-report surveys revealed high gang-risk participants in the FFT-G program had significantly lower levels of self-reported general delinquency, drug use, alcohol use, and less time spent in residential placement compared to the control group, however, there were no significant differences between the low gang-risk participants and the control group (Gottfredson et al., 2018). Further, FFT-G participants were found to have significantly lower rates of recidivism than controls, with the greatest effects for high gang-risk participants. Specifically, 12 months after treatment, FFT-G high gang risk participants were significantly less likely to have been arrested, have fewer arrests, felony charges, crimes against person charges, and property crime charges, and were less likely to be adjudicated delinquent (Gottfredson et al., 2018).

Chicago's B.A.M. program is an in-school and after-school program designed to help youth develop social cognitive skills, including "emotional regulation, interpersonal problem solving, conflict management, control of stress response, coping skills, goal setting and attainment, ability to evaluate consequences, and the ability to create solutions to problems" (Prochaska, 2014, p. 339). The in-school intervention uses group counseling and mentoring to teach skills, while the after-school program uses different sports activities to practice the behavioral skills. Evaluating B.A.M.'s impact on school and crime outcomes, Prochaska (2014) found participation in the program significantly increased school engagement and performance during the program year and in the follow up year. Additionally, during the program year, violent crime arrests were significantly reduced by 43% and weapons crimes and vandalism were significantly reduced by 36%; however, these effects were not maintained in the follow up year (Prochaska, 2014).

Roca, Inc. is a non-profit organization based in Massachusetts that seeks to foster behavior change and improve outcomes among young adults (ages 17-24) at high risk of incarceration (Abt Associates, 2021). Roca uses a CBT informed curriculum that focuses on participants' specific needs, teaching them how thoughts, feelings, and behaviors are connected, and mastering the use of these skills across various settings. Evaluation of Roca found participants had substantially lower levels of recidivism for any new conviction, a new violent

conviction, and three-year recidivism (Abt Associates, 2021). For example, the three-year recidivism rate for new crimes ranges from 42% to 48% for high-risk young men under the age of 24 in Massachusetts, while the three-year recidivism rate for Roca participants was 30% (Abt Associates, 2021). Importantly, however, the impact of CBT programming was not able to be extracted from the other curricula offered with Roca, thus, it cannot be determined to what extent the CBT programming contributed to the results.

While therapy-based programs are promising, there are some important limitations to address. First, therapy-based programs may be more effective for reducing offending behaviors among juveniles than adults (Feucht & Holt, 2016). Additionally, programs serving the highest-risk population appear to be more effective (Gottfredson et al., 2018; Landenberger & Lipsey, 2005), however, programs conducted through school, like Chicago's B.A.M., may miss the highest-risk youth (Prochaska, 2014). Lastly, the long-term effects of therapy-based programs remain unclear, with some evidence to suggest that effects on offending behaviors decay over time (Prochaska, 2014).

Youth-Focused Interventions

Youth-focused interventions are those that explicitly target young adults, adolescents, and children most at risk of criminal involvement (Farrington, 2016). These strategies are typically prevention focused, aimed at preventing at-risk youth from becoming involved in the criminal justice system. Importantly, youth-focused strategies often do not focus on violence, rather, they target more general criminogenic and educational outcomes. Youth-focused strategies will often incorporate other strategies such as FFT and CBT as part of the intervention. Promising youth-focused strategies include school-based/early-childhood interventions, youth work programs, and mentoring.

School-Based/Early-Childhood Prevention Programs

School-based/early-childhood interventions primarily target children in early-childhood (i.e., pre-school, kindergarten, first grade) and emphasize improving intellectual capabilities and cognitive problem solving (Farrington, 2016). These programs are often delivered both in-school and at home. Evaluations of school-based/early-childhood intervention programs have shown promising short- and long-term effects on crime involvement and other life outcomes (Farrington, 2016). For example, the Perry Program in Ypsilanti, MI provided daily pre-school programming and weekly home visits to disadvantaged African American children (aged 3-4) for about 2 years, with the goal of providing intellectual stimulation, increasing thinking and reasoning abilities, and increasing later school achievement (Farrington, 2016; Parks, 2000). At each follow up (ages 15, 19, 27, and 40), participants had significantly lower levels of delinquency and criminal involvement than controls (Farrington, 2016; Parks, 2000; Schweinhart & Weikart, 1981; Berrueta-Clement et al., 1984; Schweinhart & Weikart, 1993; Schweinhart et al., 2005).

The Seattle Social Development Project (SSDP) is another example of an early-childhood school-based intervention. The SSDP begins intervention at age 6 and combines parent training, teacher training, and child skills training to increase attachment and bonding to school and parents, improve interpersonal cognitive problem-solving skills, and reinforce prosocial behavior (Farrington, 2016; O'Donnell et al., 1995). Follow up at age 12 (O'Donnell et al., 1995) and age 18 (Hawkins et al., 1999) found significant reductions in delinquency, substance use, and

incidences of violence; however, by age 27 the beneficial effects on offending reduced considerably (Hawkins et al., 2008).

A promising school-based intervention specifically targeting gang membership and violence is the Gang Resistance Education and Training (G.R.E.A.T.) program. The G.R.E.A.T. program aims to teach youth to avoid gang membership, prevent violence and criminal activity, and assist youth in developing positive relationships with law enforcement (Esbensen et al., 2013). The program consists of 13 lessons delivered once a week by uniformed law enforcement officers, addressing risk factors for gang involvement and violent offending and life skills (e.g., school commitment and performance, peer associations, self-control, etc.) to prevent involvement in gangs and delinquency. Esbensen and colleagues (2013) evaluated the G.R.E.A.T. program across seven cities (Albuquerque, NM; Chicago, IL; a Dallas-Fort Worth, TX area district; Greeley, CO; Nashville, TN; Philadelphia, PA, and Portland, OR) at 1-year and 4-years posttreatment. Across the 4-years posttreatment, compared with non-G.R.E.A.T. students, G.R.E.A.T. students had significantly lower odds of belonging to a gang (24% lower), had more positive attitudes toward law enforcement, and had less pronounced risk factors associated with gang membership (Esbensen et al., 2013). However, no significant effects were found for delinquency (general or violent offending). Further, program effects were found to vary considerably by intervention site, finding only three sites significantly reduced gang membership and two sites significantly reduced the frequency of delinquency, however, there were no significant effects on violent offending and two sites produced null findings across all outcome measures (Esbensen et al., 2013).

There are several common pitfalls associated with the school-based/early-childhood interventions. Namely, most of these programs are not specifically targeting violence and/or gun violence. Rather, they are often focused on a variety of outcomes, primarily those related to educational outcomes and general delinquency. Additionally, because these programs are typically delivered during school, they can miss the highest risk students because those at highest risk are also more likely to have been removed from school (e.g., dropped out, suspended, expelled; Esbensen et al., 2013). Reaching those at highest risk may also face challenges with parental involvement and consent.

Youth Work Programs

Youth employment programs primarily target adolescents and young adults between the ages of 14 and 24, providing young people with work experience, positive relationships, and pathways to careers and/or post-secondary education (Modestino, 2017). Youth employment programs have been found to reduce involvement in violence by 35% to 45% (“Fact Sheet,” 2021). For example, Modestino (2017) evaluated the Boston Summer Youth Employment Program and found participants had significantly fewer violent crime charges (-35%) and property crime charges (-57%) in the 17 months following the intervention. However, there was no significant effect on ever being arrested. Heller and colleagues (2017) examined the One Summer Chicago Plus (OSC+) youth employment program and found violent crime arrests decreased by 45% in the first year, though the effects did not continue into the second year and there were no significant changes in other crime types.

There are some notable limitations of youth work programs. First, many of these programs are application-based and youth are typically chosen at random to participate, thus the highest-risk individuals may not receive programming (Modestino, 2017; Heller et al., 2017).

Second, few work programs have the primary objective of crime prevention, thus, evaluations often do not measure changes in criminal behavior (Welsh et al., 2013). Finally, the effects of these programs on crime appear to decay over time, suggesting the programs primarily serve an incapacitation effect during programming but have no long-term deterrence effect (Modestino, 2017; Heller et al., 2017).

Mentoring Programs

Mentoring programs are a widely used type of youth-focused strategy, providing one-on-one relationships between at-risk youth and caring adults to promote positive youth development and prevent negative outcomes (Tolan et al., 2013; DuBois, 2021). Mentoring programs generally target broader, more general outcomes including antisocial behavior, delinquency, and educational outcomes. As such, mentoring programs serve a wide range of age groups (e.g., early adolescents to young adults) and populations with diverse needs and risk factors. Additionally, the mentoring approaches vary widely based on the age of the mentor (e.g., older peers vs. adults), whether mentors are volunteers or paid, the mentoring format (e.g., one-to-one vs. group), and location of service delivery (e.g., school vs. community; DuBois, 2021). Systematic evaluations of mentoring programs have found they are generally effective for both preventing and reducing delinquent behavior (Tolan et al., 2013; DuBois, 2021; Raposa et al., 2019; DuBois et al., 2011). Importantly, mentoring programs that include targeted, skills-based approaches have a much larger effect on positive outcomes than non-specific relational mentoring approaches (Christensen et al., 2020).

Most evaluations of mentoring programs focus on their effects on the broader outcomes of antisocial behavior, delinquency, and education. However, several mentoring programs have been evaluated that target serious offending behaviors and justice system involvement. This review will focus on those that have been evaluated for their impact on serious delinquency and/or violent behavior and have been evaluated across multiple sites and time periods.¹⁰ Additionally, this review largely focuses on intervention-oriented mentoring programs, those that target individuals already involved in the justice system.

One of the most recognizable mentoring programs is Big Brothers Big Sisters (BBBS), which matches youth to volunteer mentors who spend time with their mentee in social or recreational activities several times per month (Tierney et al., 2000). BBBS programs are primarily prevention-focused, aiming to improve academic achievement, antisocial behavior, and delinquency outcomes and typically offered to youth between the ages of 9 and 16. Evaluations of BBBS' community-based program have found significant short-term effects on illegal drug and alcohol use (Tierney et al., 2000) and long-term effects on total number of criminal offenses during adulthood (DuBois et al., 2018). However, BBBS' community-based program did not have a significant effect on adult arrest for property or person offenses (DuBois et al., 2018). Further, BBBS' school-based program had no significant effects on delinquency outcomes at 9- and 15-month follow-ups (Herrera et al., 2007; 2011).

¹⁰ Additional mentoring programs that were reviewed but not included in the report were Across Ages (LoSciuto et al., 1996; Taylor et al., 1999), Fostering Healthy Futures (Taussig et al., 2021), Cabrini Green Youth Program Children Teaching Children (Sheehan et al., 1999), SNAP Under 12 Outreach Project (Augimeri et al., 2007; Lipman et al., 2008), Reading for Life (Seroczynski et al., 2015), Campus Connections (Haddock et al., 2017), and Arches Transformative Learning (Lynch et al., 2018).

A promising mentoring program that addresses gun violence is Advance Peace (AP). AP is an 18-month fellowship program that targets the most lethal individuals at the center of gun violence in a city (generally aged 14 to 34). Throughout the program, fellows are provided mentoring and supportive relationships by Neighborhood Change Agents (NCAs; street outreach workers) 7-days-a-week. Additionally, fellows participate in group life-skills classes and are connected to professional services by their NCAs. In addition to providing mentorship, NCAs also work as “violence interrupters” and regularly intervene in situations where guns are drawn and ready to be used (Corburn et al., 2021).

An evaluation of AP in Richmond, CA found a significant 55% reduction in annual firearm homicides and 43% reduction in firearm assaults after implementation of the program (Matthay et al., 2019). However, during the same period, nonfirearm homicides and assaults increased by 16% and 3%, respectively. Significant reductions in firearm homicides and assaults were also found in an evaluation of AP in Sacramento, CA (Corburn & Fukutome-Lopez, 2020). During the 18-month fellowship period, gun homicides and assaults declined by 22% in the AP zones, compared to a 10% decline citywide. Overall, the number of gun assaults and homicides were significantly reduced by 27% compared to if there had been no intervention (Corburn & Fukutome-Lopez, 2020). Additionally, Corburn & Fukutome-Lopez (2020) examined participant outcomes, finding 90% of the fellows had no new gun charges and 44% had no new arrest charges by the completion of the program.

Mentoring has also been offered to system-involved youth as a component of diversion programs. For example, the Adolescent Diversion Project (ADP) is a community-based mentoring program for youth diverted from juvenile court to intensive supervision (Davidson et al., 1987; Smith et al., 2004). The ADP is an 18-week mentoring program in which mentors spend 3-8 hours per week with the juveniles and their families, providing them services tailored to their specific needs and improving juveniles’ skills in several areas, including interpersonal relationships, academic outcomes, and youth development. ADP has been evaluated twice, once with undergraduate students serving as volunteer mentors (Davidson et al., 1987) and once with paid family workers from a local service agency serving as mentors (Smith et al., 2004). Both evaluations found significant reductions in officially measured recidivism but not in self-reported delinquency/offending.

Another diversion-mentoring program is the Youth Advocate Program (YAP). The YAP is a short-term, high-intensity mentoring program provided to juvenile court-referred youth as a condition of their probation or parole (Karcher & Johnson, 2016). Youth (aged 10-19) referred to the program are at immediate risk of institutionalization due to violent or repeat property offenses. The YAP aims to prevent future criminal activity by providing wraparound services, help youth meet court mandated goals, and strengthen family and community relations. During the program, paid mentors (Advocates) meet with youth for 7.5 to 30 hours per week over a 4- to 6-month period, working with the youth to implement their individual service plans and achieve their goals. The activities that Advocates engage in with the youth are driven by the youths’ specific needs and interests, and may include homework, community service, employment assistance, recreational activities, group activities, and wraparound services (Karcher & Johnson, 2016). From entry to discharge, YAP participants exhibited improvements in serious dispositions and had statistically significant decreases in self-reported misconduct at discharge compared to untreated comparison groups (Karcher & Johnson, 2016). YAP also shows some evidence of

long-term effects, with participants exhibiting large decreases in self-reported status offenses, misdemeanors, and felonies (“serious dispositions) at 12-months post-discharge.

Lastly, the Juvenile Weapons Offenders Program (JWOP) is a diversion-mentoring program that targets male non-violent juvenile weapon offenders between the ages of 13 and 17 with the aim of reducing firearm recidivism and keeping youth out of the juvenile justice system (Soe-Lin et al., 2020). The 6-month program is divided into three educational segments: (1) developing awareness of the traumatic consequences of firearm violence, (2) developing awareness of unhealthy behaviors and risk factors, and (3) skills-based programming focused on choices, decision-making skills, and attitudinal change. Program classes are provided by peer mentors and graduates of the program are encouraged to continue skill development by becoming peer mentors. Soe-Lin and colleagues (2020) compared recidivism outcomes for those who completed the program to those who did not complete the program, finding significantly lower 6-month recidivism rates for any criminal charge (20.1% vs. 32.9%) and charges excluding unarmed criminal offenses (10.1% vs. 22.4%). Additionally, program completers had significantly lower 12-month recidivism rates at 33.6% for any criminal charge (vs. 50.0% for non-completers) and 18.6% when excluding unarmed criminal offenses (vs. 33.9% for non-completers).

Overall, mentoring programs show promise for reducing offending behaviors, however, there are some limitations. Notably, most mentoring programs do not directly target violent behavior; rather, mentoring programs typically address antisocial behavior, delinquency, and educational outcomes (Tolan et al., 2013). Additionally, some programs (e.g., ADP, JWOP) exclude youth with serious offenses (Davidson et al., 1987; Soe-Lin et al., 2020). Thus, mentoring programs may be missing youth at greatest risk for serious offending behaviors. Further, mentoring program studies often lack descriptions of the program design and mentoring activities, making it difficult to understand which specific mechanism(s) are contributing to youth outcomes (Tolan et al., 2013; DuBois, 2021). Lastly, most evaluations focus on immediate effects, and it is not clear what the long-term effects of mentoring programs are (Tolan et al., 2013; DuBois, 2021; Herrera et al., 2007).

Hospital-Based Violence Interventions

Hospital-based violence intervention programs (HVIP) focus on reducing gun violence by reaching high-risk individuals who have been recently admitted to a hospital for treatment of a serious violent injury (Giffords Law Center to Prevent Gun Violence, 2016). HVIP screens patients to identify those most at risk for reinjury and connects them with case managers who help refer high-risk individuals to a variety of community-based organizations and social services (Holler et al., 2022). HVIPs have been implemented for both adult populations—Prescription for Hope (RxH; Bell et al., 2018; Holler et al., 2022), Violence Intervention Program (VIP; Cooper et al., 2006), and The Wraparound Project (WAP; Smith et al., 2013; Juillard et al., 2016)—and youth populations—Life Outside Violence (LOV; Mueller et al., 2023) Take Charge! (Cheng et al., 2008; Lindstrom Johnson et al., 2022), and WAP.

Most evaluations of HVIP programs find limited to no impact on violent reinjury (Affinati et al., 2016). Several evaluations have reported low rates of reinjury, around 5%, however, they are not significantly different from historical reinjury rates or nonintervention group reinjury rates (Affinati et al., 2016; Bell et al., 2018; Cooper et al., 2006; Smith et al., 2013; Juillard et al., 2016). One exception is an evaluation of RxH, which found that the odds of

violent reinjury within 2 years of treatment was significantly reduced by 65% (Holler et al., 2022). Evaluations of HVIP effects on criminal activity have reported mixed findings. For example, an evaluation of RxH found participation in the program significantly increased the odds of a new conviction for a violent crime by 143% (Holler et al., 2022). However, an evaluation of VIP found the nonintervention group was 3 times more likely to be arrested for a violent crime, 2 times more likely to be convicted of any crime, and 4 times more likely to be convicted of a violent crime, though there was no significant difference in the number of arrests between the intervention group and nonintervention group (Cooper et al., 2006). Null effects on criminal activity were found in two evaluations of Take Charge!, a youth-focused HVIP program (Cheng et al., 2008; Lindstrom Johnson et al., 2022).

There are several notable limitations regarding HVIP programs and their evaluations. Specifically, many HVIP evaluation samples are small and are often plagued with low retention rates and/or non-randomized study samples (Affinati et al., 2016; Bonne et al., 2022; Juillard et al., 2015; Smith et al., 2013). Additionally, the inclusion and exclusion criteria vary widely, with some programs excluding and others including victims of domestic violence, for example (Affinati et al., 2016; Bonne et al., 2022). Lastly, the service provision, involved providers and staff, and program dosage vary widely between hospital programs (Affinati et al., 2016; Bonne et al., 2022; Smith et al., 2013). However, there is some evidence to suggest that programs that have resources dedicated to crime prevention, mental health, and employment and have higher dosages of case management exposure are more likely to reduce reinjury and violent crime (Holler et al., 2022; Cooper et al., 2006; Smith et al., 2013; Cheng et al., 2008).

Summary

As shown in Table 11, overall, there are a variety of intervention strategies that have been found to reduce gun violence and violent crime. The types of strategies range from law enforcement-led programs to ones that use and encourage more partnerships with community members and organizations. Additionally, the strategies are varied in their target offender populations—youth, adults, specific offending groups—and crime outcomes—group violence, firearm offenses, violent offending, etc. Importantly, depending on the specific programs implemented, their impact varies. Many programs have been found to produce some reduction in overall crime, but there are often varying degrees of effectiveness for specific crime categories, such as homicide, violence, property, and drugs. Additionally, the effectiveness of these strategies can vary by jurisdiction. Ultimately, for these strategies to be effective, they must align with the crime problem and with jurisdictional resources and capabilities for implementation fidelity.

Table 11: Violence intervention programs and targeted population/problem

<i>Intervention Category</i>	<i>Targeted Population/Problem</i>
<i>Law Enforcement-Based</i>	
Hot Spots Policing	• Targets micro-geographic locations with high concentrations of gun and drug violence with aggressive order maintenance tactics
Problem-Oriented Policing	• Targets underlying causes of violent, property, and drug crimes
Focused Deterrence	• Targets chronic individual offenders and violent groups involved in gun, gang, and drug violence to reduce further criminal involvement
<i>Partnership-Oriented</i>	

<i>Intervention Category</i>	<i>Targeted Population/Problem</i>
Third-Party Policing	• Targets signs of disorder and physical decay contributing to property and drug crimes
Community-Oriented Policing	• Targets neighborhood social and physical disorder contributing to violent, property, and drug crimes
<i>Community-Based</i>	
Street Outreach	• Targets high-risk individuals likely to be involved in gun violence and violent crime to mediate violent conflicts
Place-Making Strategies	• Targets physical environments that create opportunities for crime, such as areas with poor street lighting and/or abandoned/neglected buildings
Therapy-Based	• Targets delinquent youth and young adult offenders at risk for recidivism and continued problematic behaviors
<i>Youth-Focused</i>	
School-Based or Early-Childhood Prevention	• Targets elementary-aged children with low cognitive abilities and social skills to improve educational outcomes and reduce delinquency
Youth Work	• Targets adolescents and young adults to improve employment skills which may result in reductions in criminal involvement
Mentoring	• Targets at-risk youth and young adults to broadly address antisocial behavior, general delinquency, and educational outcomes
<i>Hospital-Based</i>	
Prescription for Hope	• Targets high-risk adults who have recently been admitted to a hospital for treatment of a serious violent injury to reduce rates of violent reinjury
The Wraparound Project	• Targets high-risk youth and adults who have recently been admitted to a hospital for treatment of a serious violent injury to reduce rates of violent reinjury

In the next section of the report, we offer our intervention recommendations drawing on our quantitative assessment of violent crime in Leon County and the prior literature.

