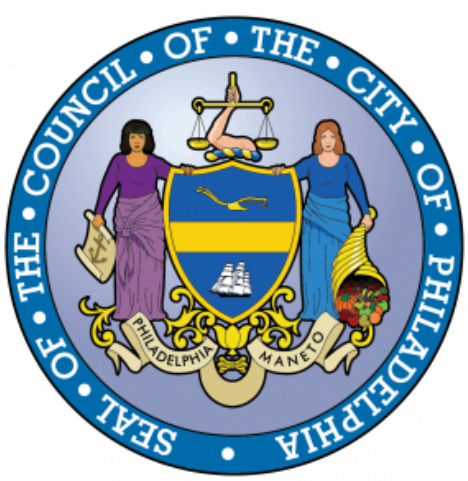
# *100 Shooting Review Committee Report*













PHL DAO
Philadelphia District Attorney's Office

Department of Public Health

Managing Director's Office

DEFENDER ASSOCIATION of PHILADELPHIA

The City of Philadelphia has been plagued by a wave of senseless gun violence. In 2021 alone, there were over 2,300 victims of shootings in our city. That is roughly six shootings per day. That is unacceptable. As Desmond Tutu stated, "there comes a point where we need to stop just pulling people out of the river. We need to go upstream and find out why they're falling in." As Chair of the Council's Committee on Public Safety, it was imperative to me that we understand what is happening. We created the 100 Shooting Review Committee to examine the root causes of gun violence and make recommendations for how to proceed in addressing them. Due to the increasing rates of crime, we expanded the Committee's purview to examine 2,000+ shootings. This Committee came together as a synergy. A synergy is defined as the interaction or cooperation of two or more organizations, substances, or other agents to produce a combined effect greater than the sum of their separate effects. This Committee is just that. We wish to acknowledge the resources and commitments contributed by each of the individual agencies, departments and staff in the creation of this report. I would like to thank the Police Commissioner, District Attorney, Chief Defender, City Controller, Managing Director, First Judicial District, and the Department of Public Health, along with their staff members, for their dedication to this project. At the end of the day, it is important to remember what this report is: a view of the same issue through a variety of different lenses; and what it is not: a solution to the problem, but a redefining of the question. I would like to offer my sincere thank you to everyone who contributed to this project… now let's get to work!

Sincerely,



Curtis Jones, Jr.

Councilmember – 4th District

Majority Whip

# 100 Shooting Review Committee Report


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DAO 9. Poster on Gun Cases by Amaral, Loeffler, Ridgeway (2021)
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Appendix 8: PDPH
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# 1. Executive Summary

On September 10, 2020, City Council passed Resolution #200436, authorizing the Committee on Public Safety and the Special Committee on Gun Violence Prevention to hold hearings on the current state of gun violence in Philadelphia and to receive actionable recommendations to address the gun violence crisis. Specifically, the resolution along with subsequent Resolution #210703 and committee discussions sought information on and examination of (1) the circumstances shared by those accused of committing the last 100 shootings, (2) the source of firearms used to commit violent crime in the city, (3) any prior contacts the arrestee had with the criminal justice system, and (4) the trend of gun case disposition, bail and recidivism.

This report reflects joint efforts by numerous city agencies to respond to the resolution, specifically by reviewing available data, studies, and evidence-based practices throughout the United States. The inter-agency collaboration has been collectively referred to as the Philadelphia Interagency Research and Public Safety Collaborative (PIRPSC) and includes the following organizations (those with a * were directly responsible for this report):

- Controller's Office
- Defender Association of Philadelphia ("Defender Association") *
- Department of Public Health ("DPH" or "PDPH") *
- District Attorney's Office ("DAO") *
- First Judicial District ("FJD")
- Managing Director's Office ("MDO") *
- PA Attorney General
- Police Department ("PPD") *

Firearm violence in Philadelphia is a public health crisis. In 2021, Philadelphia suffered a record number of fatal criminal shooting victims (501) and non-fatal criminal shooting victims (1,850).[1] Philadelphia has also experienced extraordinary recent increases in arrests for illegal firearm possession and crime guns recovered, while the Commonwealth has recorded record gun sales in 2020. Despite this crisis in gun violence, shooting arrest rates remain low, conviction rates in illegal gun possession cases have been declining since 2015, and conviction rates in shooting cases declined between 2015 and 2019 and increased modestly in 2020 and 2021.