IV. INTERVENTION RECOMMENDATIONS

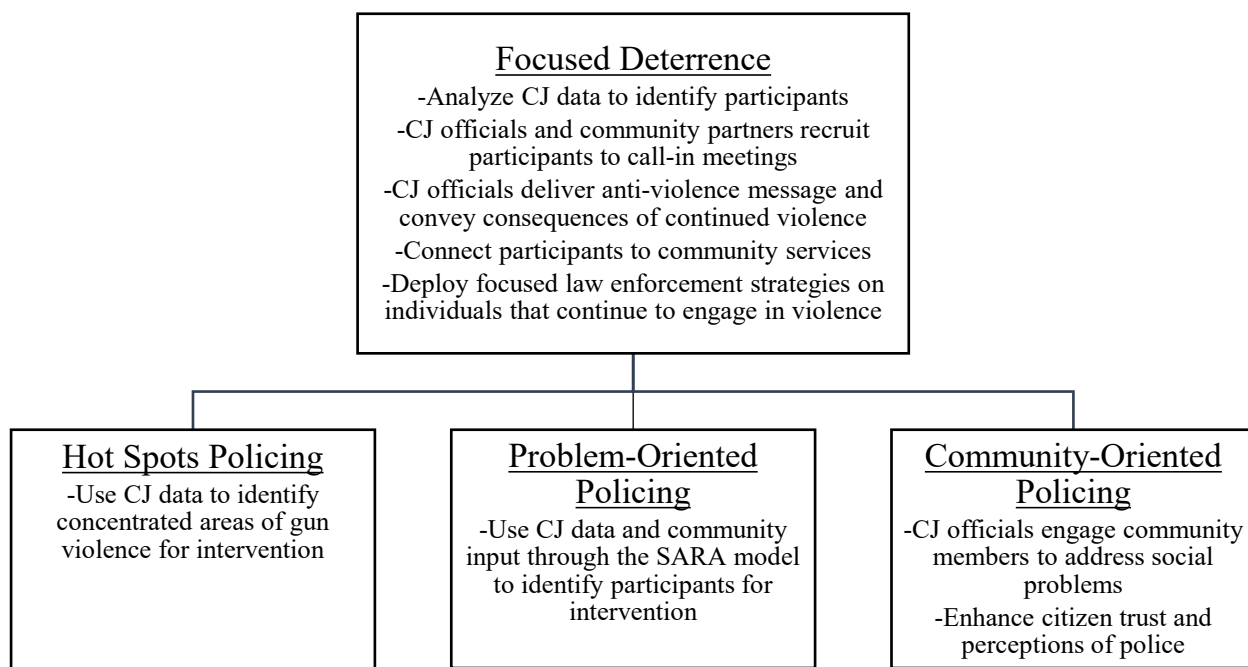
Our review of the literature revealed the strategies with the strongest near-term violent crime reduction effects. These include focused deterrence, hot spots policing with problem-oriented strategies, and community-oriented policing. To inform our recommendations, we compared the demographic and crime statistics of the evaluated intervention sites to Tallahassee, focusing on similarities in population and violent, property, and total crime rates. It is important to note that most prior research was conducted in major cities (e.g., Baltimore, MD; Chicago, IL; Los Angeles, CA; New York City, NY; Philadelphia, PA; Indianapolis, IN) and the findings may not translate well to Leon County. However, in addition to evaluations in these major cities, several studies have evaluated the intervention programs in cities that are similar in size to Tallahassee (e.g., Lowell, MA; Springfield, MA; Rockford, IL, Birmingham, AL; Montgomery, AL), or slightly larger than Tallahassee (e.g., Oakland, CA; Tampa, FL; St. Louis, MO). Overall, Tallahassee appears to have a lower violent and property crime rate than the comparison cities. Importantly, however, the most effective violence intervention strategies have produced positive effects across all intervention population sizes and crime rates. As such, we should expect, if implemented with integrity, these intervention strategies to be effective in Tallahassee.

Our quantitative assessment of gun violence in Leon County revealed some similarities and differences compared to other cities that have implemented violence intervention programs. Our similarities lie in the concentration of gun violence in neighborhoods with high levels of

concentrated disadvantage and residential turnover. There is also some overlap in the age of offenders between Leon County and the intervention cities. Specifically, most intervention strategies targeted offenders between the ages of 16 and 24; the average age of offenders in Leon County is 27 years old, but approximately half of all offenders fall within the target age range (16-24). A notable distinction is that most of the gun violence in Leon County is not perpetrated by identifiable groups. Specifically, only about 28% of identified suspects are known or suspected to be affiliated with gangs and only about 6% of incidents are considered gang related. Notably, however, we found that roughly 40% of shootings were between acquaintances while about 45% of shootings were between strangers. Additionally, we found roughly one-third of shootings were the result of arguments (e.g., feeling disrespected, jealousy, history of arguments).

Based on our review of the literature and quantitative assessment of gun violence in Leon County, it is recommended that the CVIPI Planning Team consider an integrated intervention strategy drawing on elements of focused deterrence, hot spots policing, problem-oriented policing, and community-oriented policing. Figure 15 summarizes the recommended intervention practices and program components.

Figure 15: Recommended intervention practices and key program components for the reduction of homicides and gun violence



The primary intervention the CVIPI Planning Team should consider is a focused deterrence strategy that targets both identifiable offender groups and individuals. The group violence focused deterrence intervention may be helpful in targeting offenders with gang associations as well as the more informal networks involved with acquaintance victimizations, while targeting individuals may be better suited for those incidents perpetrated against strangers.

Importantly, given the high rate of argument-based gun violence incidents, the call-in meeting element of focused deterrence should include messaging and connection to services aimed at addressing conflict resolution skills.

To support the focused deterrence strategy, the CVIPI Planning Team should consider adapting and incorporating elements of hot spots policing, problem-oriented policing, and community-oriented policing. Hot spots policing may be particularly effective in targeting the neighborhoods most at risk, including ZIP codes 32301, 32303, 32304, and 32310 and the Providence, Bond, Frenchtown, and Southside neighborhoods. Elements of problem-oriented policing, particularly the SARA model, should be considered to assist in identifying those groups and individuals most likely to be involved in gun violence for intervention. Notably, focused deterrence strategies often utilize the SARA model in identifying their target population.

Importantly, we found gun violence incidents were more likely to be cleared when victims cooperated with the police investigation. Consequently, the CVIPI Planning Team should consider incorporating intervention elements that will bolster community-police relations. For example, problem-oriented policing's SARA model involves an element of community participation, typically in identifying appropriate responses to the crime problem. The SARA model may also welcome community participation in identifying the local crime problem. Similarly, community-oriented policing largely focuses on developing community-police relationships to identify and respond to local crime problems. In addition to increasing clearance rates, improving community-police relations can help ensure the success of the intervention. Specifically, if community residents are resistant to the intervention, the intervention will likely be impeded and its intended outcomes unlikely.

Once the intervention program has been implemented with fidelity, the CVIPI Planning Team should consider implementing gun violence related prevention programs to ensure long-term sustained effects. Based on our quantitative assessment of the gun violence data, there is a clear need for prevention programs that focus on social/emotional education, such as improving conflict resolution skills. Importantly, improving the conflict resolution skills of individuals at high risk for gun violence may reduce gun violence incidents that result from arguments.

Promising prevention strategies that have addressed social/emotional learning include therapy-based programs, school-based/early childhood prevention programs, and mentoring programs. Notably, these programs have targeted individuals of all ages, including children, youth, and young adults, and individuals with varying degrees of risk for criminal involvement. For example, therapy-based programs, such as Chicago's B.A.M. and Roca, Inc., have been provided to high-risk youth and young adults to improve their social cognitive skills, including emotion regulation, problem-solving, and conflict management. Similarly, mentoring programs may also include components focused on improving cognitive-behavioral skills, such as Big Brothers Big Sisters, Advance Peace, SNAP Under 12 Outreach Project (Augimeri et al., 2007; Lipman et al., 2008), and Arches Transformative Mentoring program (Lynch et al., 2018).

Implementation Methods and Resources

Once intervention and prevention programs are chosen, to ensure they are implemented with fidelity, it is important for each component to be evidence-based. In this section, we describe the methods and resources used by prior intervention and prevention strategies to guide implementation of our recommendations. Specifically, we describe the methods used for

identification of the target population, the methods for connecting the identified population to the program services, and the resources and/or individuals involved in carrying out these methods (e.g., law enforcement, community partners, service providers).

Our primary intervention recommendation is a focused deterrence strategy that targets both individual and group offenders. Group violence focused deterrence interventions tend to target chronic offenders, who typically are members of gangs or have ties to gangs, are male, and between the ages of 18 and 24 (Braga et al., 2001; McLively & Nieto, 2019; Circo et al. 2020). Group violence interventions use both objective and subjective methods to identify potential gang members or violent individuals. Objective methods typically involve the analysis of police data on reported violent crimes and incidents involving gangs or violent groups (Braga et al., 2001; McLively & Nieto, 2019; Circo et al., 2020). For example, the Indianapolis Violence Reduction Partnership (IVRP) identifies targets by searching official police records and incident reviews for information about homicide suspects and victims, focusing mostly on gang/group affiliations, drug involvement, and prior involvement in the criminal justice system (McGarrell et al., 2006). In addition to analyzing firearm related arrests, Detroit Ceasefire maintains a gang database which lists individuals that are known to be gang affiliated (Circo et al., 2021).

Another common method used by group violence interventions for identifying target groups involves the utilization of subjective police intelligence. The Kansas City No Violence Alliance (KC NoVa) engages in “group audits,” where they meet with police officers who share their insight about current violent groups and their members, relationships, and activities (Fox & Novak, 2018). Similarly, the Group Violence Reduction Strategy (GVRS) in Chicago conducts “gang audits,” where a team of researchers sit down and identify geographic locations of gangs and their “turf,” their relationships to one another, and names of the individual members (Papachristos & Kirk, 2015). GVRS New Orleans obtains information about gang participation from police officers who are familiar with the local gang structures, which results in a continually updated list of potential gangs to target in their intervention (Corsaro & Engel, 2015). These strategies may be particularly beneficial for Leon County, as our quantitative assessment indicated that detailed gang information was not always available in the law enforcement case files.

Once the targets are identified, these programs typically deliver anti-violence messages through the use of call-in meetings. Most participants are either on probation, parole, or are incarcerated, therefore attendance to these meetings is required (Braga et al., 2001; Circo et al., 2020; Papachristos & Kirk, 2015; Corsaro & Engel, 2015; McGarrell et al., 2006). Additionally, gang outreach workers often make contact with participants in their homes, at a police station, at probation or parole offices, or in the community (Braga et al., 2001; Fox & Novak, 2018). Some programs use custom notifications to ensure that participants who are no longer under probation or parole supervision are being reached (Circo et al., 2021; Corsaro & Engel, 2015).

At the call-in meetings, attendees hear from community members, faith leaders, law enforcement officials, victims’ families, gun-violence survivors, ex-offenders, and social service providers who advocate for a reduction in violence and offer their support networks and services (McLively & Nieto, 2019; Fox & Novak, 2018; Papachristos & Kirk, 2015). These meetings also provide law enforcement officials the opportunity to directly inform the participants that violence will not be tolerated and explain the enhanced law enforcement responses should the violence continue (Fox & Novak, 2018; Papachristos & Kirk, 2015; Corsaro & Engel, 2015; McGarrell et

al., 2006). These meetings are typically held in a public space to demonstrate a community effort in the anti-violence message (Braga et al., 2001; Circo et al., 2020; Papachristos & Kirk, 2015; Corsaro & Engel, 2015; McGarrell et al., 2006).

The individual offender focused deterrence interventions tend to target “impact players,” or individuals who have a history of committing violent acts (Braga et al., 2008; Clark-Moorman et al., 2019; Grunwald & Papachristos, 2017; Fox et al., 2022). These types of programs analyze risk factors and patterns of chronic offenders to identify which individuals are at highest risk for engaging in violence, thus making a good target for intervention (Fox et al., 2022; Clark-Moorman et al., 2019, Grunwald & Papachristos, 2017; Braga et al., 2008). For example, Project Safe Neighborhood (PSN) Tampa uses a risk assessment tool called the “Violent Impact Players List” (VIP List) which uses evidence-based risk factors to identify the “serial trigger pullers” at highest risk of committing additional violent crimes (Fox et al., 2022). These risk factors include prior firearm offense/arrest, violent criminal history, gang affiliation within past 5 years, probation/release from prison within past 3 years, suspect/victim in a shooting, associate of suspect in shooting, and felony nonviolent arrests within past 2 years. Those who score above a 25-point threshold are considered the highest risk and labeled as “VIPs.” Similarly, RAVEN and PSN Chicago select their targets through a focus on recently released probationers/parolees with gun related/violent offenses (i.e., homicide, aggravated assaults, robberies; Clark-Moorman et al., 2019, Grunwald & Papachristos, 2017). Individual offenders may also be identified using subjective street intelligence collected by law enforcement officials who have close interactions with gang members (Braga et al., 2008).

The anti-violence, deterrent messages are typically delivered to the identified individuals through direct, in-person communication (Braga et al., 2008; Clark-Moorman et al., 2019; Grunwald & Papachristos, 2017). This communication occurs either by probation/parole-required call-in meetings held in public spaces, or by physically going to a gang’s “turf” to talk when violence occurs (Braga et al., 2008; Clark-Moorman et al., 2019; Grunwald & Papachristos, 2017). Communication efforts at these meetings come from law enforcement, social service providers (i.e., drug treatment and counseling), education specialists, health professionals, employment counselors, ex-offenders, and community leaders, all of whom take part in expressing the importance of ending violence in the community and offer their services and networks (Braga et al., 2008; Grunwald & Papachristos, 2017; Clark-Moorman et al., 2019). One unique method of communication in PSN Lowell is the distribution of PSN business cards and fliers, a toll-free phone line, public service announcements on TV and radio, bus placards, and even billboards (Braga et al., 2008).

To support the focused deterrence strategy, we recommended incorporating elements of hot spots policing, problem-oriented policing, and community-oriented policing to assist in identifying the target population. Specifically, hot spots policing draws on police incident reports to identify the microgeographic areas with the highest concentration of crime, such as specific buildings, addresses, street segments, or intersections (Braga, 2016; Braga et al., 2010). Problem-oriented policing identifies the intervention location and target population through the scanning and analysis steps of the SARA model. Scanning generally involves a hot spots approach, identifying local areas with the highest crime problem by analyzing incident reports and citizen calls for service (Braga et al., 1999; Maguire et al., 2015). Once a problem has been identified, officers engage in the analysis phase to understand the nature and potential causes of the problem. The analysis phase often involves discussion with community members through door-

to-door visits, community meetings, and/or community surveys (Braga et al., 1999). Similarly, community-oriented policing works directly with community members to identify and understand local crime problems through community meetings and door-to-door visits (Gill et al., 2014). Importantly, the involvement of the community in identifying and developing responses to the local crime problem can bolster community-police relations by enhancing citizens trust in police and their perceptions of police fairness, legitimacy, and effectiveness (Gill et al., 2014).

To sustain the intervention effects, we recommended implementing prevention programs that focus on addressing social/emotional learning. As noted previously, prevention programs can target a general population and/or those at high-risk for criminal involvement. Further, prevention programs can target individuals of all age groups, including children, youth, and young adults. Importantly, however, prevention programs that target the highest-risk individuals have been found to be more effective at reducing serious offending. Here we provide examples of the methods used in therapy-based programs, school-based/early childhood prevention programs, and mentoring programs to identify high-risk populations for intervention.

Therapy-based programs can be both prevention- and intervention-focused and often target at-risk individuals from adverse backgrounds, such as those from low-income, high-crime communities with educational struggles (Abt Associates, 2021; Prochaska, 2014). More specifically, Chicago's Becoming a Man (BAM) program focuses on middle and high school boys who are struggling academically, whereas Roca Inc. focuses on young men and women ages 17 to 24 who are involved in criminal activity (Abt Associates, 2021; Prochaska, 2014). These programs utilize differing methods to identify and recruit individuals for intervention. BAM works directly with schools to identify "medium-risk" students who would benefit from the program, which they define as those with low cognitive skills that are still likely to attend school (Prochaska, 2014). Roca trains Youth Workers and sends them into communities to engage and recruit individuals at risk of incarceration based on their involvement with a gang, the justice system, and/or drugs, as well as their exposure to violence, poverty, and systematic racism (Abt Associates, 2021). The Youth Workers will also engage the friends and family of the identified individuals to help persuade them to participate (Abt Associates, 2021).

Once individuals agree to participate, the programs engage them by building trusting relationships through frequent activities and interactions between participants and their assigned program worker (Abt Associates, 2021; Prochaska, 2014). For example, BAM provides in-school and after-school activities such as sports, counseling, and mentoring to teach different social cognitive skills to the youth, such as emotional regulation, problem solving, goal setting, coping skills, and more (Prochaska, 2014). Roca focuses on frequent outreach and creating a safe and stable relationship between the Youth Workers and the participants to support lasting behavior change through social activities such as community dinners, ziplining, and exercise classes. Additionally, Roca provides structured and unstructured programming that involves the teaching and practicing of employment, education, and life skills through a cognitive behavioral therapy (CBT) informed curriculum (Abt Associates, 2021).

School-based programs typically target children ranging from ages three to thirteen from low-income families, high crime areas, and/or gang ridden communities to prevent future delinquency and gang involvement (Esbensen et al., 2013; O'Donnell et al., 1995; Schweinhart & Weikart, 1981). For example, the Gang Resistance Education and Training (GREAT) program

selects students—exclusively in grades six and seven—from schools in gang-ridden cities to teach them to avoid gang involvement and criminal activities, and to help them foster positive relationships with law enforcement (Esbensen et al., 2013).

School-based programs implement in-school lessons taught by teachers and/or law enforcement officers to teach social and cognitive skills to students (Esbensen et al., 2013; O'Donnell et al., 1995; Schweinhart & Weikart, 1981). For example, the GREAT program includes lessons taught by uniformed law enforcement officers in the classroom once a week, and teachers are asked to complement the lessons during regular class time as well (Esbensen et al., 2013). The curriculum addresses topics such as school commitment, school performance, association with conventional or delinquent peers, susceptibility to peer influence, empathy, self-control, perceived guilt, neutralization techniques, and moral disengagement (Esbensen et al., 2013).

Promising mentoring programs that address social/emotional learning and serve a wide range of age groups include Big Brothers Big Sisters (BBBS), SNAP Under 12 Outreach Program (ORP), and Advance Peace. Specifically, BBBS serves youth between the ages of 9 and 16 (Tierney et al., 2000; DuBois et al., 2018, Herrera et al., 2007; 2011; 2023), ORP serves youth under the age of 12 (Augimeri et al., 2007; Lipman et al., 2008), and Advance Peace serves young adult offenders between the ages of 14 and 34 (Corburn et al., 2021). Generally, individuals accepted into these programs have a history of contact with the police or criminal justice system, low academic performance, and/or low socioeconomic status (Corburn et al., 2021; Tierney et al., 2000; Herrera et al., 2007; Augimeri et al., 2007; Lipman et al., 2008). However, identification and inclusion of program participants varies by program.

The community-based BBBS requires an application and screening process that targets youth from single-parent households who demonstrate low levels of social skills (Tierney et al., 2000). On the other hand, participants of the school-based BBBS are referred by their teachers and targets youth who receive free or reduced-price lunch, are from single-parent households, and have difficulties in one or more of four risk areas (i.e., academic performance, school behavior, relationships, and youth-reported misconduct; Herrera et al., 2007). ORP targets youth who have had police contact in the last 6 months or are at risk of having police contact, which is assessed using the delinquency subscale of the Child Behavior Checklist and/or a Teacher's Report Form analyzing the youths' levels of offending behaviors (Augimeri et al., 2007; Lipman et al., 2008). ORP participants may be referred to the program by the criminal justice system, school personnel, mental health service providers, and/or parents (Augimeri et al., 2007; Lipman et al., 2008). Lastly, Advance Peace involves a 6-month community-based recruiting process, identifying and recruiting the 20-30 individuals within the community that create the greatest risk for gun violence—typically individuals who are the hardest to reach, have been rejected from other programs, and have long rap-sheets that deny them educational, employment, and housing opportunities (Corburn et al., 2021).

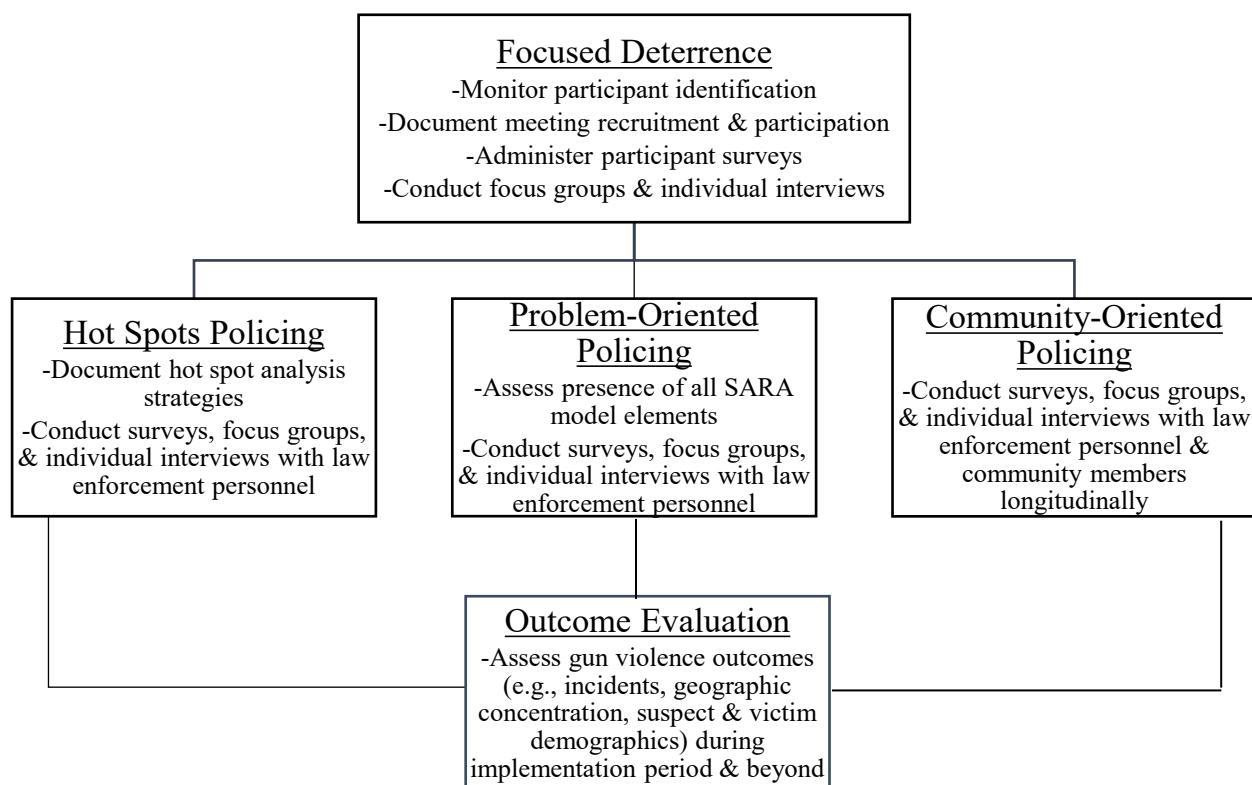
The mentoring component also varies across the programs. Mentoring is the sole component of BBBS, where mentors interact with their mentees several times per month, forming a trusting relationship with their mentees and engaging them in positive recreational and social activities, such as helping with homework, arts and crafts, playing sports and games, going to the library or a sporting event, and talking about various issues and topics (Herrera et al., 2007; 2023; DuBois, 2018; Tierney et al., 2000). On the other hand, Advance Peace and ORP

offer mentoring as one of many services of their program. Through these programs, social/emotional learning is primarily addressed through group-based learning programs, counseling, and connection to services (Corburn et al., 2021; Augimeri et al., 2007; Lipman et al., 2008). However, mentors serve an important function for engaging with participants and ensuring their continued involvement in the program.

V. IMPLEMENTATION EVALUATION PLAN

The following implementation evaluation plan is based on our above recommendations, with the implementation of a focused deterrence program with hot spots policing, problem-oriented policing, and community-policing strategies. Figure 16 summarizes the implementation evaluation methods for each recommended intervention program component.

Figure 16: Implementation evaluation plan of recommended intervention strategies



Of critical importance in focused deterrence programs is systematic and effective identification of those most at-risk for perpetrating gun violence. Only a small fraction of gun violence in Leon County is gang-related (13% of suspects and 6% of incidents in the past 4 years), which complicates identification of those targeted for focused deterrence efforts. As previously discussed, several focused deterrence programs focus on gangs/gang members for their targeted messaging. We will provide guidance based on prior research to law enforcement and other community members who are intimately familiar with perpetrators of local gun violence to identify participants for call-in meetings. Subsequently, we will document how these high-risk community members are being identified and contacted over time. These processes should be updated based on the continued compiling and assessment of TPD and LCSO data on

gun violence incidents, victims, and suspects. We will meet with involved law enforcement officers and community partners to document current identification processes/criteria and suggest adaptations based on successful strategies in prior research. Participant identification will be continually informed by ongoing gun violence incidents in the Leon County community. For example, as new gun violence incidents occur, if suspects had not been identified as high-risk targets for focused deterrence programming through current data-informed processes, this will inform gaps in our understanding of high-risk targets and point to necessary adjustments.

We will also document the steps taken to plan, publicize, and promote participation in call-in meetings. Without a current parole system in Florida, the ability to mandate participation at call-in meetings is greatly diminished, which elevates the importance of these steps. Law enforcement and community partners should attempt various methods of publicizing meetings and also encourage participation through a variety of methods. These methods should be guided by successful efforts in prior research and local circumstances, resources, and capacities. Trusted community members can be used as a source of chain referral to inform targeted high-risk community members and urge their presence at meetings. Call-in meetings should also include the promise of connection to resources and can also provide incentives such as free food and raffle prizes. We will aim to document motivation for participation at call-in meetings to the greatest extent possible. Sampling attendees to determine both how they heard about the meeting and why they ultimately chose to attend will provide critical information to sustain and increase participation at future meetings.

Additionally, we will document call-in meeting participation and procedures over time. A record of the high-risk community members, law enforcement personnel, community partners, and community members in attendance is important to understanding community buy-in and investment over time. Lack of or dwindling engagement among targeted high-risk participants, law enforcement, and community partners is a common impediment to the successful implementation of focused deterrence strategies. Documenting participation will enable quick responses if such dwindling engagement is observed. Additionally, detailing the content of call-in meetings enables an understanding of what mechanisms underlie observed community-level effects. Specifically, we will document what occurs during meetings (e.g., who speaks, how information is responded to, who engages in discussions, what law enforcement messages are shared) and debrief with as many meeting participants as possible to garner their perceptions of effective vs. ineffective messaging. An understanding of what elements of call-in meetings are perceived as well-received, out-of-touch, impactful, infantilizing, helpful, etc. will enable alterations to meeting content to maintain or increase participant engagement. These perceptions of meetings and messages will likely vary significantly between targeted participants, but this speaks to important variation in perceptions that must be addressed.

Focus groups and in-depth individual interviews will be conducted periodically throughout the implementation process to elicit a deeper understanding of program procedures, successes, and barriers. These focus groups and interviews will be conducted with members of all involved parties, including law enforcement personnel, community partners (e.g., service providers, faith-based leaders), community members (e.g., family members, victims or victim family members), and targeted high-risk participants. Throughout the implementation process, information gained from these focus groups and interviews will be immediately employed to address barriers and expand upon successful elements. Additionally, focus groups and individual interviews will be audio recorded (when participant consent is provided) and transcribed,

enabling further in-depth analysis to assess participant perceptions and the mechanisms underlying observed outcomes.

The perceptions of and feedback from targeted community members who are at-risk for gun violence perpetration will be of particular importance in the implementation evaluation process. An understanding of why these targeted participants do or do not buy into the focused deterrence program, what encouraged them to participate, what resources (if any) they were connected to through their participation, and any pertinent changes to their attitudes and behaviors over time is of utmost importance. This speaks not only to the fidelity of the focused deterrence program and its implementation, but more critically to the capacity for the program to have the desired impact on local gun violence over time.

Beyond the focused deterrence portion of our recommended intervention plan, we will evaluate the implementation of all other selected strategies. As previously discussed, we suggest the addition of elements of hot spots policing, problem-oriented policing, and community-oriented policing. Our quantitative analyses identified geographic concentration of gun violence incidents within the Leon County area, which speaks to the importance of hot spots techniques. If implemented by law enforcement personnel, we will document what continued analyses TPD and LCSO are performing to regularly assess gun violence hot spots. Additionally, our focus groups and interviews with law enforcement personnel will include inquiry into what strategies officers are employing in identified geographic hot spots. Previous research has demonstrated implementation barriers related to strategies employed in hot spots, with problem-oriented policing strategies proving effective, while mass arrests for low-level/disorder crimes do not result in long-term reductions in crime or violence. In this vein, our recommendation of combining elements of problem-oriented policing will be documented through similar efforts.

If law enforcement personnel choose to implement elements of problem-oriented policing in the long term, we will assess implementation of the SARA model and its inclusive steps. This will ideally include officer surveys to garner a comprehensive picture of individual officer understanding of, employment of, and investment in each step of the SARA model (scanning, analysis, response, and assessment). An in-depth understanding of how officers are identifying localized crime problems, pinpointing the root causes of those problems, intervening with well-informed strategies, and evaluating effectiveness speaks to officer buy-in and important variation in understanding of the SARA model and its intent. Our periodic focus groups and individual interviews with law enforcement personnel will also incorporate questions regarding problem-oriented policing strategies if such strategies are implemented.

Finally, we recommend that community-oriented policies strategies be used in combination with the above strategies. Given our finding of issues with victim cooperation with law enforcement, and the subsequent impact on apprehension of the suspect, a focus on community-police relations is warranted. Additionally, community-oriented policing is a natural companion to problem-oriented policing, as community input is valuable in identifying and understanding local crime and its root causes. These strategies are often used in tandem, which we recommend due to their logical pairing and the potential additional benefit of enhanced community-police relations and perceptions of police legitimacy added by community-oriented policing. Much of the previously discussed implementation evaluation efforts will assess the elements of community-oriented policing, if these elements are selected for use in our community. Law enforcement focus groups and individual interviews will include questions

regarding current community-police relations and strategies for building police-community relationships and trust. Similarly, these questions will be incorporated into focus groups and individual interviews conducted with community partners and community members (defined above). Longitudinal focus groups and interviews will enable the assessment of impacts to perceived community-police relations from the viewpoint of both groups over time. Ideally, law enforcement officer and community member surveys would be administered to a larger sample of these groups at two time periods to assess perceptions of community-police relations over time.

Our assessment of outcomes stemming from implemented gun violence intervention strategies will rely on the implementation timeline and data availability. Ideally, we will be able to track gun violence outcomes, including incidents, incident circumstances, geographic concentration of gun violence, and suspect and victim demographics/characteristics during the implementation period and beyond. Tangible outcomes, principally a reduction in gun violence incidents in Leon County, are the most pertinent findings. However, the detailed evaluation of the implementation process described above is essential to ensure fidelity to the intended program models and address shortcomings or barriers as they emerge. An assessment of quantitative outcomes absent this implementation evaluation renders us unable to determine what strategies and mechanisms had an impact and should be continued or expanded.

As discussed previously in this report, our immediate focus is on reduction of gun violence incidents in the near term. Our recommended strategies align with this primary focus, but we recognize the importance of prevention programs in sustaining positive outcomes. Once the selected gun violence intervention program(s) have been implemented with fidelity and are operating as intended, attention can and should shift to the addition of or enhanced capacity for prevention programs aimed at preventing violence in our community in the long term. A number of prevention programs are already operating in our community, such as Big Brothers Big Sisters. A comprehensive evaluation of provider capacity is currently ongoing by the Council on the Status of Men and Boys, aimed at assessing existing relevant services for youth and adults in our community. This evaluation combined with ongoing assessment of characteristics defining those most at-risk for perpetrating gun violence in the Leon County area will guide selection of prevention programs that are best suited for our community. For example, given the low percentage of gang-related gun violence locally, the Gang Resistance Education and Training (GREAT) program may not be the best allocation of prevention funds for Leon County. Once the selected intervention strategies are underway and impacting local gun violence, all involved partners will combine our knowledge of prior research, local crime and violence trends, and local capacities to select the prevention programs best-suited for Leon County.

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APPENDICES Project Presentations



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Gun Violence in Leon County, 2019-2023

Presentation to the LCSO CVIPI Planning Team

Dr. Emma Fridel

PI: Dr. Thomas Blomberg

Co-PIs: Dr. Emma Fridel & Dr. Kim Davidson

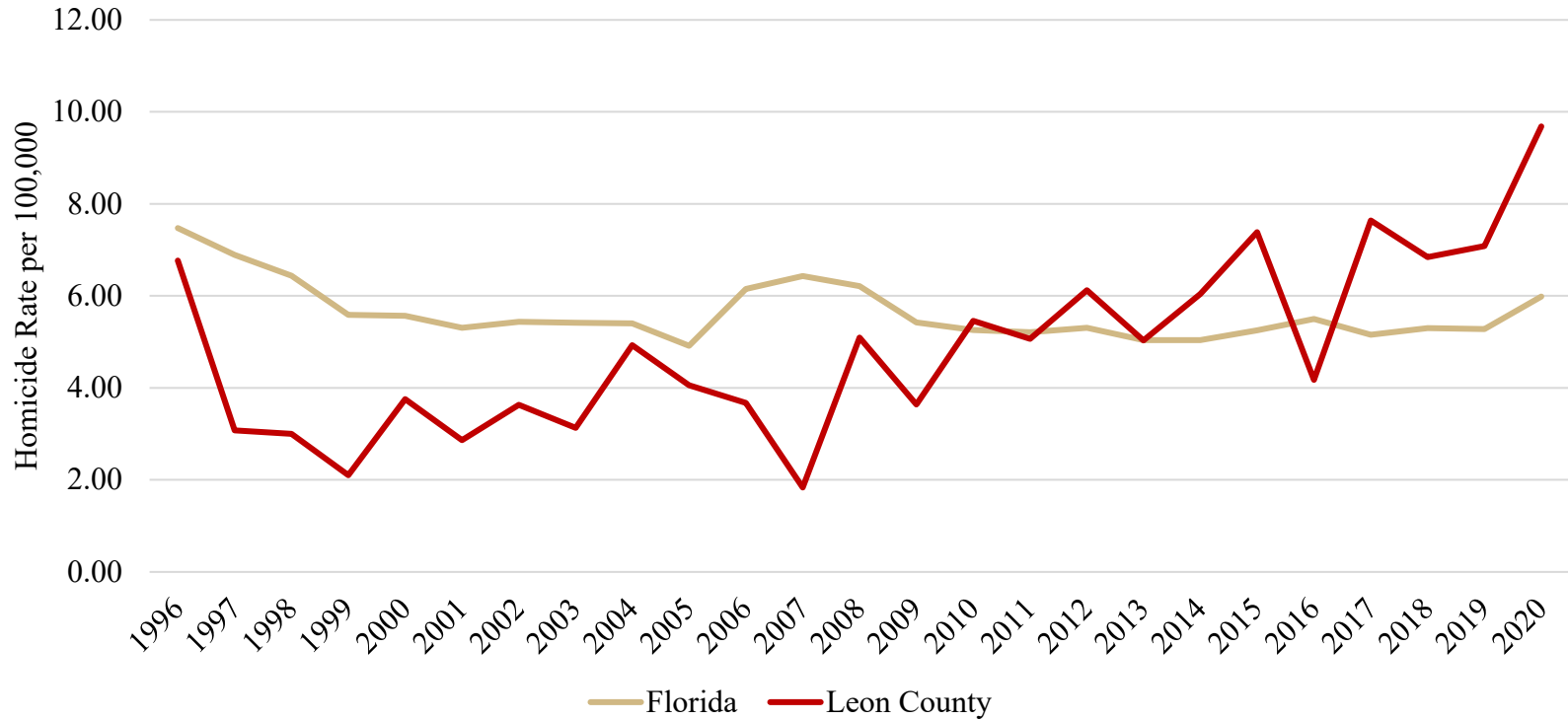


Overview

- Historical trends of fatal and nonfatal gun violence
- Comparison with other counties in Florida
- Detailed analysis of LCSO and TPD case files



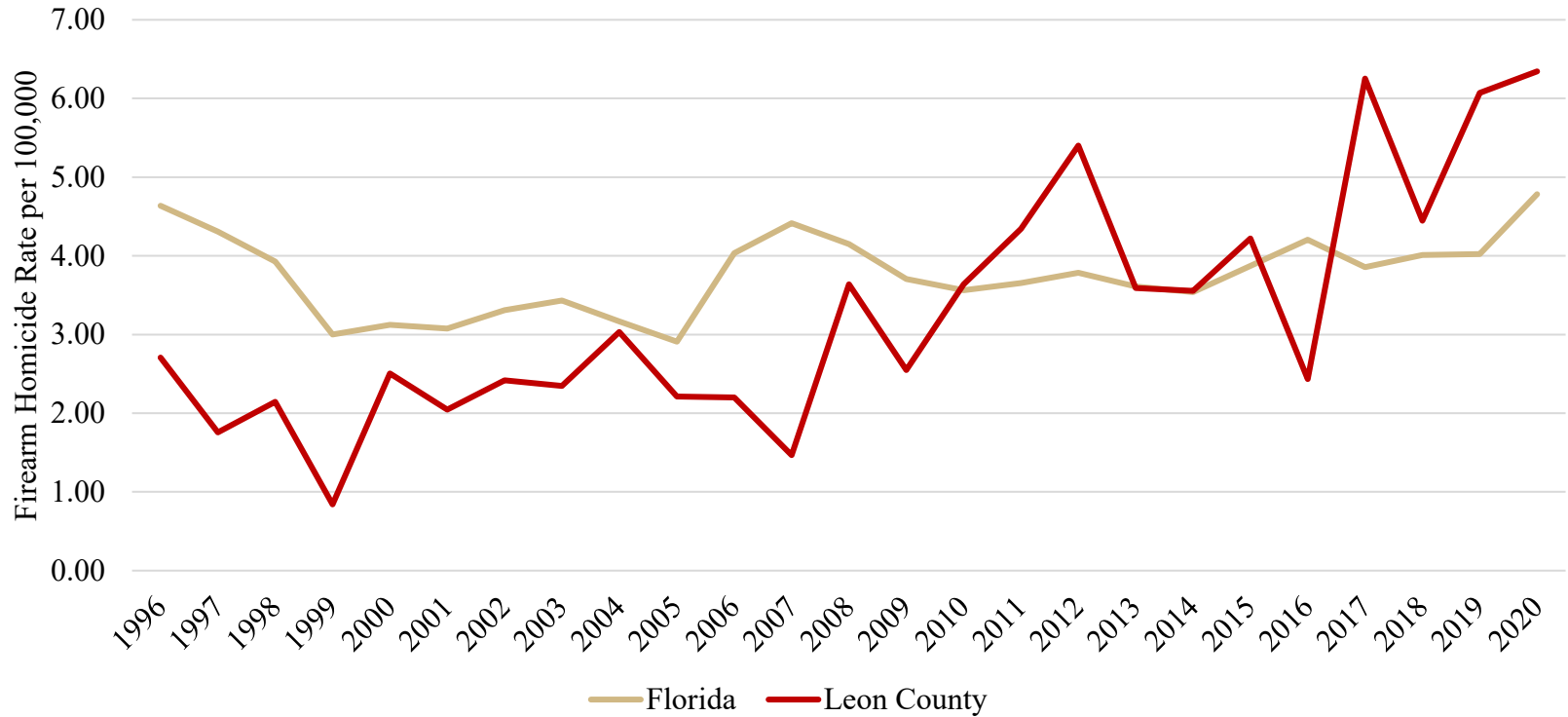
Trends: Homicide



Source: Florida Department of Law Enforcement (FDLE)



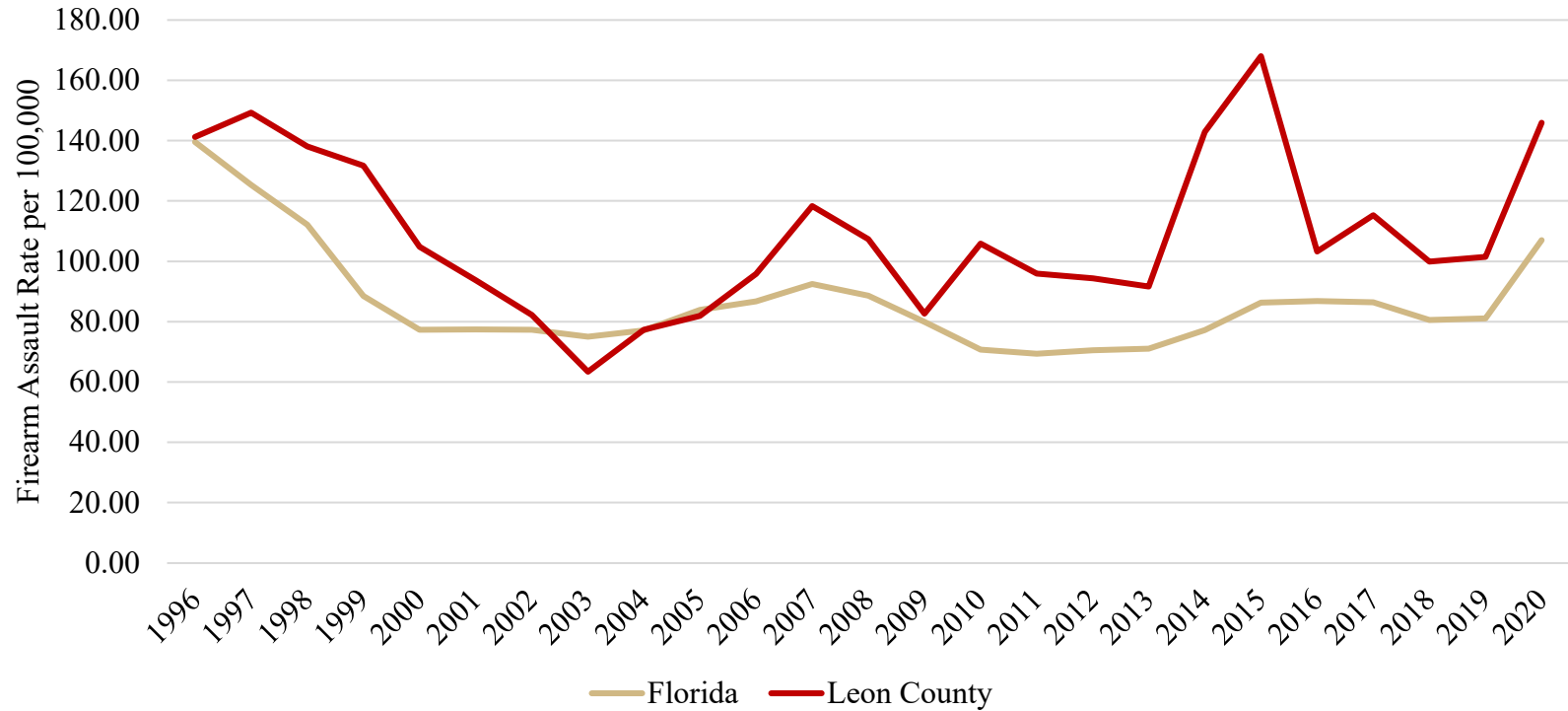
Trends: Firearm Homicide



Source: Florida Department of Law Enforcement (FDLE)