[1] Criminal shootings exclude such incidents as accidental shootings, self-inflicted shootings, and justifiable (e.g., self-defense) shootings. Some of the shootings involve multiple victims being struck in a single incident; this count is victim counts, not incident counts.

Firearm violence in Philadelphia is a racial justice crisis. Shootings disproportionately impact Black communities: in Philadelphia over 80% of shooting victims and 79% of arrestees have been Black since 2015. Both victims and arrestees overwhelmingly come from disadvantaged neighborhoods that are majority non-white, have high rates of poverty and unemployment, and less likely to have a high school degree or diploma. Endemic violence in these communities means that the vast majority of those arrested for gun violence have themselves been previously traumatized, often as a witness to previous violent acts; over 80% have previously accessed or been screened for behavioral health services through the City.

Because the causes of gun violence are complex and varied, so are the solutions. Addressing the gun violence crisis requires a comprehensive strategy with elements of enforcement, intervention, and prevention to achieve both short-term and long-term reductions in gun crimes. Collaboration among city agencies, including law enforcement and non-law enforcement agencies is critical to successfully implement such a comprehensive strategy.

Reviews of evidence-based practices, along with data analysis of local data, have helped us to come to key findings related to gun violence in Philadelphia and have informed recommendations to stem that violence. Readers are encouraged to read both the summary, below, as well as the report in its entirety to understand the context of our recommendations as well as the limitations in both our data and data analyses.

# Key Findings

## General Findings on Shootings

- Victims and arrestees for shootings tend to be male, people of color, 18-35 years old, and have a prior criminal history. Most arrestees have used non-criminal city services, with the most common being behavioral health services, and have previously witnessed violence.
- Arrestee contacts with city agencies (both criminal and non-criminal) often occur several years prior to being arrested in a shooting incident, with many contacts happening before the age of 18.
- Arguments were the most commonly identified shooting motive (50% of shootings). Drug trafficking/transactions was the second most common motivation (18%).
- When crime-guns are recovered, they tend to be semi-automatic pistols that were first purchased in Pennsylvania more than 3 years ago. Because guns may change

ownership both legally and illegally, it is not possible to know where the most recent sale was made. Approximately 1 in 4 crime guns were originally purchased outside of Pennsylvania.
- Gun sales have skyrocketed in Pennsylvania in recent years. In 2000, fewer than 400,000 guns were sold in Pennsylvania; in 2020, over 1 million were sold.

## Arrest

- Clearance rates in shooting cases are low. For example, only 37% of fatal shootings and 18% of non-fatal shootings in 2020 have been cleared[2]. Out of 9,042 shooting victims between 2015 and 2020 in Philadelphia, 6,910 have not been cleared.
- Arrests for non-fatal and fatal shootings tend to happen within the first few months. 75% of non-fatal shooting arrests occur within 61 days; 75% of fatal shooting arrests occur within 125 days of the shooting.
- Non-fatal shootings are more likely to be solved in months with fewer shootings, when the investigation is done by a PPD unit with more detectives, and where PPD's Special Investigations Unit (SIU) investigated the incident.
- There has been a marked increase in the number of people arrested in Philadelphia for illegal gun possession (without the accusation of any additional offense).[3] That increase is largely due to a doubling in arrests for illegal possession of a firearm without a license since 2018. Arrests for possession of a firearm by a prohibited person have also increased during that time period, but more modestly.
- There is a large disparate impact in illegal gun possession arrests: approximately 4 in 5 people arrested for both primary types of illegal gun possession are Black. Additionally, much of the increase in illegal gun possession arrests have been of young people carrying firearms without a license.

## Case Processing

- Both the initial and final bail amount set by courts in illegal possession of firearms cases declined between 2015 and 2019, but increased in 2020 and 2021. As bail decreased along with the increase in the use of unsecured bail, the proportion of

[2] Here, clearance refers to the number of shootings in a given year that have either led to an arrest or where a suspect has been identified but cannot be arrested (i.e., exceptional clearances) (e.g. due to death or fleeing the country).