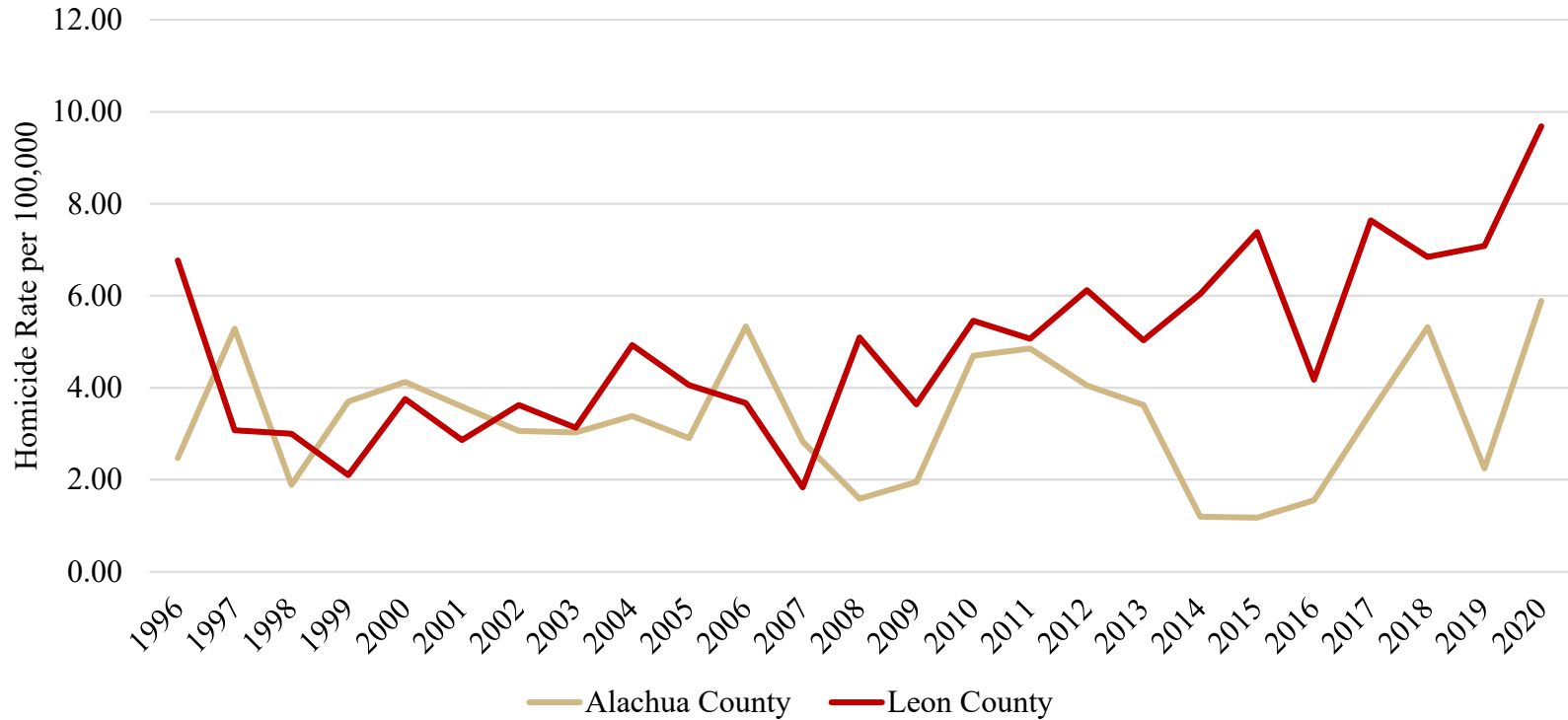
Trends: Firearm Assault



Source: Florida Department of Law Enforcement (FDLE)



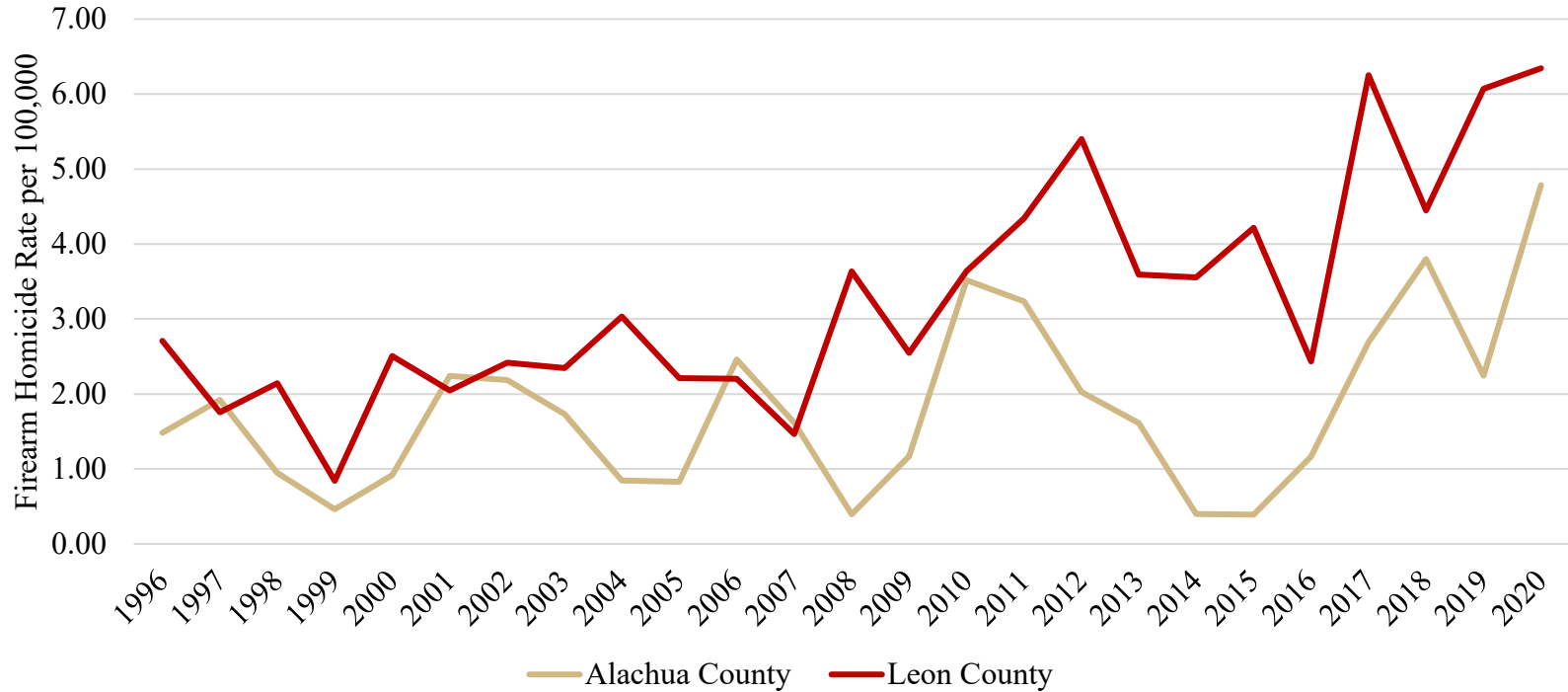
Trends: Homicide



Source: Florida Department of Law Enforcement (FDLE)



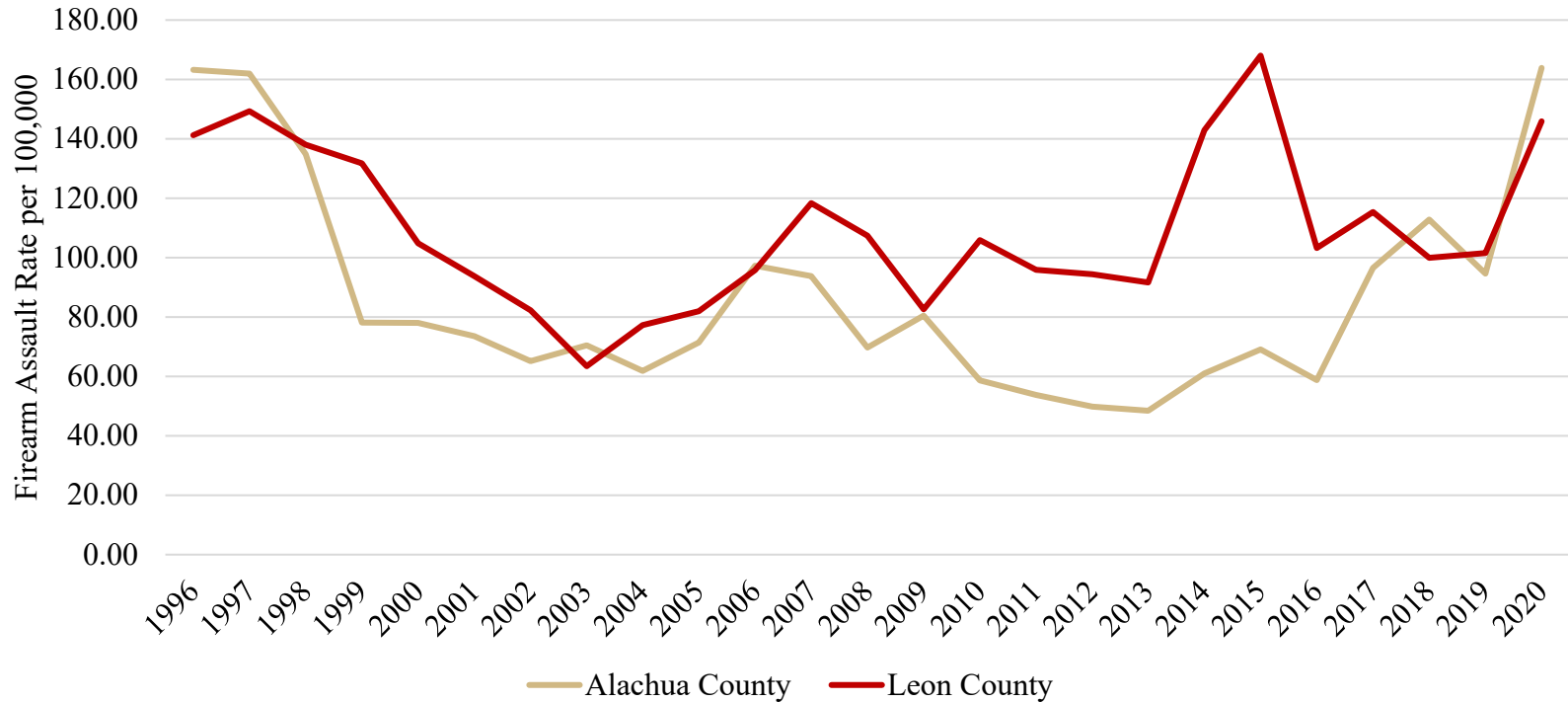
Trends: Firearm Homicide



Source: Florida Department of Law Enforcement (FDLE)



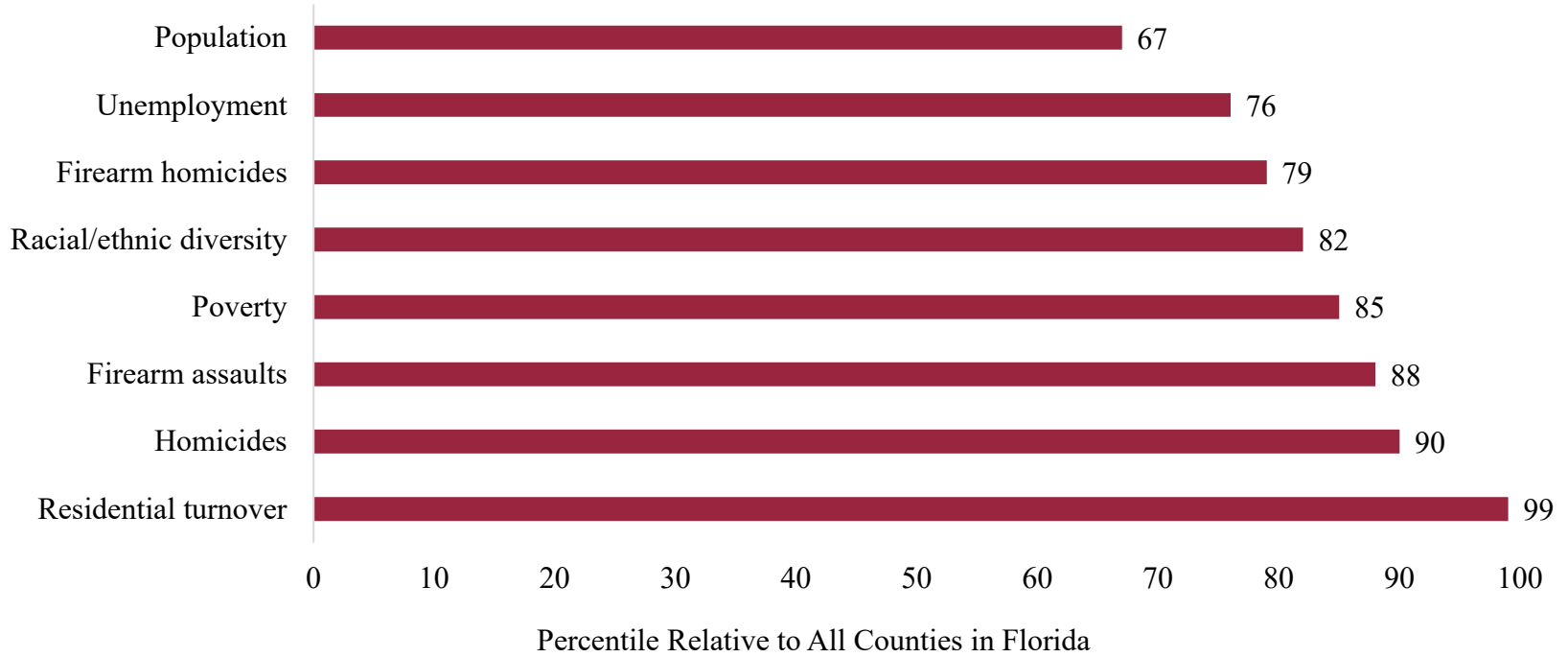
Trends: Firearm Assault



Source: Florida Department of Law Enforcement (FDLE)



Leon County in Context



Source: Florida Department of Law Enforcement (FDLE); American Community Survey (ACS, 2017-2021)

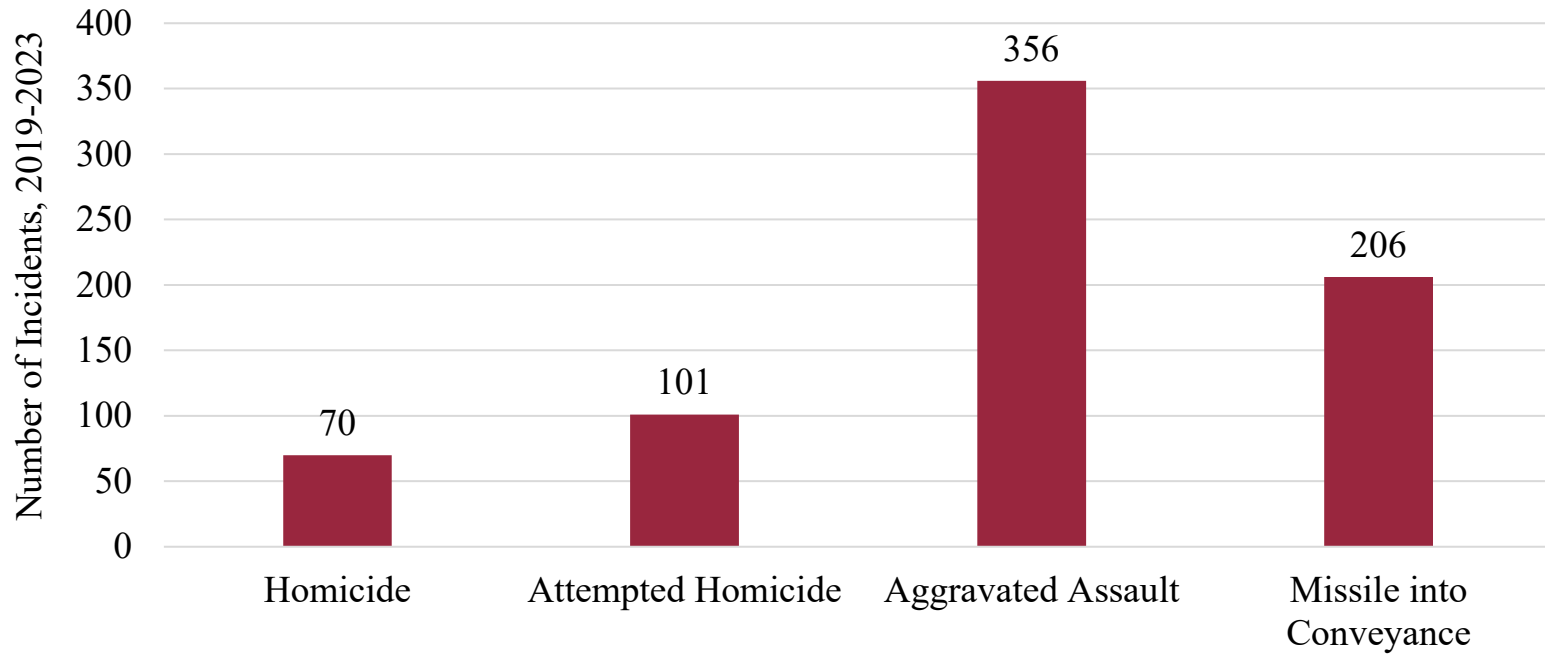


Methods

- Collected data on all incidents in which shots were fired with the intent to harm another person, including:
 - Homicides (all weapons)
 - Aggravated assault
 - Aggravated battery
 - Shootings into dwellings and conveyances (“drive-bys”)
- Time period: June 2019 – June 2023
- Examined 1,930 cases for inclusion and identified 733 relevant incidents

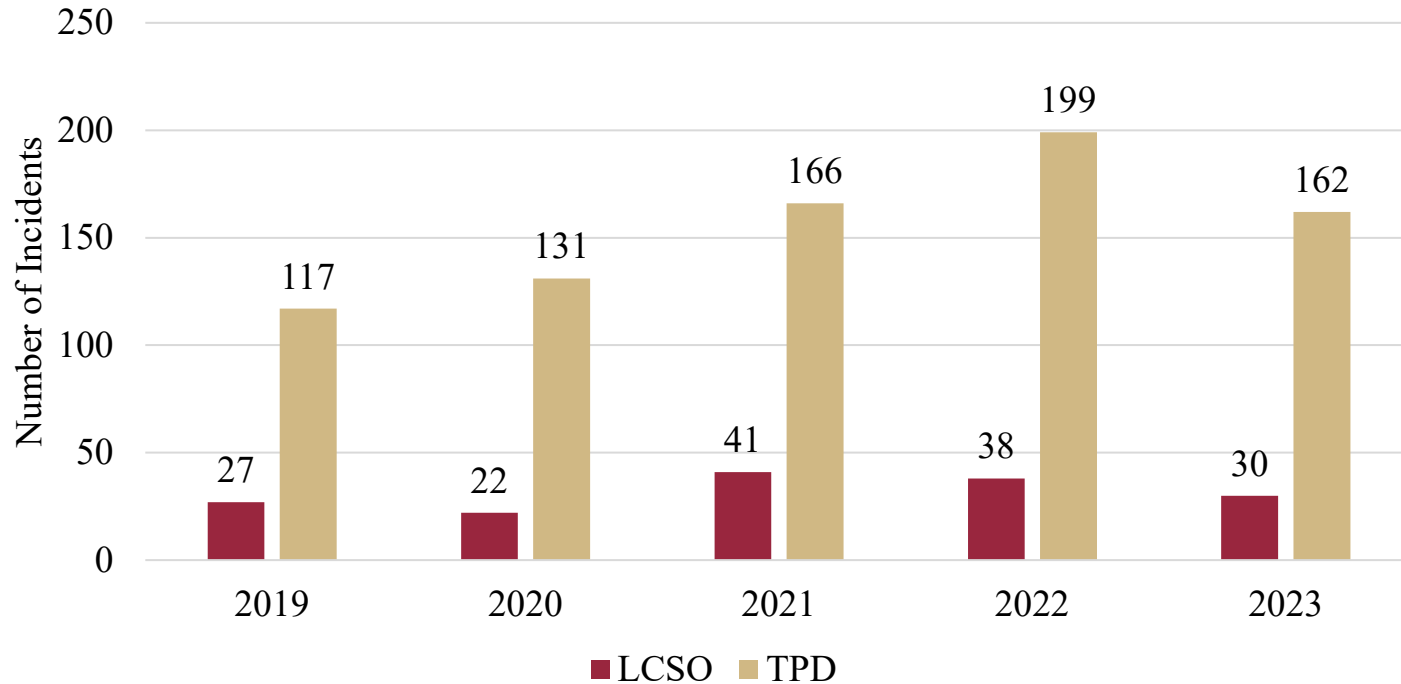


Number of Incidents by Type





Shootings in Leon County by Agency, 2019-2023



Note: Data for 2019 and 2023 projected based on monthly data from 2020-2022



Shootings in Leon County by ZIP Code, 2019-2023

ZIP Code	Number of Incidents	Rate per 10,000
32310	119	84.46
32304	238	51.91
32301	112	34.54
32305	68	32.67
32303	121	23.91
32308	18	8.03
32311	16	7.54
32312	24	7.51
32307	1	5.69
32309	8	2.39
32317	2	1.38
32306	0	0.00



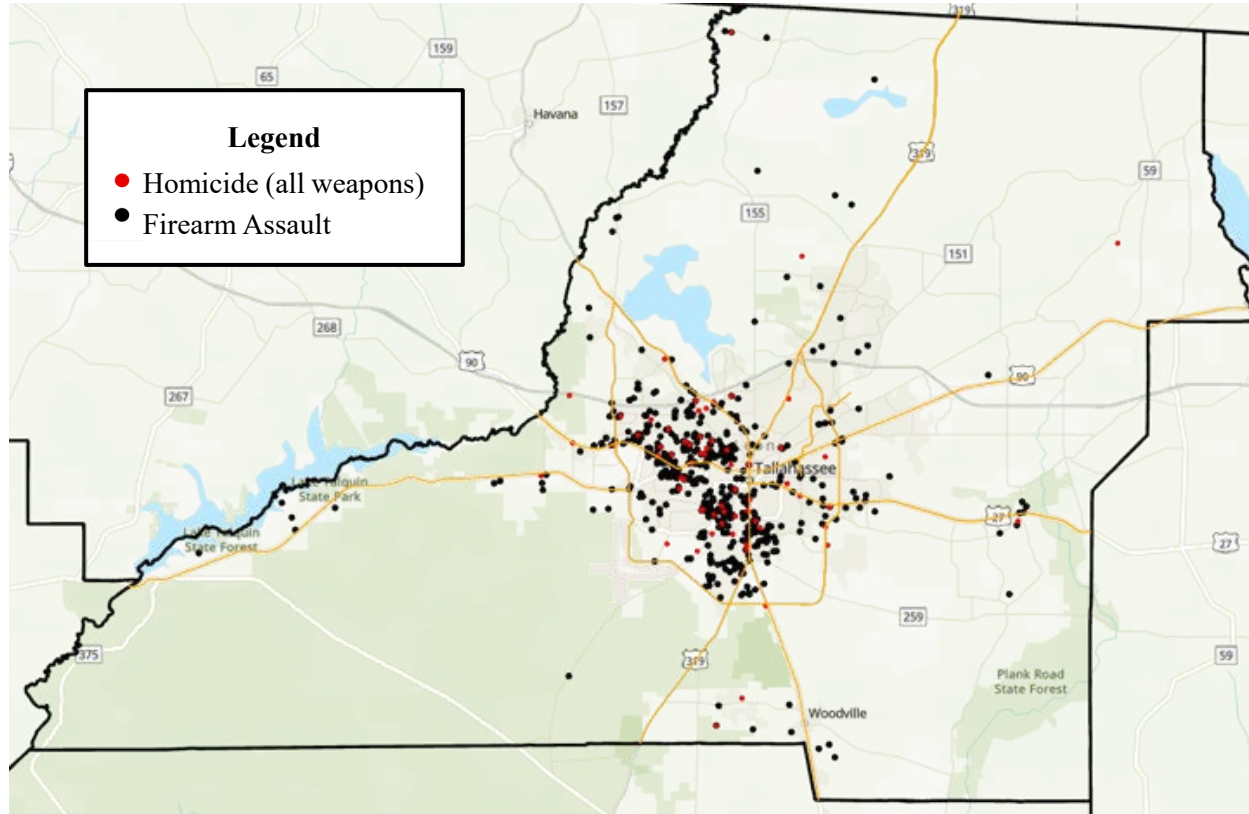
Shootings in Leon County by Neighborhood, 2019-2023

Neighborhood	Number of Incidents	Rate per 10,000
Providence	29	163.01
Bond	55	151.68
Southside	26	83.15
Frenchtown	76	74.81
Other	543	30.07

Note: Neighborhoods defined by City of Tallahassee Neighborhood Revitalization Strategy Area Plan, 2020-2024



Shootings in Leon County, 2019-2023

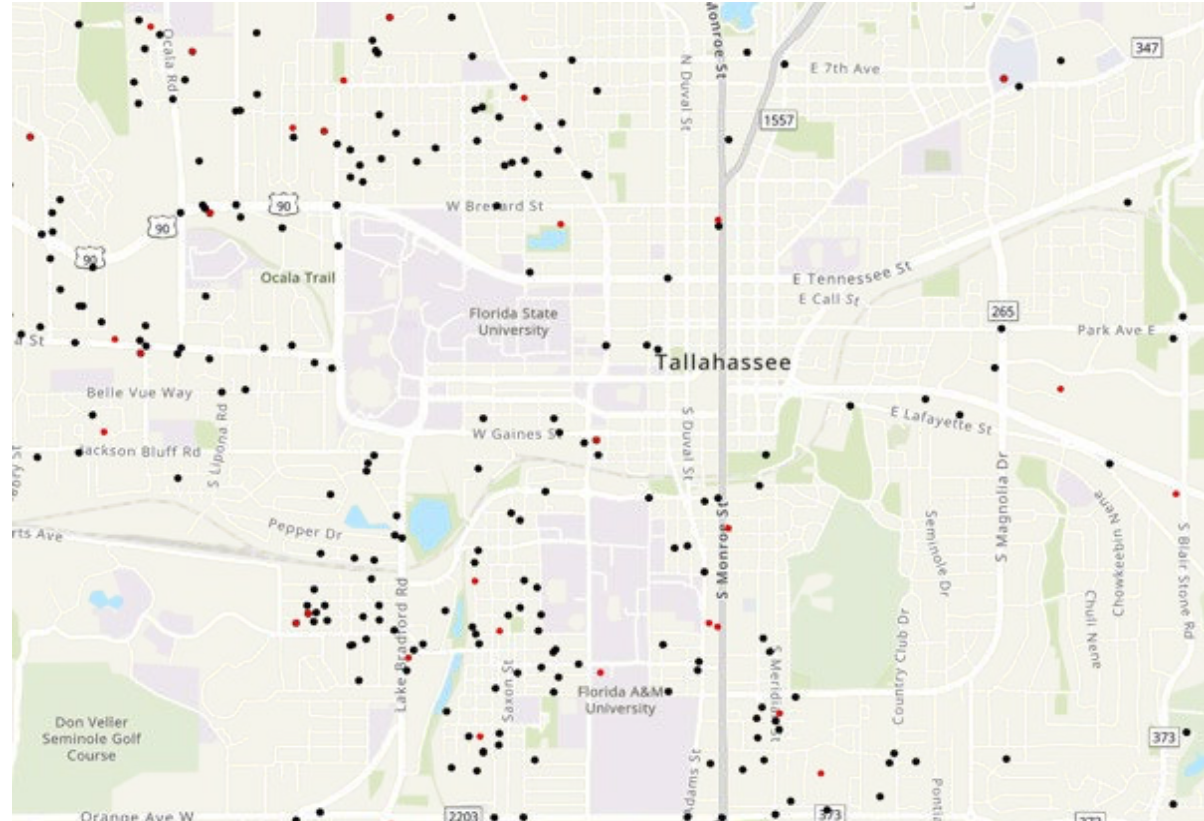




Shootings in Tallahassee, 2019-2023

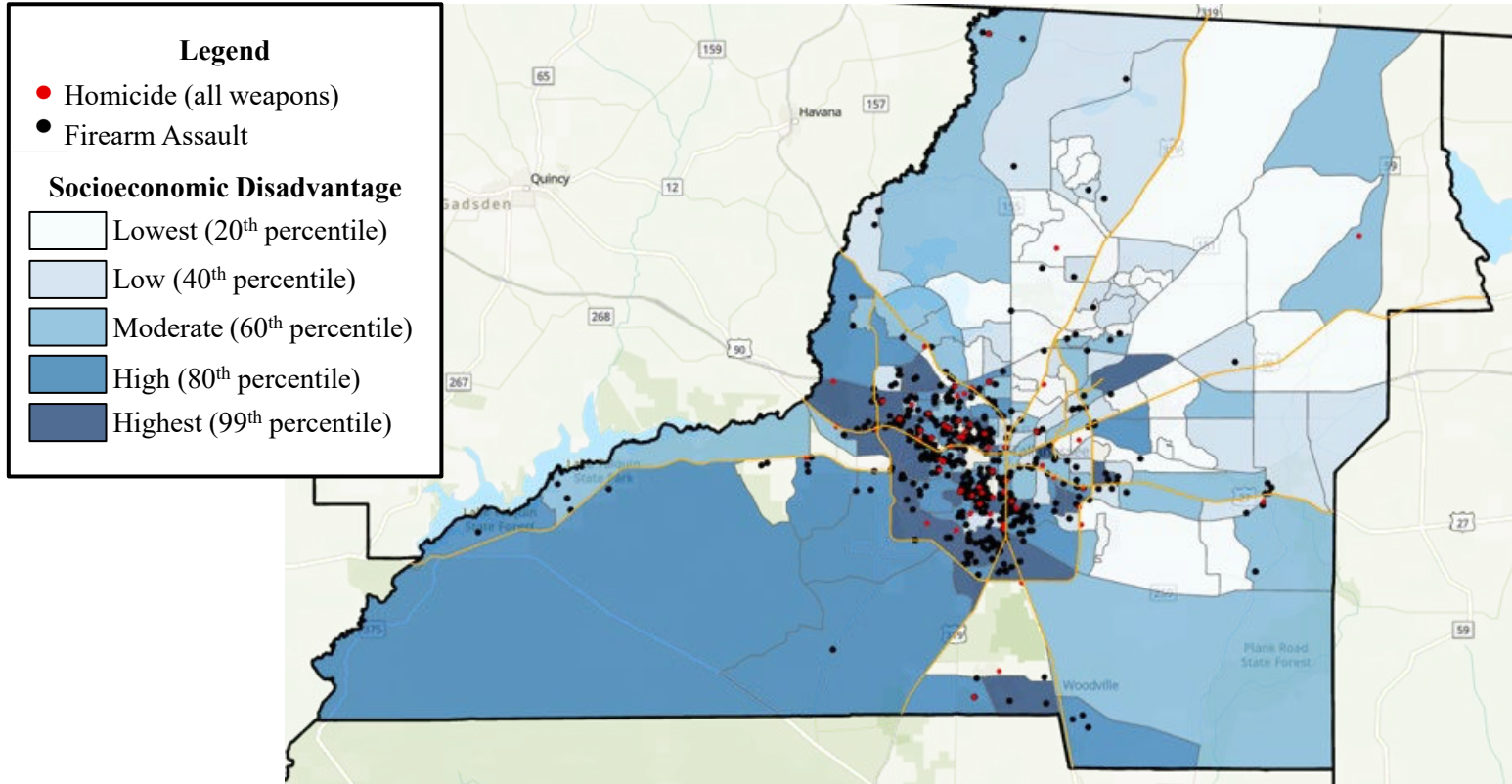
Legend

- Homicide (all weapons)
- Firearm Assault



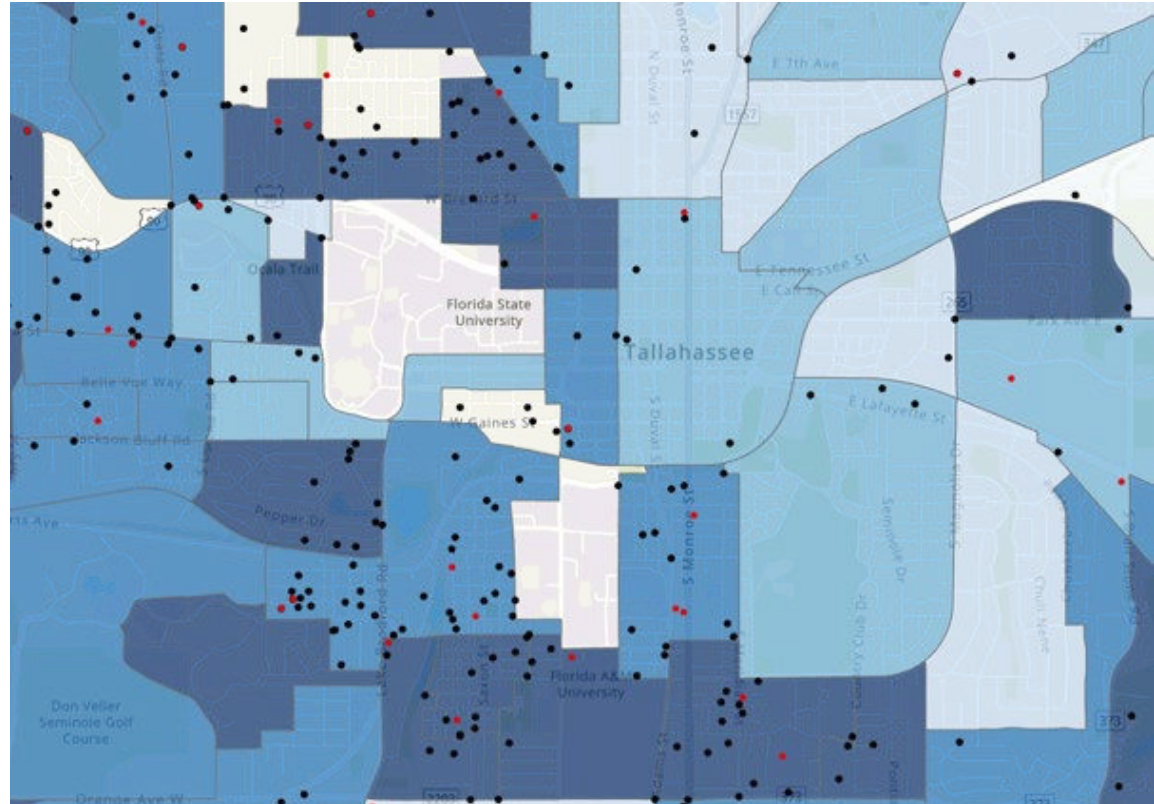
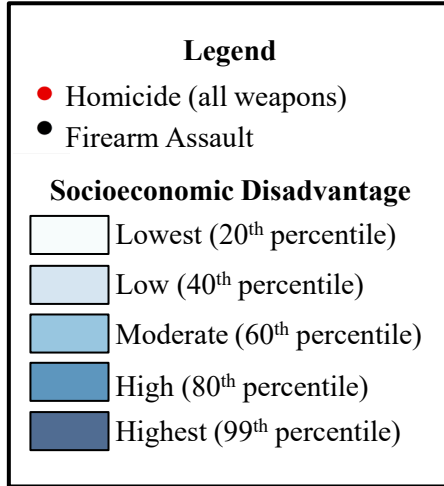


Shootings by Socioeconomic Disadvantage



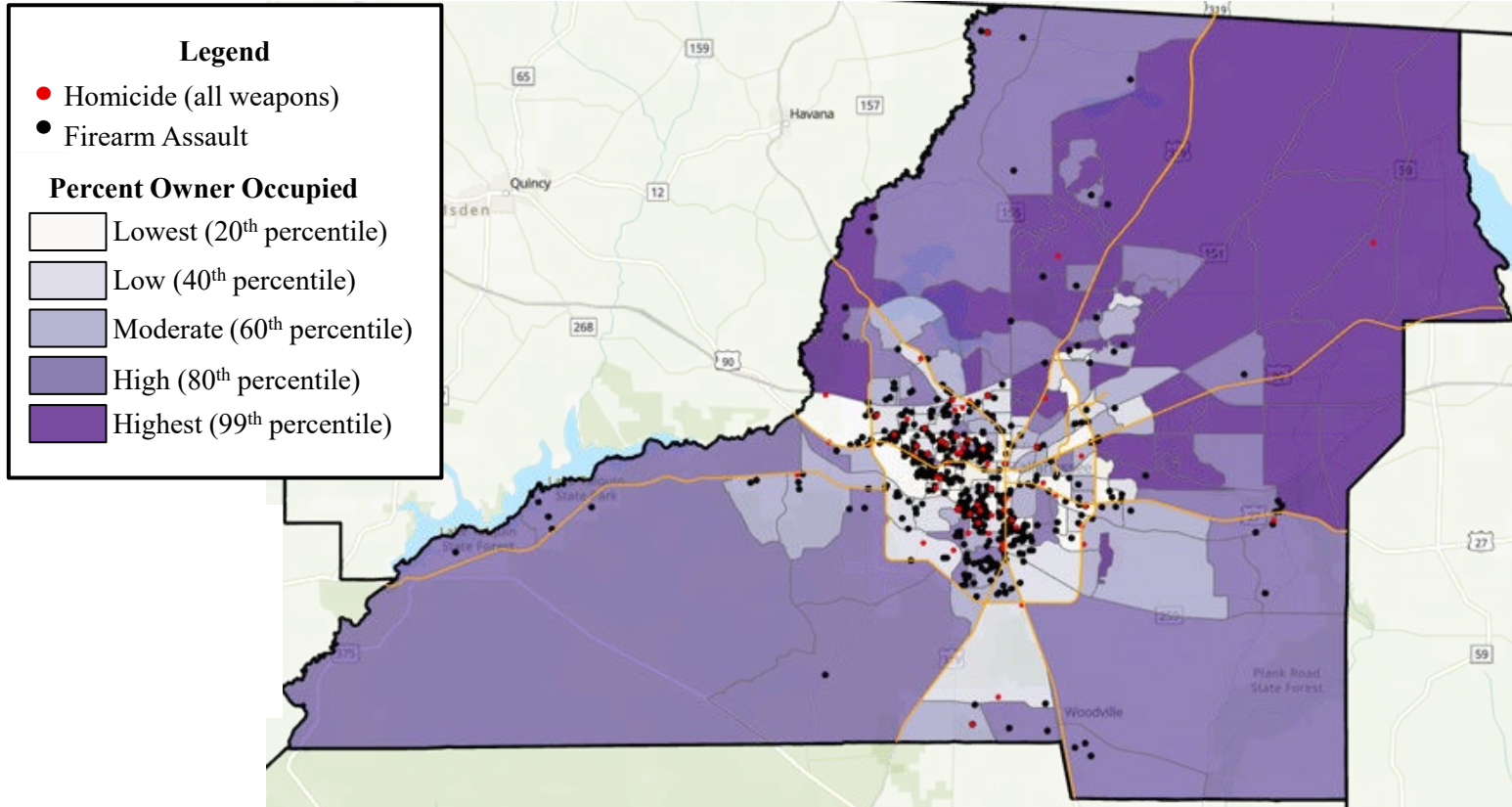


Shootings by Socioeconomic Disadvantage



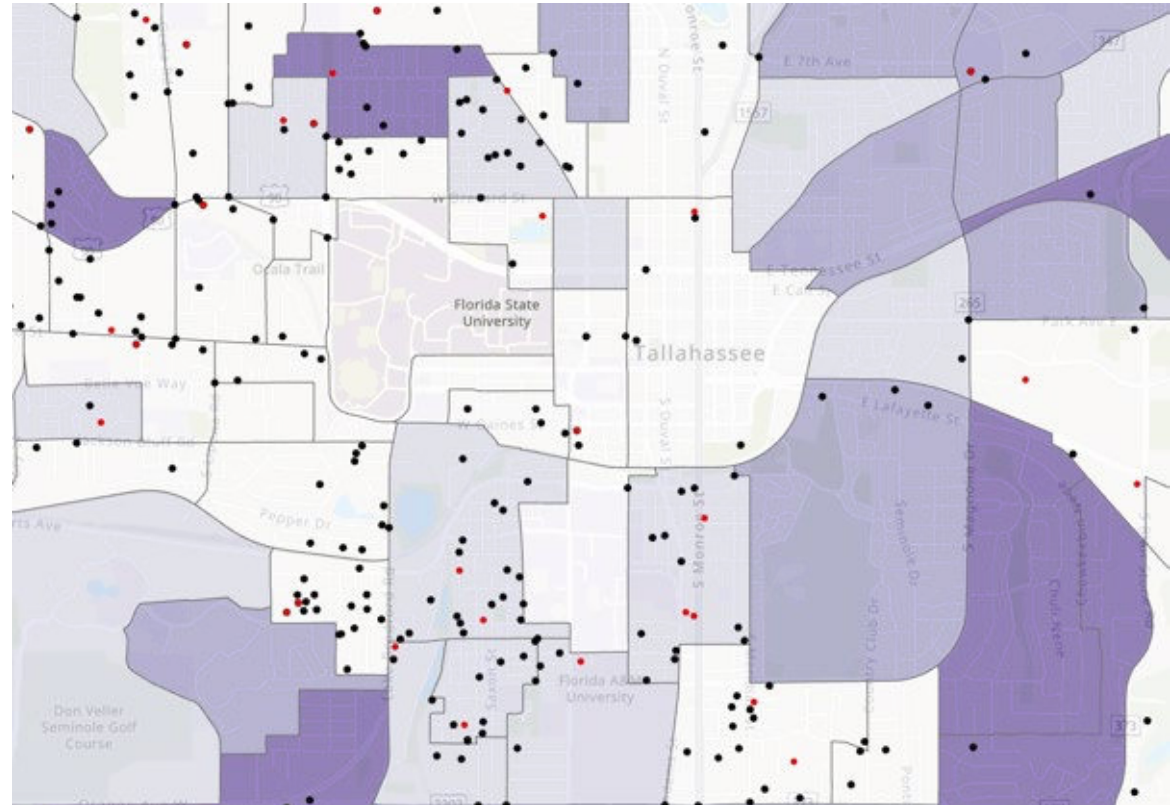
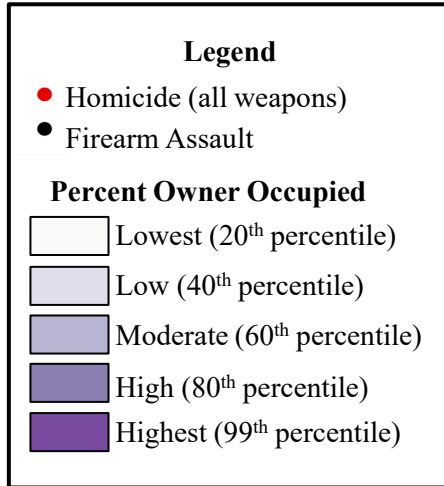


Shootings by Owner-Occupied Housing





Shootings by Owner-Occupied Housing





Negative Binomial Regression on Shootings in 191 Block Groups in Leon County, 2019-2023