[3] There are two main categories of illegal gun possession cases in Philadelphia: Possession of a firearm by a person who has been prohibited from carrying gun due to a past serious conviction or other prohibition (18 Pa.C.S. § 6105), and possession of a firearm without a license (18 Pa.C.S. § 6106). The former is generally viewed as the most serious illegal gun possession statute, while the latter is generally viewed as less serious than possession by a prohibited person. Both are non-violent offenses only related to illegal possession of a gun.

cases where bail was posted increased for both types of illegal firearm possession. In 2021, the median initial bail for illegal gun possession by a prohibited person was $150,000 and was $50,000 for illegal possession without a license[4].

- The rearrest rate for a new gun crime after being released from jail during the pendency of their original illegal possession of firearm case is relatively small, but rearrests may nonetheless be concerning. At the time of September 2021 when the analysis was conducted, the rearrest rate increased slightly from 8% in 2015 to 11% in 2019, but returned to 8% in 2020. The rearrest rate for a new violent gun crime remained steady at around 2-4% during the study period, while the rearrest rate for a new illegal gun possession offense rose from 3-4% in 2015-2018 to 6% in 2019-2020. 1% or fewer of the re-arrests were for shootings during the pendency of their original case.
- Conviction rates in shooting cases have fallen steadily since 2015, although had begun to rebound just before the pandemic. Between 2016 and 2020, the fatal shooting conviction rate dropped from 96% to 80%. It dropped less sharply, from 69% to 64%, in non-fatal shootings.
- Conviction rates in both types of illegal gun possession cases have fallen steadily since 2015 (from about 65% in 2015 to about 45% in 2020); notably, this declining trend is a long-term trend predating the pandemic, and the court closure alone will not explain this.
- The courts have had very limited capacity to try cases during the COVID-19 pandemic, especially cases needing civilian witnesses and juries. This has resulted in a large backlog of open cases in 2020 and 2021. For example, at the end of 2019 there were 1,685 pending cases involving fatal or non-fatal shootings or possession of a firearm by a prohibited person or without a license. In mid-December 2021, there were 4,571 open cases for those offenses, an increase of 171%.
- A review of nearly 400 dismissed and withdrawn illegal gun possession cases conducted by the DAO showed an increase in “constructive possession” cases among dismissed and withdrawn illegal gun possession cases in recent years. Constructive possession cases arise when no one physically possesses a gun illegally (e.g. the gun may be under a seat in a car full of people), making the cases harder to prove.
- Approximately half of illegal gun possession cases were dismissed because of the failure of the victim, witness, or police officer to appear for court proceedings. Improving victim, witness, and police officer court appearances is within the control of system actors.

[4] Note that the defendant is required to post only 10% of the bail amount set.

- The DAO and PPD instituted a project to collaboratively review each new non-fatal shooting and gun possession by a prohibited person case in December 2020. Of the cases involved in that collaboration that received a preliminary hearing in its first year, 81% successfully passed the preliminary hearing stage, a significant improvement over rates prior to the collaboration.[5]

# Recommendations

Based on the key findings, additional data analyses, and reviews of evidence-based practices, the agencies make the following recommendations. We note at the outset that all of these recommendations are not unanimous. Even among those with broader support, they will require continued collaboration between system and community stakeholders to ensure implementation in a manner that promotes public safety and fairness. Agencies outline their specific positions on how best to implement these recommendations in the full report. We encourage readers to review each agencies' sections as there is diversity of opinion between stakeholders as to implementation strategies. Note that endorsement and support are different from prioritization. Many of the recommendations will require funding, and discussions on prioritization under budgetary constraints also need to be held.

## Enforcement[6]

1. Incorporate the voices of people with lived experience in developing effective enforcement strategies tailored to their neighborhoods.
2. Improve arrest rates in shooting cases by creating a centralized non-fatal shooting investigation team within the PPD and further investing in better forensic technology (e.g., expanding the staffing and space available to PPD's office of forensic services, investments in technology to test ballistic evidence for DNA, and investment in equipment to conduct forensic cell phone analysis).

[5] To pass the preliminary hearing, a judge must determine that there is enough evidence available to bring a case against the defendant.