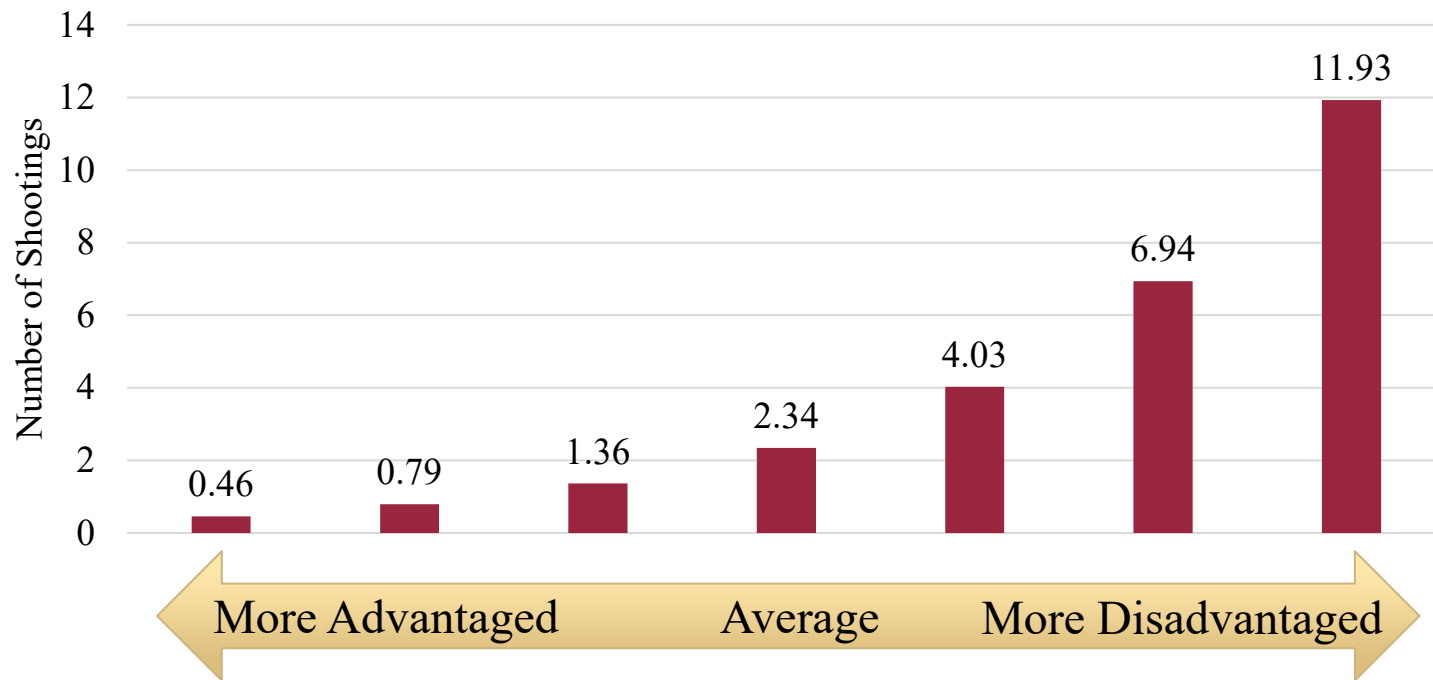
Standardized Predictor	IRR	95% CI
Concentrated disadvantage	1.721***	[1.413-2.095]
Racial/ethnic heterogeneity	0.773**	[0.651-0.919]
Residential stability	0.521***	[0.404-0.671]
Percent divorced	1.243*	[1.022-1.511]
Percent male	0.956	[0.805-1.136]
Percent aged 18 to 24	1.187	[0.908-1.552]

Note: IRR = incidence rate ratio; CI = confidence interval

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$



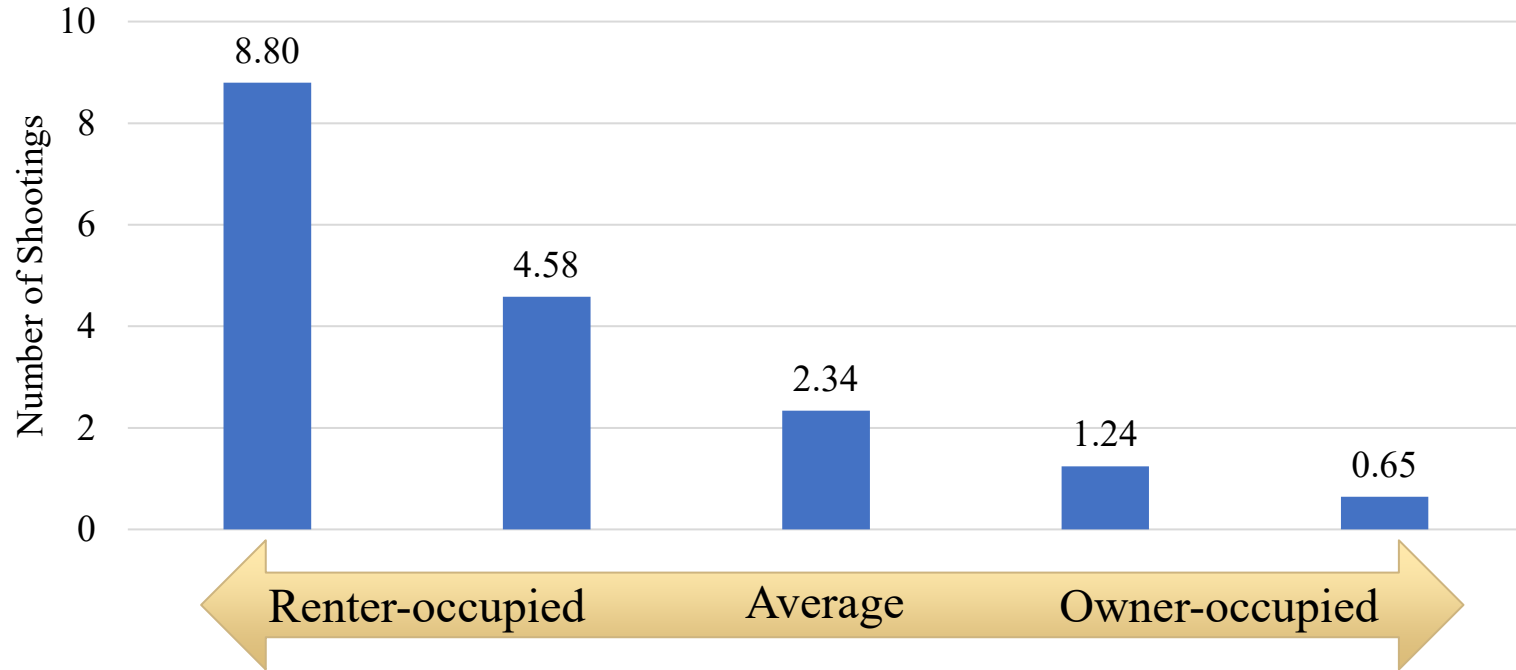
Predicted Number of Shootings by Block Group Disadvantage



Note: Concentrated disadvantaged measured from -3 to 3 standard deviations. Estimates based on a four-year period.



Predicted Number of Shootings by Owner-Occupied Housing



Note: Owner-occupied housing measured from -2 to 2 standard deviations. Estimates based on a four-year period.

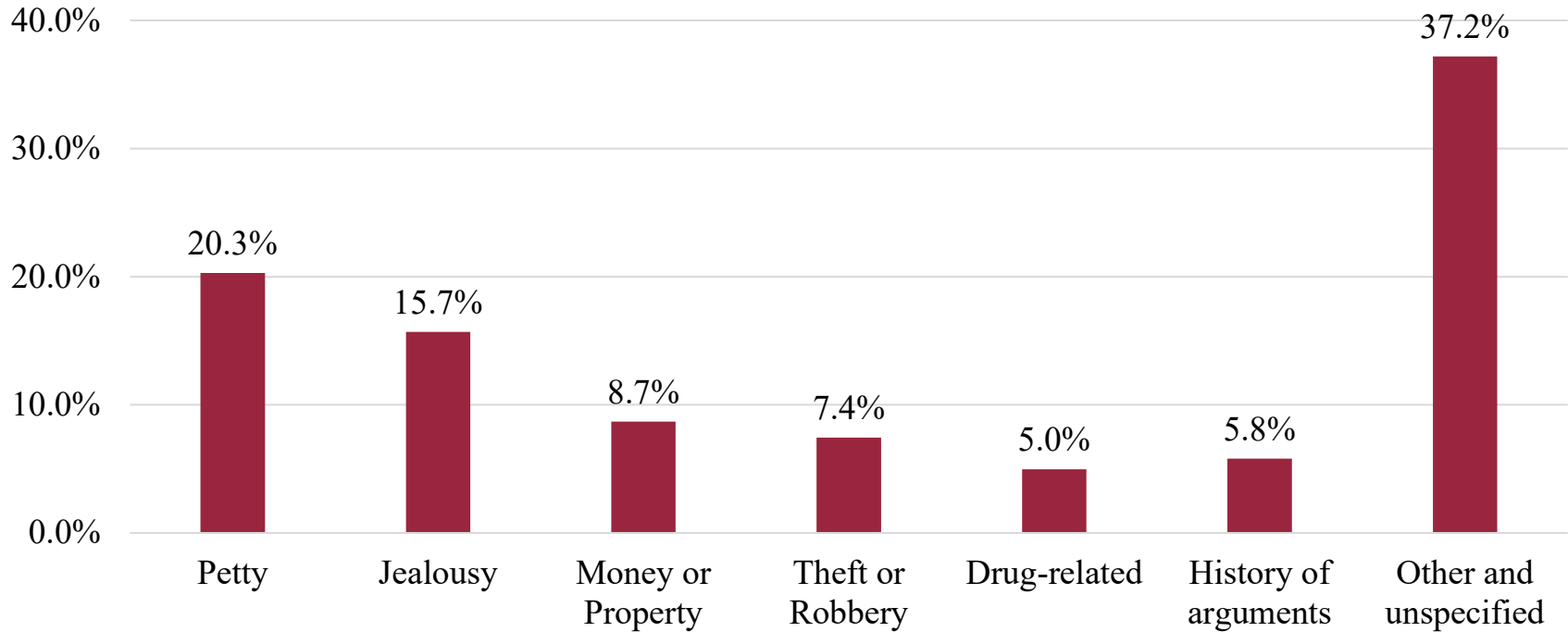


Incident Characteristics

- Suspect(s) identified: 42.6%
- Case officially cleared: 32.2%
- Victim possessed weapon: 9.8%
- Fired directly at person: 48.7%
- Drug trade/usage: 13.5%
- Gang related: 6.3%
- Domestic violence: 10.5%
- Argument: 33.0%



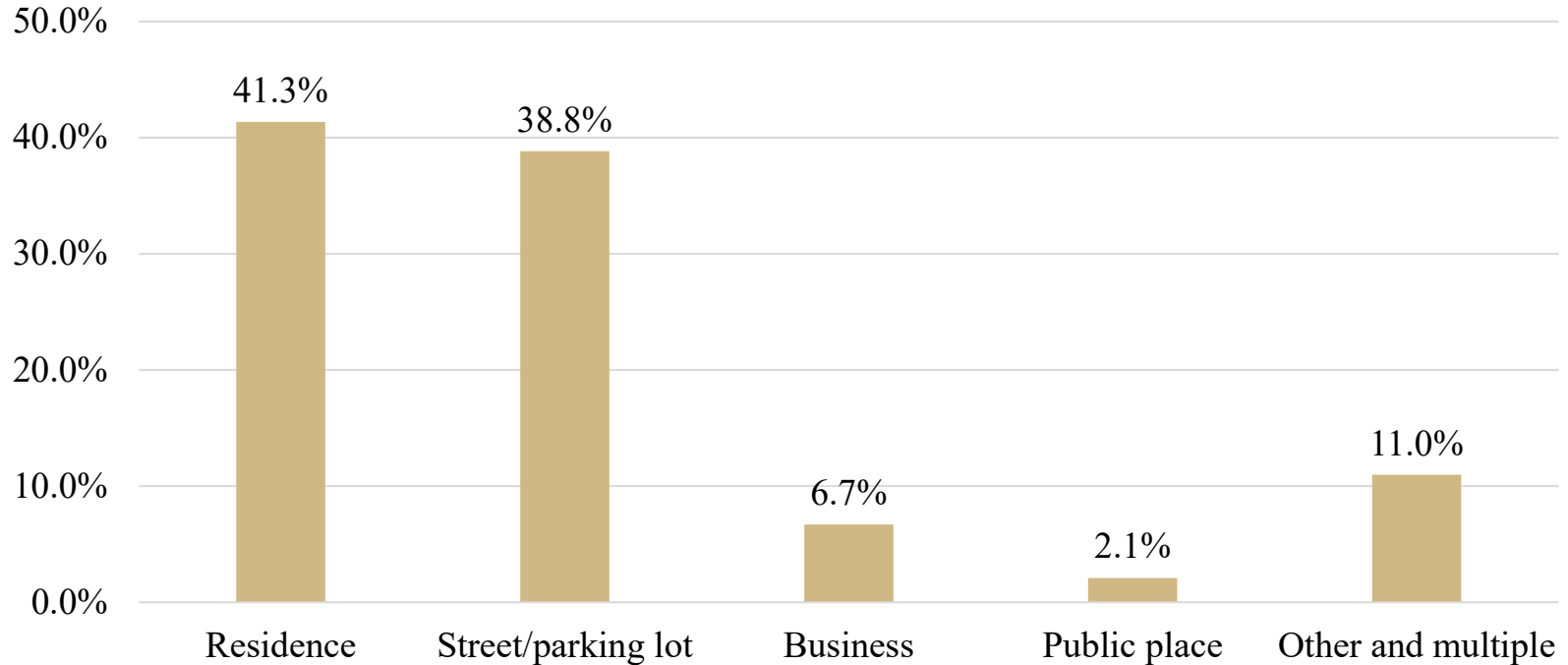
Argument Type



Note: Percentages calculated based on 242 incidents with confirmed arguments.



Location Type



Note: Percentages calculated based on 721 incidents with known location



Victim Characteristics (N = 1,255)

- Average age: 28.9 years
 - 12.9% under 18
- Race/Ethnicity
 - 13.1% White
 - 82.1% Black
 - 4.8% Other
- Gender
 - 59.7% male
 - 40.3% female
- Injury (Assault only)
 - 43.3% nonfatal
 - 56.7% none
- Cooperation (Assault only)
 - 79.5% cooperative
 - 18.4% uncooperative
- 3.4% experienced multiple victimizations during the study period

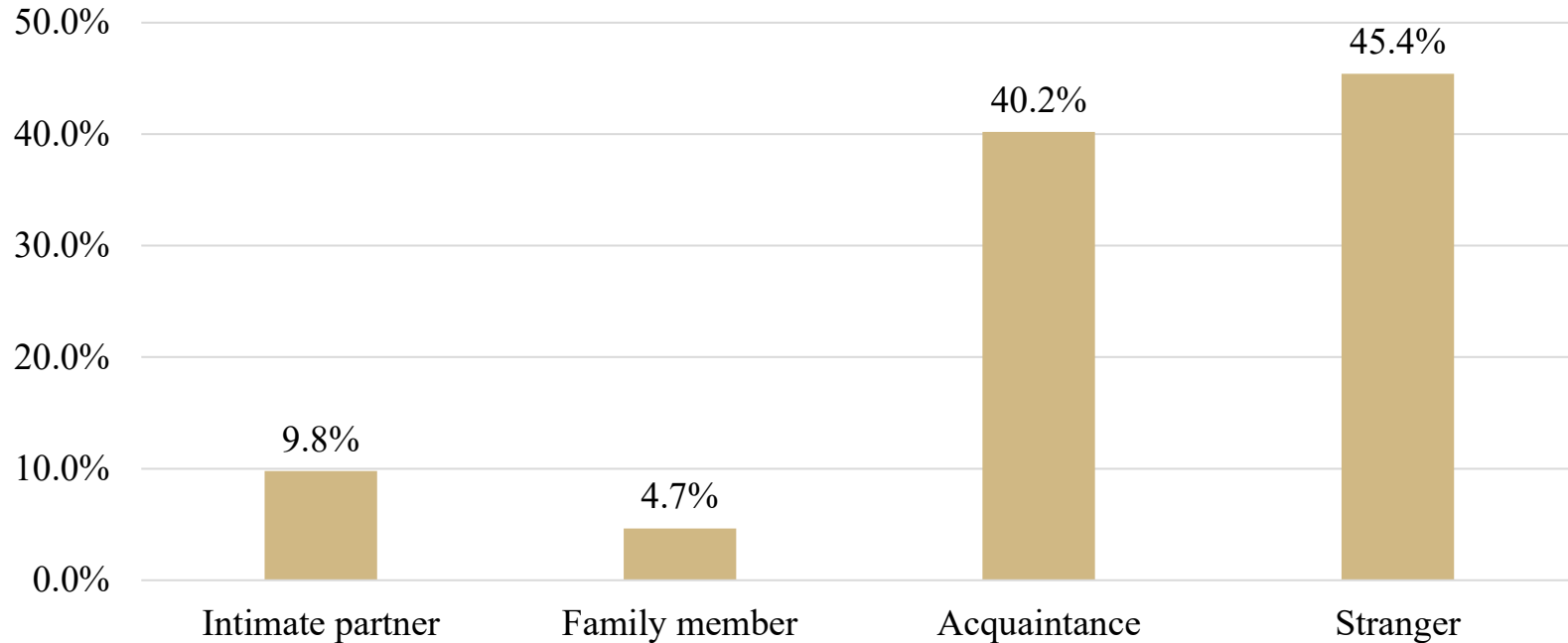


Suspect Characteristics (N = 414)

- Average age: 27.3 years
 - 11.8% under 18
- Race/Ethnicity
 - 13.3% White
 - 83.8% Black
 - 2.9% Other
- Gender
 - 87.4% male
 - 12.6% female
- 28.0% confirmed or suspected gang members
- 17.3% acted as accomplices
- 3.1% also experienced victimization during the study period



Victim-Offender Relationship



Note: Percentages calculated at the individual level based on 713 known relationships in 342 incidents.



Summary

- There were 733 shootings and homicides in Leon County from June 2019 to June 2023, involving 1,255 victims and 414 identified suspects
- Incidents clustered in neighborhoods characterized by high levels of socioeconomic disadvantage and residential turnover
- Most incidents
 - Involved young Black men as both victims and suspects
 - Involved acquaintances and strangers
 - Occurred in the street or private residences
 - Were not directly related to drugs and gangs



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Thank you!

Questions?



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A Review of Violence Intervention Programs

Presentation to the LCSO CVIPI Planning Team

Kaylee Noorman & Dr. Kim Davidson

PI: Dr. Thomas Blomberg

Co-PIs: Dr. Emma Fridel & Dr. Kim Davidson



Tallahassee Demographics and Crime Statistics in 2020

- Population: 197,00 (385,000 metro)
 - Race/Ethnicity: 50% White, 36% Black, 7% Hispanic, 3.5% Two or More Races
 - Age: 17% under 18, 10% over 65, Median 27.2
 - Poverty: 25%
- Crime Rate (per 100,000):
 - Violent Crime: 770
 - Property Crime: 2,937
 - Total Crime: 3,707



Literature Review Methods

- Searched CrimeSolutions.gov and peer-reviewed journals for interventions targeting gun violence and violent assaults.
 - Largely focused on interventions that have been deemed effective or promising.
 - For each intervention, the review focused on the 1) intervention activities, 2) methods used for identification of the target population for intervention, 3) intervention effects on gun violence and violent offending behaviors, and 4) barriers to intervention implementation.
- For each intervention site, demographic and crime statistic data were collected for the intervention year.
 - This will be used to inform which intervention strategies may be a good fit based on similarities between Tallahassee's demographics and those of successful intervention sites.



Intervention Strategies

- Identified intervention strategies encompass a range of intervention levels:
 - Law enforcement-based
 - Partnership-oriented
 - Community-based
 - Hospital-based
 - Youth-focused
- Specific programs and projects within these interventions can focus on different specific crimes or different target populations, such as homicide, gun violence, drugs, gangs, or youth.
- Specific programs can be implemented independently or mixed with other intervention strategies.



Law Enforcement-Based Interventions

- **Law enforcement-based interventions** are those which are primarily implemented by local law enforcement agencies.
- Identified programs include Hot Spots Policing, Problem-Oriented Policing, and Focused Deterrence Strategies.
- Although each are distinct programs, law enforcement agencies often incorporate multiple strategies such as a mix of Hot Spots Policing with Problem-Oriented and/or Community-Oriented Policing.



Hot Spots Policing

- **Hot Spots Policing** focuses police resources on micro-geographic locations with high concentrations of crime, particularly drug and gun violence.
 - Police departments typically use a range of tactics within these hot spots such as direct patrol, enhanced traffic stops, foot patrol, and increased surveillance operations.^{1,2}
- Hot spots policing has been found to produce small but significant overall reductions in crime, having the largest reduction effect on drug crimes, followed by disorder outcomes, property outcomes, and violent crime outcomes.³
- Hot spots programs that also engage in Problem-Oriented Policing interventions have been found to generate much larger crime control impacts relative to those that simply increased traditional police crime prevention actions such as directed patrol and drug enforcement.^{1, 2, 3, 4}

¹Braga, A. A. (2016). The science and practice of hot-spots policing. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 139-149). Routledge.

²National Academies of Sciences, Engineering, and Medicine. (2018). *Proactive policing: Effects on crime and communities*. Washington, DC: The National Academies Press.

³Braga, A. A., Turchan, B., Papachristos, A. V., & Hureau, D. M. (2019). Hot spots policing of small geographic areas effects on crime. *Campbell Systematic Reviews*, 15(3).

⁴Rosenfeld, R., Deckard, M. J., & Blackburn, E. (2014). The effects of directed patrol and self-initiated enforcement on firearm violence: A randomized controlled study of hot spots policing. *Criminology*, 52(3), 428-449.



Hot Spots Policing

- Common Pitfalls
 - Officers are often given extensive discretion about which proactive activities to engage in and evaluations of hot spots policing programs often fail to measure which types of activities officers are engaging in within their hot spot locations, making it difficult to know which activities are affecting the outcomes.^{1, 2, 3}
 - Among hot spots programs that also engage in Problem-Oriented Policing, the problem analysis engaged in by officers is generally weak, with officers having limited time and data resources to adequately diagnose the problems, resulting in less nuanced interventions.^{2, 4}
 - Intervention dosage varies by the level of officer buy-in and has shown to decay over the life of the intervention.^{2, 3}
 - Most analyses focus on the immediate impact of hot spots interventions, thus long-term effects are unclear.

¹Rosenfeld, R., Deckard, M. J., & Blackburn, E. (2014). The effects of directed patrol and self-initiated enforcement on firearm violence: A randomized controlled study of hot spots policing. *Criminology*, 52(3), 428-449.

²Taylor, B., Koper, C. S., & Woods, D. J. (2011). A randomized controlled trial of different policing strategies at hot spots of violent crime. *Journal of Experimental Criminology*, 7, 149-181.

³Schaefer, B. P., Hughes, T., & Stelzig, W. C. (2021). Hot spots across the metropolis: Evaluating hot spots directed patrol at city and suburban locations. *Justice Quarterly*, 38(1).

⁴Braga, A. A., & Bond, B. J. (2008). Policing crime and disorder hot spots: A randomized controlled trial. *Criminology*, 46(3), 577-607.



Problem-Oriented Policing

- **Problem-Oriented Policing (POP)** seeks to identify the underlying causes of crime problems and to frame appropriate responses using a wide variety of methods and tactics.¹
 - POP uses the SARA model (scanning, analysis, response, and assessment) to identify problems, carefully analyze the conditions contributing to the problem, develop a tailored response to target these underlying factors, and evaluate outcome effectiveness.²
 - Responses to problems can draw upon a variety of tactics and practices, ranging from arrest of offenders and modification of the physical environment to engagement with community members.^{1, 2}
- Problem-oriented policing has been found to significantly reduce overall crime and disorder; however, it appears to be more effective in reducing property crime and disorder offenses, while reductions in violent crime were often not significant.^{1, 2, 3}

¹National Academies of Sciences, Engineering, and Medicine. (2018). *Proactive policing: Effects on crime and communities*. Washington, DC: The National Academies Press.

²Hinkle, J. C., Weisburd, D., Telep, C. W., & Petersen, K. (2020). Problem-oriented policing for reducing crime and disorder: An updated systematic review and meta-analysis. *Campbell Systematic Reviews*, 16(2).

³Braga, A. A., Weisburd, D. L., Waring, E. J., Mazerolle, L. G., Spelman, W., & Gajewski, F. (1999). Problem-oriented policing in violent crime places: A randomized controlled experiment. *Criminology*, 37(3), 541-580.



Problem-Oriented Policing

- Common Pitfalls
 - Programs are often characterized by partial implementations of the SARA model.^{1, 2, 3}
 - Problem analyses were often small-scale, with little formal analysis or assessment.
 - This may be attributed to a lack of training/understanding of the SARA model and sufficient resources to fully engage in problem analysis.
 - Programs may also be hindered by a lack of intervention buy-in.¹
 - Some police departments expressed little interest regarding the intervention, thus provided little administrative support and police training.
 - Resistance from stakeholders, community partners, and community residents unwilling to cooperate with the proposed interventions.

¹Hinkle, J. C., Weisburd, D., Telep, C. W., & Petersen, K. (2020). Problem-oriented policing for reducing crime and disorder: An updated systematic review and meta-analysis. *Campbell Systematic Reviews*, 16(2).

²Eck, J. E., & Gallagher, K. (2016). Problem-oriented policing: Evidence v. framing in implementation success. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 129-138). Routledge.

³Cordner, G., & Biebel, E. P. (2005). Problem-oriented policing in practice. *Criminology & Public Policy*, 4(2), 155-180.



Focused Deterrence

- **Focused deterrence** programs are designed to change the behavior of chronic offenders and violent groups through partnerships between law enforcement, social services, and community organizations.¹
 - Focused deterrence programs use activities consistent with POP's SARA model to identify key offenders/groups of offenders for intervention and understand the underlying violence-producing dynamics and conditions.
 - Focused deterrence programs use offender notification strategies to send target offenders/groups a double message, pairing offers of assistance with threats of punishment.
- There are three main operational variations of focused deterrence: 1) Group Violence Intervention; 2) Drug Market Intervention; 3) Individual Offender Strategies
- Focused deterrence programs have been found to produce an overall statistically significant, moderate crime reduction effect; however, program effect sizes varied by program type, with group violence intervention strategies generating larger crime reduction impacts, high-risk individual programs generating moderate effects, and drug market interventions producing the smallest effect.^{1, 2, 3}

¹Braga, A. A., & Kennedy, D. M. (2021). *A framework for addressing violence and serious crime: Focused deterrence, legitimacy, and prevention* (Elements in Criminology). Cambridge: Cambridge University Press.

²Braga, A. A., Weisburd, D., & Turchan, B. (2019). Focused deterrence strategies effects on crime: A systematic review. *Campbell Systematic Reviews*, 15(3).

³National Academies of Sciences, Engineering, and Medicine. (2018). *Proactive policing: Effects on crime and communities*. Washington, DC: The National Academies Press.



Focused Deterrence

- **Group Violence Intervention (GVI)** strategies are a type of focused deterrence solution to gun violence centered around the insight that the vast majority of gun violence is perpetrated by incredibly small and easily identifiable segments of a given community.¹
 - GVI works by identifying individuals and groups most at risk for gun violence, inviting these individuals to a “call-in” consisting of local community members, law enforcement officers, and social service providers to convey a powerful message that gun violence must stop.
 - During call-ins, social service providers also connect at-risk individuals with needed resources to reduce violent behavior.
 - If the gun violence does not stop, then law enforcement will use all available legal action against the groups and individuals responsible.
- Operation Ceasefire, the Group Violence Reduction Strategy (GVRS), and the Indianapolis Violence Reduction Partnership (IVRP) are examples of successful GVI strategies to reduce gun violence.²

¹Giffords Law Center to Prevent Gun Violence. (2016). *Healing communities in crisis: Lifesaving solutions to the urban gun violence epidemic*. San Francisco, CA.

²Braga, A. A., Weisburd, D., & Turchan, B. (2019). Focused deterrence strategies effects on crime: A systematic review. *Campbell Systematic Reviews*, 15(3).



Group Violence Intervention

- **Operation Ceasefire** involves a partnership between law enforcement and community organizations to reduce gang-related gun violence using a “pulling levers” focused deterrence strategy.¹
 - The focused deterrence strategy is designed to prevent violence by reaching out directly to gangs with the message that violence will not be tolerated, and every legally available sanction will be used should violence occur.
 - Community organizations work simultaneously with law enforcement to offer services and other help to gang members.
- Evaluations of Operation Ceasefire in Boston, Massachusetts^{1, 2} and Oakland, California³ have found significant reductions in gun assault incidents, gun homicides, and gang-involved shootings.
 - Boston’s initial implementation of Operation Ceasefire in 1996 resulted in a statistically significant 63% decrease in the monthly number of youth homicides, a 25% decrease in the monthly number of citywide gun assault incidents, a 32% decrease in monthly number of citywide shots-fired calls, and a 44% decrease in monthly number of youth gun assaults in a high-risk police district.¹
 - In Oakland, monthly gun homicide counts were significantly reduced by 31.5% and treated gangs/groups experienced a significant 27.0% reduction in shootings relative to untreated gangs/groups.³

¹Braga, A. A., Kennedy, D. M., Waring, E. J., & Piehl, A. M. (2001). Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston’s Operation Ceasefire. *Journal of Research in Crime and Delinquency*, 38(3), 195-225.

²Braga, A. A., Hureau, D. M., & Papachristos, A. V. (2014). Deterring gang-involved gun violence: Measuring the impact of Boston’s Operation Ceasefire on street gang behavior. *Journal of Quantitative Criminology*, 30(1), 113-139.

³Braga, A. A., Barao, L. M., Zimmerman, G., Brunson, R. K., Papachristos, A. V., Wood, G., & Farrell, C. (2019). *Oakland Ceasefire evaluation: Final report to the City of Oakland*.



Group Violence Intervention

- Common Pitfalls
 - Operation Ceasefire
 - Challenges in sustaining initiatives over an extended period of time resulting from instability in program leadership and lack of resources.^{1, 2, 5}
 - More research is needed on the specific program mechanisms responsible for observed outcomes.^{3, 4, 6}
 - More research is needed on the effects of the intervention on individual behavior.^{1, 6}

¹Braga, A. A., Hureau, D. M., & Papachristos, A. V. (2014). Deterring gang-involved gun violence: Measuring the impact of Boston's Operation Ceasefire on street gang behavior. *Journal of Quantitative Criminology*, 30(1), 113-139.

²Braga, A. A., Barao, L. M., Zimmerman, G., Brunson, R. K., Papachristos, A. V., Wood, G., & Farrell, C. (2019). *Oakland Ceasefire evaluation: Final report to the City of Oakland*.

³Braga, A. A., Kennedy, D. M., Waring, E. J., & Piehl, A. M. (2001). Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinquency*, 38(3), 195-225.

⁴Braga, A. A., Zimmerman, G., Barao, L., Farrell, C., Brunson, R. K., & Papachristos, A. V. (2019). Street gangs, gun violence, and focused deterrence: Comparing place-based and group-based evaluation methods to estimate direct and spillover deterrent effects. *Journal of Research in Crime and Delinquency*, 56(4), 524-562.

⁵Circo, G. M., Krupa, J. M., McGarrell, E., & De Biasi, A. (2021). Focused deterrence and program fidelity: Evaluating the impact of Detroit Ceasefire. *Justice Evaluation Journal*, 4(1).

⁶Circo, G., Krupa, J. M., McGarrell, E., & De Biasi, A. (2020). The individual-level deterrent effect of "call-in" meetings on time to re-arrest. *Crime & Delinquency*, 66(11), 1630-1651.



Group Violence Intervention

- **Group Violence Reduction Strategy (GVRS)** targets violence disproportionately driven by gangs and groups.¹
 - GVRS deploys “call-in” meetings where known gang members meet with representatives from law enforcement, the community, and social service providers to receive an antiviolence message.
 - Attendees are told to inform their other gang members to stop the violence, and if they don’t, then law enforcement action would be taken against the whole gang.
- GVRS has shown to have promising effects on reducing gang violence and gun violence, significantly reducing shooting victimizations, firearm homicides, and firearm assaults.¹
 - Chicago GVRS,² New Orleans GVRS,³ and Kansas City No Violence Alliance (NoVA)⁴ are examples of promising GVRS programs.

¹Braga, A. A., Weisburd, D., & Turchan, B. (2019). Focused deterrence strategies effects on crime: A systematic review. *Campbell Systematic Reviews*, 15(3).

²Papachristos, A. V., & Kirk, D. S. (2015). Changing the street dynamic: Evaluating Chicago’s group violence reduction strategy. *Criminology & Public Policy*, 14(3), 525-558.

³Corsaro, N., & Engel, R. S. (2015). Most challenging of contexts: Assessing the impact of focused deterrence on serious violence in New Orleans. *Criminology & Public Policy*, 14(3), 471-505.

⁴Fox, A. M., & Novak, K. J. (2018). Collaborating to reduce violence: The impact of focused deterrence in Kansas City. *Police Quarterly*, 21(3), 283-308.



Group Violence Intervention

- **The Indianapolis Violence Reduction Partnership (IVRP)** aims to address homicide and gun assault problems using a focused deterrence strategy that targets illegal gun carrying and use among known groups of chronic offenders, often involved in the drug trade.^{1, 2}
 - A key element of this strategy involves face-to-face meetings with groups of high-risk probationers and parolees, where criminal justice officials and community members provide a deterrence message and explain the severe penalties for continuing to engage in firearm crimes.
 - Probationers and parolees are also urged to take advantage of a range of social services and opportunities.
- IVRP has been found to produce substantial reductions in city-wide homicides and gang homicides.
 - At the time of the intervention, IVRP produced an immediate 34.3% reduction in the number of homicides per month.¹
 - Gang homicides experienced a statistically significant decline of 38.1% following intervention, while non-gang homicides experienced a non-significant decline of 8.6%.²

¹McGarrell, E. F., Chermak, S., Wilson, J. M., & Corsaro, N. (2006). Reducing homicide through a “lever-pulling” strategy. *Justice Quarterly*, 23(2), 214-231.

²Corsaro, N., & McGarrell, E. F. (2009). Testing a promising homicide reduction strategy: re-assessing the impact of the Indianapolis “pulling levers” intervention. *Journal of Experimental Criminology*, 5, 63-82.



Group Violence Intervention

- Common Pitfalls
 - GVRS
 - Some evidence of a decay effect over time.⁴
 - Mechanism(s) unclear (e.g., incapacitation, deterrence, social service utilization)¹
 - IVRP
 - Reductions concentrated among gang-related homicides with a non-significant reduction among non-gang-related homicides.^{5, 6}

¹Braga, A. A., Weisburd, D., & Turchan, B. (2019). Focused deterrence strategies effects on crime: A systematic review. *Campbell Systematic Reviews*, 15(3).

²Papachristos, A. V., & Kirk, D. S. (2015). Changing the street dynamic: Evaluating Chicago's group violence reduction strategy. *Criminology & Public Policy*, 14(3), 525-558.

³Corsaro, N., & Engel, R. S. (2015). Most challenging of contexts: Assessing the impact of focused deterrence on serious violence in New Orleans. *Criminology & Public Policy*, 14(3), 471-505.

⁴Fox, A. M., & Novak, K. J. (2018). Collaborating to reduce violence: The impact of focused deterrence in Kansas City. *Police Quarterly*, 21(3), 283-308.

⁵McGarrell, E. F., Chermak, S., Wilson, J. M., & Corsaro, N. (2006). Reducing homicide through a "lever-pulling" strategy. *Justice Quarterly*, 23(2), 214-231.

⁶Corsaro, N., & McGarrell, E. F. (2009). Testing a promising homicide reduction strategy: re-assessing the impact of the Indianapolis "pulling levers" intervention.

Journal of Experimental Criminology, 5, 63-82.



Focused Deterrence

- **Individual Offender Strategies** are aimed at preventing repeat offending by high-risk individuals.¹
 - These strategies generally address the most dangerous offenders with a wide range of legal tools, warn offenders that their “next offense” will bring extraordinary legal attention, and focus community “moral voices” on such offenders to set a clear standard that violence is unacceptable.¹
 - These strategies also provide social support services, connecting individuals to treatment, housing, employment, and educational opportunities.²
- Project Safe Neighborhoods (PSN) and the Rockford Area Violence Elimination Network (RAVEN) are examples of individual offender strategies that show promise for reducing violent crime.

¹Braga, A. A., Weisburd, D., & Turchan, B. (2019). Focused deterrence strategies effects on crime: A systematic review. *Campbell Systematic Reviews*, 15(3).

²Clark-Moorman, K., Rydberg, J., & McGarrell, E. F. (2019). Impact evaluation of parolee-based focused deterrence program on community-level violence. *Criminal Justice Policy Review*, 30(9), 1408-1430.



Individual Offender Strategies

- **Project Safe Neighborhoods (PSN)** is a federally funded anti-gun crime initiative that brings together law enforcement with researchers and community organizations.¹
 - U.S. Attorneys' Offices are tasked with creating task forces involving local, state and federal law enforcement, local prosecutors, probation and parole, local government, service providers, neighborhood leaders, & the faith community.
 - These task forces emphasize deterrence and incapacitation through the threat of federal prosecution for illegal gun possession and violent, gang, and drug related offenses involving a firearm.
- A national evaluation of PSN found cities that received PSN treatment experienced a 4.1% reduction in violent crime compared to non-PSN cities.¹
- PSN has also been found to reduce total homicides and gun homicides in Chicago, Illinois²; Tampa, Florida³; and Lowell, Massachusetts⁴.
 - An evaluation of Tampa's PSN program found PSN was associated with a raw reduction of 24.4% in violent crime and 24.0% in gun crime rates in the pre- (2013-2015) and post-test (2016-2018) periods.³
 - An evaluation of Chicago's PSN program found the offender notification meetings component to be the most effective in reducing homicides and recidivism.²

¹McGarrell, E. F., Corsaro, N., Hipple, N. K., & Bynum, T. S. (2010). Project safe neighborhoods and violent crime trends in US cities: Assessing violent crime impact. *Journal of Quantitative Criminology*, 26, 165-190.

²Grunwald, B., & Papachristos, A. V. (2017). Project safe neighborhoods in Chicago: Looking back a decade later. *The Journal of Criminal Law & Criminology*, 107(1), 131-159.

³Fox, B., Allen, S. F., & Toth, A. (2022). Evaluating the impact of Project Safe Neighborhoods (PSN) initiative on violence and gun crime in Tampa: Does it work and does it last? *Journal of Experimental Criminology*, 18, 543-567.

⁴Braga, A. A., Pierce, G. L., McDevitt, J., & Bond, B. J. (2008). The strategic prevention of gun violence among gang-involved offenders. *Justice Quarterly*, 25(1), 132-162.



Individual Offender Strategies

- **Rockford Area Violence Elimination Network (RAVEN)** is a program targeting firearm violence among recently released parolees and probationers at risk of being involved in future violence.¹
 - RAVEN utilizes call-in meetings to welcome parolees back to the community and provide a message about their opportunity to contribute positively to society and avoid crime.
 - Parolees are also given an enforcement message noting the steps that law enforcement agencies are taking to monitor high-risk parolees and reduce gun crime.
 - RAVEN also has a social support component, connecting parolees to educational and employment opportunities.
- An evaluation of RAVEN found significant reductions of 20.52% in gun robberies, 15.89% in gun assaults, and 29.08% in non-gun robberies; however, gun homicides, non-gun homicides, and non-gun assault did not experience significant declines.¹

¹Clark-Moorman, K., Rydberg, J., & McGarrell, E. F. (2019). Impact evaluation of parolee-based focused deterrence program on community-level violence. *Criminal Justice Policy Review*, 30(9), 1408-1430.



Individual Offender Strategies

- Common Pitfalls
 - Project Safe Neighborhoods
 - The processes used to identify prolific offenders subject to intervention vary greatly and are often not evidence-based, relying on subjective assessments of police reports, offending histories, and criminal associations.¹
 - The effects of PSN may decay over time.^{1, 2, 3}
 - More research is needed on the specific program mechanisms responsible for observed outcomes.^{2, 4}
 - RAVEN
 - There were challenges enrolling participants in case management and social support.⁵
 - Not clear what mechanisms underlie the impact of the RAVEN intervention on violence.⁵

¹Fox, B., Allen, S. F., & Toth, A. (2022). Evaluating the impact of Project Safe Neighborhoods (PSN) initiative on violence and gun crime in Tampa: Does it work and does it last? *Journal of Experimental Criminology*, 18, 543-567.

²McGarrell, E. F., Corsaro, N., Hipple, N. K., & Bynum, T. S. (2010). Project safe neighborhoods and violent crime trends in US cities: Assessing violent crime impact. *Journal of Quantitative Criminology*, 26, 165-190.

³Grunwald, B., & Papachristos, A. V. (2017). Project safe neighborhoods in Chicago: Looking back a decade later. *The Journal of Criminal Law & Criminology*, 107(1), 131-159.

⁴Braga, A. A., Pierce, G. L., McDevitt, J., & Bond, B. J. (2008). The strategic prevention of gun violence among gang-involved offenders. *Justice Quarterly*, 25(1), 132-162.

⁵Clark-Moorman, K., Rydberg, J., & McGarrell, E. F. (2019). Impact evaluation of parolee-based focused deterrence program on community-level violence. *Criminal Justice Policy Review*, 30(9), 1408-1430.



Partnership-Oriented Interventions

- **Partnership-oriented interventions** involve a stronger focus on partnerships between law enforcement and community and/or business partners working together to prevent crime and disorder.
- Identified programs include Third-Party Policing and Community-Oriented Policing.



Partnership-Oriented Interventions

- **Third-party policing** leverages the actions of nonpolice third parties in deterring and reducing the opportunities for targeted offenders or criminal conduct.¹
 - Police engage residents, landlords, business owners, regulators, inspectors, licensing authorities, and others, encouraging them to help prevent crime and violence in hot spots through the use of civil remedies such as fines, civil orders, injunctions, and evictions.
 - Third-party policing may target certain categories of people (e.g., young people, gang members, or drug dealers) or specific places (e.g., crime hot spots).
- Evaluations of third-party policing programs have found statistically significant short-term reductions in overall crime and disorder, however, there is more limited evidence of long-term impacts.¹
 - Oakland's Beat Health Program is an example of third-party policing that has been shown to significantly reduce service calls for drug-related crime in treatment areas; however, other categories of service calls were not significantly reduced.²

¹National Academies of Sciences, Engineering, and Medicine. (2018). *Proactive policing: Effects on crime and communities*. Washington, DC: The National Academies Press.

²Mazerolle, L., & Roehl, J. (1999). *Controlling drug and disorder problems: Oakland's Beat Health program*. Research in Brief. Washington, DC: National Institute of Justice.



Partnership-Oriented Interventions

- **Community-Oriented Policing (COP)** emphasizes bringing the police and community together to make communities safe. Police work with community members to identify and understand the social issues driving crime, disorder, and fear.^{1, 2}
 - These programs often use a more holistic crime reduction approach that target whole communities and involve partnerships, organizational transformation, and problem-solving.
 - COP activities may include community meetings, foot patrols, crime newsletters, door-to-door visits, responding to social and physical disorder, and forging positive relationships with residents, among others.
- Evidence on the effectiveness of COP programs to prevent crime is mixed due to various definitions and implementation strategies across locations.^{1, 2, 3}
 - A meta-analysis of COP programs found limited effects on reducing crime, though the findings suggest a slightly larger reduction in violent crimes than property crimes.¹
 - Independent evaluations of COP programs produce similar results, finding moderate reductions in violent crime, mixed effects on property crime, and limited effects on drug crimes.^{4, 5}
 - COP programs have shown positive effects on citizen satisfaction, perceptions of disorder, and police legitimacy.^{1, 3}

¹Gill, 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, 399-428.