[6] While Defender Association supports the recommendation to involve community voices in the development and implementation of local law enforcement strategies, the agency did not participate in and does not endorse any other specific recommendations for enforcement. Defender notes that effective strategies should promote both public safety and racial equity. These values are mutually dependent not exclusive. We write separately to call for transparency in implementation and outcomes to support continued community engagement and accountability.

3. Continue the weekly collaborative review of non-fatal and illegal firearm possession cases by the PPD and DAO; consider expanding it and including other local, state, and federal justice system actors to monitor the trend of gun violence and case dispositions throughout the lifecycle of the cases. Continuous monitoring along with collaborative reviews help address investigative shortcomings and improve the overall law enforcement practices
4. Establish dedicated courtrooms for illegal gun possession cases at the Common Pleas Courts so as to streamline the overall process, minimize the risk of re-arrests, improve case processing time, increase education on gun safety, and strengthen individualized case assessment. Having dedicated resources among stakeholders (courts, defenses, and prosecution) will help thoroughly assess individual cases and their risk to determine the best treatment that may range from diversion to incarceration, while simultaneously reducing the time from arrest to disposition. Notably, dedicated courtrooms for illegal gun possession cases already exist at the Municipal Court level.
5. Reduce failures of victims and witnesses to appear in criminal cases by providing more support to victims and witnesses (transportation, better follow up), investing in technology to allow for both court-reminder texting to victims and witnesses and provision of transportation vouchers, establishing stronger accountability for police officer failures to appear, and striving to build trust in the overall criminal justice system.
6. Invest in victim and witness relocation, by providing more funds for relocation, expanding eligibility for relocation, and improving relocation outcomes by allowing people to be moved further from their homes and into neighborhoods with less violence.
7. Advocate for legislation to increase the amount of information that needs to be collected from gun purchasers, to further deter “straw purchasing.”. And request state and federal law enforcement partners increase inspections of federally licensed gun dealers who have been found to be the original source of guns ultimately used in crimes.
8. Implement Data-Driven Approaches to Crime and Traffic Safety (DDACTS) that can reduce not only violent crimes but also traffic crashes, when/where these two types of hotspots overlap, through data analysis, high visibility patrols, and publicity strategies. Operational guides of DDACTS emphasize its preventive focus and community partnerships, and DDACTS can support the city’s Vision Zero project.

## Intervention

1. Include community voices in continued collaboration between city and community stakeholders to develop and implement strategies that build trust and public confidence in local government.
2. Prioritize 311 responses and other city services in crime hot spots. Research suggests that addressing environmental factors (e.g., cleaning up trash, fixing and improving street lighting) will result in a significant reduction in violent crimes. City departments' efforts can be tied to performance-based budgeting for environmental improvements.
3. Invest in interventions focused on those of highest vulnerability, such as Cure Violence, the READI model, or Advance Peace. Although each program is different, they all hold the potential to lift those most vulnerable from the cycle of violence and connect them to necessary trauma healing, employment, and support. Collectively, they actively engage at-risk communities and individuals through credible messengers, provision of support services such as cognitive behavioral therapy and job training/placement, paid mentoring, and healing of trauma.
4. Develop more victim-centered systems and invest in robust, community-based, culturally competent victim services.
5. Advocate on the state level to expand availability of state and federal funding for Hospital-Based Violence Intervention Programs (HVIP), which have been proven to significantly lower the risk of violent reinjury or future violence perpetration after hospital discharge.
6. Invest in technologies that can help to coordinate services for victims and witnesses through community-based organizations, help victims to fill out paperwork to receive victim compensation money.

## Prevention

1. Incorporate the voices of those with lived experience in any prevention efforts.
2. Increase positive interactions between community members and police officers; this may range from positive interactions during officers' day-to-day patrols (e.g., mere encounters and business checks) to formalized home visits as well as community outreach/meetings.
3. Dedicate investment of resources in neighborhoods where chronic disinvestment has crippled community supports, health, and public safety, such as in historically "red-lined" communities and those facing the most violence. These investments should be focused on improving neighborhoods and can include such

evidence-based strategies as greening vacant lots, improving street lighting, planting trees, better street cleaning and trash pickup, repairing occupied homes, and remediating abandoned houses. It should also include prioritization of 311 responses to these neighborhoods.

4. Expand foot patrols with emphasis on community engagement and positive interactions, correct the current officer shortage through increased hiring, and invest in cell phones for police officers. Research in Philadelphia found that the foot patrols resulted in a significant reduction in violent crimes, when implemented properly with the right amount of resources.
5. Prioritize justice system involved people residing in communities with high levels of violence for directed city support services such as eviction protection, homeownership supports (repairs, improvements, purchasing), housing, substance abuse or mental health treatment, and workforce development.
6. Create a fund modeled on the Chicago Fund for Safe and Peaceful Communities, to increase private and institutional funding supporting Philadelphia-based community organizations that work to prevent and intervene in gun violence.
7. Commit resources to transparently evaluate all violence prevention and intervention efforts and outline plans to expand and scale those that work and end those that do not.
8. Increase trust between law enforcement and community members by increasing non-enforcement interactions with police (perhaps through increased community-based policing and foot patrols), reducing law enforcement responses to minor events that currently lead to misdemeanor arrests/charges, and reducing traffic stops for minor code enforcement (e.g., broken tail lights).
9. Invest in and expand the DAO's collaborative intelligence, investigative, community-centered, and victim-centered efforts, all of which are aimed at effective prosecution of gun violence, intervention in communities that suffer from gun violence, and prevention in underserved and traumatized communities.
10. Continue commitment to interagency collaboration bridging law enforcement, public health, and other key stakeholders to identify innovative opportunities for intervention and prevention**.**
11. Direct all relevant city and court-related agencies to collaborate with PIRPSC both by participating in meetings and sharing data. The ability to identify at-risk individuals and neighborhoods to provide supportive services in order to prevent future violence is greatly enhanced with additional relevant data.
12. Support PIRPSC in expanding its review of gun violence information to include a large-scale longitudinal study, with expanded data sources including qualitative

interviews, comparing victims and perpetrators of gun violence and their interaction with city services to other similarly situated residents of Philadelphia.

13. Prioritize evidence-based strategies and tactics that reduce gun-violence. Pilot and rigorously evaluate innovative programs, expanding those that work and ending those that do not.

# 2. Establishment of Committee

In September 2020, Councilmember Jones, joined by Council President Clarke, and Councilmembers Johnson and Gauthier, sponsored Resolution #200436 to address increased gun violence, homicide, and access to firearms in the city of Philadelphia. The resolution, along with subsequent Resolution #210703 authorized the Committee on Public Safety and the Special Committee on Gun Violence to hold hearings to (1) review and examine the circumstances shared by those accused of committing the last 100 shootings, (2) explore the source of firearms used to commit violent crime in the city, (3) evaluate any prior contacts the arrestee had with the criminal justice system, and (4) the trend of gun case disposition, bail and recidivism. The resolutions also recognized the need for criminal justice system stakeholders and community stakeholders to collaborate closely to stem the increases in gun violence.

In response to Council's call for increased collaboration, a group composed of the Mayor's Managing Director's, Controller's and District Attorney's Offices, the Department of Public Health, Philadelphia Police Department, First Judicial District, and the Defender Association of Philadelphia was created. We now work together as the Philadelphia Interagency Research and Public Safety Collaborative (PIRPSC), helping our agencies share data, emergent research, and associated ideas. PIRPSC would like to thank the Controller's Office and First Judicial District for their analysis and discussion during the preparation of this report.

The working group met consistently since September 2020 to explore and report its findings related to the research questions initially posed by City Council. Following initial reports, team members expanded the research agenda to investigate gun case outcomes, shooting incident clearance rates, and witness appearance rates. While focusing on criminal case process improvement, the working group also analyzed arrestees' prior contacts with city services to identify missed intervention opportunities, researched national best practices and potential partnerships with academics, and worked closely with those with lived experience to recommend short and long term strategies to reduce gun violence in the city.

The group prepared and presented materials to City Council at several special hearings and worked collaboratively to summarize the findings and recommendations from the last two years in December 2021.

Appendix 3: Committee Meeting Agendas includes a list of agendas for these meetings.

# 3. Last 100 Shooting Data Analysis

## Analysis Result by PPD

### Research Questions

The committee posed a set of questions regarding the pattern of gun violence; these questions (included in Appendix 4 in their original format) covered such topics as examining the overall trend of gun violence, analyzing the characteristics of the most recent 100 shooters (e.g., background, motivating factors), characteristics of guns used in Philadelphia, factors affecting the likelihood of shooting case clearances, and VUFA case dispositions (Violations of Uniform Firearm Act).