²Reisig, M. D. (2010). Community and problem-oriented policing. *Crime and Justice: Review of Research*, 39, 1-54.

³Gill, C., Weisburd, D., & Telep, C. (2016). Community policing. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 119-128).

⁴Uchida, C. D., Forst, B., & Annan, S. O. (1992). *Controlling street-level drug trafficking: Evidence from Oakland and Birmingham*. Washington, DC: National Institute of Justice.

⁵Connell, N. M., Miggans, K., & McGloin, J. M. (2008). Can a community policing initiative reduce serious crime? A local evaluation. *Police Quarterly*, 11(2), 127-150.



Partnership-Oriented Interventions

- Common Pitfalls
 - Third-Party Policing
 - All parties involved must reach a consensus about the appropriate civil remedies to use, and some residents and third parties may find some approaches unacceptable.¹
 - The use of coercive mechanisms to influence business and housing owners may raise privacy concerns and produce unintended harmful consequences for community members.²
 - More attention is needed to long-term maintenance after initial civil interventions are applied.³
 - Community-Oriented Policing
 - There are no criteria or set guidelines for implementing community policing.^{4, 5} The specific tactics deployed under community policing vary substantially and many have not been rigorously tested.^{4, 5}
 - Community policing as a philosophy is often not fully adopted by police departments.^{5, 6}

¹Mazerolle, L., & Roehl, J. (1999). *Controlling drug and disorder problems: Oakland's Beat Health program*. Research in Brief. Washington, DC: National Institute of Justice.

²National Academies of Sciences, Engineering, and Medicine. (2018). *Proactive policing: Effects on crime and communities*. Washington, DC: The National Academies Press.

³Mazerolle, L. G., Price, J. F., & Roehl, J. (2000). Civil remedies and drug control: A randomized field trial in Oakland, California. *Evaluation Review*, 24(2), 212-241.

⁴Gill, 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, 399-428.

⁵Gill, C., Weisburd, D., & Telep, C. (2016). Community policing. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy*. 24

⁶Uchida, C. D., Forst, B., & Annan, S. O. (1992). *Modern policing and the control of illegal drugs: Testing new strategies in two American cities*. Washington, DC: National Institute of Justice.



Community-Based Interventions

- **Community-based violence interventions (CVIs)** aim to reduce violence using evidence-informed strategies through tailored community-centered initiatives.¹
 - Tailored, community-centered initiatives engage individuals and groups to prevent and disrupt cycles of violence and retaliation, establish relationships between individuals and community assets to deliver services, and bolster community resources to improve community conditions.
 - The CVI approach actively engages community residents and stakeholders to gain insight into violence in the community and build trust.
 - CVI relies on community collaboration between partners with complimentary missions and skill sets to provide needed services.
- CVI strategies typically focus on high-risk individuals, gang and gun violence, and historical and structural challenges contributing to community violence.
- Common CVI strategies that show promise for reducing gun violence include Street Outreach programs, Place-Making Strategies, and Therapy-Based Programs.^{2, 3, 4}

¹Bureau of Justice Assistance. (2022). *Community based violence intervention and prevention initiative implementation checklist*.

²Giffords Law Center to Prevent Gun Violence. (2016). *Healing communities in crisis: Lifesaving solutions to the urban gun violence epidemic*. San Francisco, CA.

³Local Initiatives Support Corporation (LISC). (2017). *Connecting crime reduction and neighborhood revitalization: BCJI sites build safe communities*. Bureau of Justice Assistance. 25

⁴Feucht, T., & Holt, T. (2016). Does cognitive behavioral therapy work in criminal justice? A new analysis from crimesolutions.gov. *NIJ Journal*, 277, 10-17.



Community-Based Interventions

- **Street Outreach** programs seek to mediate violent disputes (resolving them before they turn deadly), connect potentially violent individuals to services, and change norms and attitudes about violence using media campaigns.¹
- Street outreach programs typically involve the following components:²
 - Violence interrupters – engage with the community to identify potentially violent conflicts and then mediate those conflicts into a peaceful resolution.
 - Outreach workers – identify high-risk individuals and connect them to appropriate social services.
 - Mobilization of the community to change social norms surrounding the use of violence; promote messages to end gun violence.
- Examples of promising street outreach programs include:
 - Cure Violence,² Safe and Successful Youth Initiative (SSYI),^{3, 4} Gang Reduction and Youth Development (GRYD)⁵

¹Abt, T. (2019). *Bleeding out: The devastating consequences of urban violence-and a bold new plan for peace in the streets*. New York: Basic Books.

²Giffords Law Center to Prevent Gun Violence. (2016). *Healing communities in crisis: Lifesaving solutions to the urban gun violence epidemic*. San Francisco, CA.

³Petrosino, A., Turner, H., Hanson, T. L., Fronius, T., Campie, P., & Goold, C. C. (2017). The impact of the Safe and Successful Youth Initiative on city-level youth crime victimization rates: Substantive results and implications for evaluation. *Journal of Multidisciplinary Evaluation*, 13(9), 8-15.

⁴Campie, P. E., Vrinotis, M., Read, N. W., Fronius, T., & Petrosino, A. (2014). *A comparative study using propensity score matching to predict incarceration likelihoods among SSYI and non-SSYI youth from 2011-2013*. Massachusetts Executive Office of Health and Human Services. Boston, MA.

⁵Brantingham, P. J., Sundback, N., Yuan, B., & Chan, K. (2017). *GRYD intervention incident response & gang crime 2017 evaluation report*. Los Angeles, CA: The Los Angeles Mayor's Office of Gang Reduction and Youth Development.



Community-Based Interventions

- **Place-Making Strategies** involve cosmetic improvements to hot spots, improving high-crime areas by addressing low occupancy, vacant lots and buildings, and restoring and improving public services and areas.^{1, 2}
- The overall effectiveness of these “cleaning and greening” programs remains inconclusive.^{2, 3}
 - In Philadelphia, fixing up abandoned buildings and vacant lots reduced firearm violence in nearby areas by 39%.³
 - The use of CCTV and improved street lighting have also been shown to effectively reduce crime.²
 - The Byrne Criminal Justice Innovation (BCJI) program helps to address crime in hot spots by employing diverse crime prevention, resident engagement, and neighborhood revitalization and has shown to reduce crime in revitalized communities in Milwaukee, WI; Evansville, IN; Philadelphia, PA; and Dayton, OH.¹

¹Local Initiatives Support Corporation (LISC). (2017). *Connecting crime reduction and neighborhood revitalization: BCJI sites build safe communities*. Bureau of Justice Assistance.

²Guerette, R. T., Johnson, S. D., & Bowers, K. (2016). Situational crime prevention. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 104-114). Routledge.

³Branas, C. C., Kondo, M. C., Murphy, S. M., South, E. C., Polsky, D., & MacDonald, J. M. (2016). Urban blight remediation as a cost-beneficial solution to firearm violence. *American Journal of Public Health, 106*, 2158-2164.



Community-Based Interventions

- **Therapy-Based Programs**, such as cognitive behavioral therapy (CBT) and functional family therapy (FFT), are widely used with delinquents and young adult offenders to reduce recidivism and address problematic behavior.^{1, 2}
- Therapy-based programs that focus on highest-risk offenders and are stand-alone or the primary feature of the program are found to be most effective.^{2, 3}
- Promising therapy-based programs that have been evaluated for their effects on violent crime include:
 - Functional family therapy for reducing gang violence,³ Chicago's Becoming a Man (B.A.M.),⁴ Roca, Inc.⁵

¹Fagan, A. A. (2016). Opportunities for public policies to strengthen families and prevent crime. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 82-91). Routledge.

²Feucht, T., & Holt, T. (2016). Does cognitive behavioral therapy work in criminal justice? A new analysis from crimesolutions.gov. *NIJ Journal*, 277, 10-17.

³Gottfredson, D. C., Thornberry, T. P., Slothower, M., Devlin, D., Kearley, B., & Fader, J. J. (2018). *Reducing gang violence: A randomized trial of functional family therapy*. Washington, DC: US Department of Justice, Office of Justice Programs.

⁴Prochaska, M. (2014). Statistically speaking: Evaluation of Becoming a Man (B.A.M.) program in Chicago. *Children's Legal Rights Journal*, 34(3), 339-343.

⁵Abt Associates. (2021). *Final report: Implementation evaluation of Roca, Inc.* Cambridge, MA.



Community-Based Interventions

- Common Pitfalls
 - Street Outreach
 - Targeting high-risk individuals can increase incarceration risk without adequate provision of services.¹
 - Some programs focused only on high-profile, gang-related violence (e.g., Gang Reduction and Youth Development).²
 - Place-Making Strategies
 - Concerns regarding gentrification and displacement of residents.³
 - May displace violence/crime to nearby areas.³
 - Therapy-Based Programs
 - Often conducted through school, which can miss high-risk youth (possible reason for observed increases in graduation rates but no reduction in violent behavior).^{4,5}

¹Campie, P. E., Vriniotis, M., Read, N. W., Fronius, T., & Petrosino, A. (2014). *A comparative study using propensity score matching to predict incarceration likelihoods among SSYI and non-SSYI youth from 2011-2013*. Massachusetts Executive Office of Health and Human Services. Boston, MA.

²Brantingham, P. J., Sundback, N., Yuan, B., & Chan, K. (2017). *GRYD intervention incident response & gang crime 2017 evaluation report*. Los Angeles Mayor's Office of Gang Reduction and Youth Development.

³Branas, C. C., Kondo, M. C..., & MacDonald, J. M. (2016). Urban blight remediation as a cost-beneficial solution to firearm violence. *American Journal of Public Health*, 106, 2158-2164.

⁴Prochaska, M. (2014). Statistically speaking: Evaluation of Becoming a Man (B.A.M.) program in Chicago. *Children's Legal Rights Journal*, 34(3), 339-343.

⁵Abt Associates. (2021). *Final report: Implementation evaluation of Roca, Inc.* Cambridge, MA.



Youth-Focused Strategies

- **Youth-focused strategies** are those that target young adults, adolescents, and children most at risk of criminal involvement.¹
 - These strategies are typically prevention focused, aiming to prevent at-risk youth from becoming involved in the criminal justice system.
 - Often incorporate other strategies such as family therapy and cognitive behavioral therapy.
- Promising youth-focused strategies include:
 - School-Based/Early-Childhood Interventions
 - Perry Program,² Seattle Social Development Project,³ Gang Resistance Education and Training (G.R.E.A.T.)⁴
 - Youth Work Programs^{5, 6}

¹Farrington, D. P. (2016). Juvenile delinquency prevention programs. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D. Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 69-81).

²Parks, G. (2000). *The High/Scope Perry Preschool Project*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

³O'Donnell, J., Hawkins, J. D., Catalano, R. F., Abbott, R. D., & Day, L. E. (1995). Preventing school failure, drug use, and delinquency among low-income children: Long-term intervention in elementary schools. *American Journal of Orthopsychiatry*, 65(1), 87-100.

⁴Esbensen, F., Osgood, D. W., Peterson, D., Taylor, T. J., & Carson, D. C. (2013). Short- and long-term outcome results from a multisite evaluation of the G.R.E.A.T. program. *Criminology & Public Policy*, 12(3), 375-411.

⁵Heller, S., Pollack, H., & Davis, J. M. V. (2017). *The effect of summer jobs on youth violence*. Washington, DC: US Department of Justice, Office of Justice Programs.

⁶Modestino, A. S. (2017). *How can summer jobs reduce crime among youth? An evaluation of the Boston summer youth employment program*. Washington, DC: Brookings Metropolitan Policy Program.



Youth-Focused Strategies

- Common Pitfalls
 - Many evaluations are dated (1980s-1990s)
 - Not specifically targeting violence/gun violence.^{1, 2, 3, 4}
 - Variety of outcomes and primarily focused on educational attainment, school attachment, graduation, employment, etc.
 - School-based interventions can miss highest risk students.^{1, 4}
 - Challenges of parental involvement/consent.⁴
 - Difficult to target multiple outcomes.⁴
 - Gang Resistance Education and Training reduces gang involvement but not offending

¹Farrington, D. P. (2016). Juvenile delinquency prevention programs. In T. G. Blomberg, J. M. Brancale, K. M. Beaver, & W. D Bales (Eds.), *Advancing criminology and criminal justice policy* (pp. 69-81). Routledge.

²Parks, G. (2000). *The High/Scope Perry Preschool Project*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

³O'Donnell, J., Hawkins, J. D., Catalano, R. F., Abbott, R. D., & Day, L. E. (1995). Preventing school failure, drug use, and delinquency among low-income children: Long-term intervention in elementary schools. *American Journal of Orthopsychiatry*, 65(1), 87-100.

⁴Esbensen, F., Osgood, D. W., Peterson, D., Taylor, T. J., & Carson, D. C. (2013). Short- and long-term outcome results from a multisite evaluation of the G.R.E.A.T. program. *Criminology & Public Policy*, 12(3), 375-411.



Mentoring Programs

- **Mentoring programs** provide a one-on-one relationship between at-risk youth and caring adults, with the goal of promoting positive youth development and preventing negative outcomes.^{1, 2}
- Mentoring programs serve a wide range of age groups and populations with diverse needs and risk factors and encompass a wide range of approaches based on the age of the mentor (e.g., older peers vs. adults), volunteer vs. paid mentors, format (e.g., one-to-one vs. group), and location (e.g., school vs. community).²
- Mentoring programs have generally shown to be effective for both preventing and reducing delinquent behavior.^{1, 2, 3, 4}
 - Mentoring programs that include targeted, skills-based approaches have a much larger effect on positive outcomes than non-specific relational mentoring approaches.⁵

¹Tolan, P., Henry, D., Schoeny, M., Bass, A., Lovegrove, P., & Nichols, E. (2013). Mentoring interventions to affect juvenile delinquency and associated problems: A systematic review. *Campbell Systematic Reviews*.

²DuBois, D. L. (2021). Mentoring programs for youth: A promising intervention for delinquency prevention. *NIJ Journal*, 283, 1-11.

³Raposa, E. B., Rhodes, J., Stams, G., & Hussain, S. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of Youth and Adolescence*, 48, 423-443.

⁴DuBois, D. L., Portillo, N., Rhodes, J. E., Naida, S., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12(2), 57-91.

⁵Christensen, K. M., Hagler, M. A., Stams, G., Raposa, E. B., Burton, S., & Rhodes, J. E. (2020). Non-specific versus targeted approaches to youth mentoring: A follow-up meta-analysis. *Journal of Youth and Adolescence*, 49, 959-972.



Mentoring Programs

- **Adolescent Diversion Project** diverts youth from juvenile court to intensive supervision alongside individualized behavioral interventions & services.¹
 - Reductions in officially measured recidivism but not in self-reported delinquency/offending.
- **Advance Peace** identifies individuals who are highly-influential in local gun violence and engages them in intensive mentoring and individualized action plans through Neighborhood Change Agents.²
 - Reductions in gun homicides and assaults in implementation zones. Most participants have no new gun charges, but 54% are rearrested.³
- **Big Brothers Big Sisters** matches youth to volunteer mentors who spend time with their mentee in social/recreational activities several times per month.⁴
 - Reductions in illegal drug and alcohol use but not in self-reported delinquency/offending or arrest.^{4, 5}

¹Davidson, W. S., Redner, R., Blakely, C. H., Mitchell, C. M., & Emshoff, J. G. (1987). Diversion of juvenile offenders: an experimental comparison. *Journal of consulting and clinical psychology*, 55(1), 68.

²Corburn, J., Boggan, D., Muttaqi, K., Vaughn, S., Houston, J., Thibodeaux, J., & Muhammad, B. (2021). A healing-centered approach to preventing urban gun violence: the Advance Peace model. *Humanities and Social Sciences Communications*, 8(1), 1-7.

³Corburn, J., & Fukutome-Lopez, A. (2020). Outcome evaluation of advance peace Sacramento, 2018–19.

⁴Tierney, J. P., Grossman, J. B., & Resch, N. L. (2000). *Making a difference: An impact study of Big Brothers/Big Sisters*. Philadelphia, PA: Public/Private Ventures.

⁵DuBois, D. L., Herrera, C., & Rivera, J. (2018). *Investigation of long-term effects of the Big Brothers Big Sisters community-based mentoring program: Final technical report for OJJDP*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.



Mentoring Programs

- Common Pitfalls
 - Most do not directly target violent behavior; rather, mentoring programs typically address antisocial behavior, delinquency, and educational outcomes.¹
 - Some programs (e.g., Adolescent Diversion Project) exclude youth with serious person crimes.²
 - Studies often lack descriptions of the program design and mentoring activities, making it difficult to understand which specific mechanism(s) are contributing to youth outcomes.^{1, 3}
 - Most evaluations focus on immediate effects; it is not clear what the long-term effects of mentoring programs are.^{1, 3}
 - Most effects of Big Brothers Big Sisters are not sustained beyond one year.⁴

¹Tolan, P., Henry, D., Schoeny, M., Bass, A., Lovegrove, P., & Nichols, E. (2013). Mentoring interventions to affect juvenile delinquency and associated problems: A systematic review. *Campbell Systematic Reviews*, 10, 1-148.

²Davidson, W. S., Redner, R., Blakely, C. H., Mitchell, C. M., & Emshoff, J. G. (1987). Diversion of juvenile offenders: an experimental comparison. *Journal of consulting and clinical psychology*, 55(1), 68.

³DuBois, D. L. (2021). Mentoring programs for youth: A promising intervention for delinquency prevention. *NIJ Journal*, 283, 1-11.

⁴Herrera, C., Grossman, J. B., Kauh, T. J., Feldman, A. F., & McMaken, J. (2007). Making a Difference in Schools: The Big Brothers Big Sisters School-Based Mentoring Impact Study. *Public/Private Ventures*.



Hospital-Based Violence Intervention

- **Hospital-based violence intervention programs (HVIP)** focus on reducing gun violence by reaching high-risk individuals who have been recently admitted to a hospital for treatment of a serious violent injury.¹
 - HVIP screens patients to identify those most at risk for reinjury and connects them with case managers who help connect high-risk individuals to a variety of community-based organizations and social services.
- Most evaluations find no impact on reinjury or recidivism, but many samples are small with low retention rates and/or non-randomized study samples.^{2, 3, 4}

¹Giffords Law Center to Prevent Gun Violence. (2016). *Healing communities in crisis: Lifesaving solutions to the urban gun violence epidemic*. San Francisco, CA.

²Affinati, S., Patton, D., Hansen, L., Ranney, M., Christmas, A. B., Violano, P., Sodhi, A., Robinson, B., & Crandall, M. (2016). Hospital-based violence intervention programs targeting adult populations: An Eastern Association for the Surgery of Trauma evidence-based review. *Trauma Surgery & Acute Care Open*, 1, 1-7.

³Bonne, S., Hink, A., Violano, P., Allee, L., Duncan, T., Burke, P., Fein, J., Kozyckij, T., Shapiro, D., Bakes, K., Kuhls, D., Bulger, E., & Dicker, R. (2022). Understanding the makeup of a growing field: A committee on trauma survey of the national network of hospital-based violence intervention programs. *The American Journal of Surgery*, 223.

⁴Juillard, C., Smith, R., Anaya, N., Garcia, A., Kahn, J. G., & Dicker, R. A. (2015). Saving lives and saving money: Hospital-based violence intervention is cost-effective. *Journal of Trauma & Acute Care Surgery*, 78(2), 252-258.



Hospital-Based Violence Intervention

- Common Pitfalls
 - Low retention among eligible participants.^{1, 4}
 - Small sample sizes and lack of randomization in studies results in mixed results.^{1, 2, 3, 4}
 - Inclusion and exclusion criteria vary widely (e.g., domestic violence victims).¹
 - Service provision, involved providers/staff, and dosage vary widely between hospital programs.^{1, 2, 3}

¹Affinati, S., Patton, D., Hansen, L., Ranney, M., Christmas, A. B., Violano, P., Sodhi, A., Robinson, B., & Crandall, M. (2016). Hospital-based violence intervention programs targeting adult populations: An Eastern Association for the Surgery of Trauma evidence-based review. *Trauma Surgery & Acute Care Open*, 1, 1-7.

²Bonne, S., Hink, A., Violano, P., & Dicker, R. (2022). Understanding the makeup of a growing field: A committee on trauma survey of the national network of hospital-based violence intervention programs. *The American Journal of Surgery*, 223.

³Smith, R., Dobbins, S., Evans, A., Balhotra, K., & Dicker, R. A. (2013). Hospital-based violence intervention: Risk reduction resources that are essential for success. *Journal of Trauma & Acute Care Surgery*, 74(4), 976-982.

⁴Juillard, C., Cooperman, L., Allen, I., Pirracchio, R., Henderson, T., Marquez, R., Orellana, J., Texada, M., & Dicker, R. A. (2016). A decade of hospital-based violence intervention: Benefits and shortcomings. *Journal of Trauma & Acute Care Surgery*, 81(6), 1156-1161.



Summary

- There are many effective violence/gun violence interventions programs
- In selecting a program (or programs), important considerations include:
 - Targeted outcome(s)
 - Intervention population and size
 - Provider, partner, and community capacities and resources
- Analysis of LCSO and TPD data will guide these decisions
 - Presentation of these results in the September meeting
- Additionally, prior research and evaluation sites will be considered
 - It is important to note that most prior research was conducted in major cities (e.g., Baltimore, Chicago, Los Angeles) and may not be well-suited for Tallahassee



Questions?

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