### Key Findings

In response to the questions, the PPD analysis team established the following findings:

- The number of homicides, shooting victims, VUFA arrests, gun recoveries, and gun purchases increased significantly since 2015, particularly during the Covid-19 pandemic and civil unrest.
    - The increase in VUFA arrests cannot simply be attributed to an increase in gun purchases and fewer individuals obtaining concealed carry permits; there was a notable increase in VUFA arrests of previous felons prohibited from carrying firearms (CC6105).
    - The pandemic and civil unrest created significant challenges in policing (e.g., limited social interaction and strained resources); many major cities saw a similar increase in gun violence.
- Most of the guns recovered were semi-automatic, 9mm pistols, that were originally purchased within Pennsylvania; the time-to-crime since original purchases was oftentimes a very long time (> 3 years).
    - “Ghost gun” recoveries have increased by at least 410% from 2019 to 2021.
- An analysis of the most recent 100 shooting arrestees (as of August 2020) indicated that:
    - Common motives for shootings were argument (50%) and drug-related (18%).
    - Offender and victim demographics resembled each other: male, people of color, those in late adolescence and young adulthood (18-35 years old).

    - Previous shooting victimizations were fairly common among both shooters (7%) and victims (5%), despite the fact that shootings are statistically rare events (2,246 shooting victims in 2020 out of 1.5 million Philadelphians, or 0.1%).
    - Previous arrests for gun possession, narcotics and/or violent felony were very common among both shooters and victims.
        - It should be noted that prior criminal history is not the sole determinant of future involvement in shootings; however, it is certainly one of the important risk factors, as a willingness to carry a firearm is a necessary precursor to shooting someone.
- An analysis of VUFA case dispositions indicated that:
    - VUFA cases withdrawn/dismissed went up, while guilty convictions went down since 2015.
    - Although court closures during the pandemic affected how cases were processed (e.g., only weak cases were disposed of, while other cases remained open without final dispositions), the reduction in conviction rates has been a long-term trend that pre-dates the pandemic.
        - A recent initiative, such as PPD/DAO VUFA reviews, has improved the rate of VUFA cases passing preliminary hearings.
    - Bail amount went down between 2015 and 2019; it increased in 2020/2021.
        - The reduction in bail amount was more evident among those with prior gun arrests.
    - Bail posting percentage went up.
    - Sentences became shorter for 18 PaCS 6105 (firearm prohibition); incarceration became less frequent for 18 PaCS 6105 (without license) than earlier years.
    - Reoffending rate for another gun offense during a VUFA open case was about 8% in 2015/16; it went up slightly to 11 % in 2019.
    - Individuals rearrested for VUFA, with a previous gun crime arrest (within 3 years), have increased from 10% in 2015 to 17% in 2020.

## Implications

The number of homicides, shootings, and VUFA arrests track alongside each other, suggesting that more guns on the street mean more shooting victims; this in turn lowers the clearance rate of shootings due to strained resources. Clearing shooting cases certainly should be focused on; but there should also be an equal focus on addressing illegal guns on the street, as carrying an illegal firearm is a precursor to using it to commit a crime.

Addressing the supply-side of guns has limited impact due to several reasons. First, Pennsylvania is a source state of guns, self-supplying most guns used in Philadelphia. Second, most guns used and/or recovered are those purchased a long time ago, indicating that attempts to limit the future supply of guns now will not impact the current gun violence crisis. Therefore, we should focus on the demand to carry/use a firearm by focusing on enforcement, intervention, and prevention of carrying illegal firearms and using them.

There appears to be a trend in the criminal justice system where gun cases are treated more leniently than in earlier years. It is particularly concerning that the reoffending rate for another gun offense during a VUFA open case has increased, when the bail posting percentages have increased and overall sentences have become lighter. The current analysis was limited to arrested offenders; it is important to also take into account the network of criminals; they communicate. Criminals see and hear from their peers. Additionally, while it is not within the scope of the current analysis, it may be prudent to examine the VUFA sentence patterns in Philadelphia against the Pennsylvania state sentencing guidelines, as the Sentencing Commission is currently researching[7].

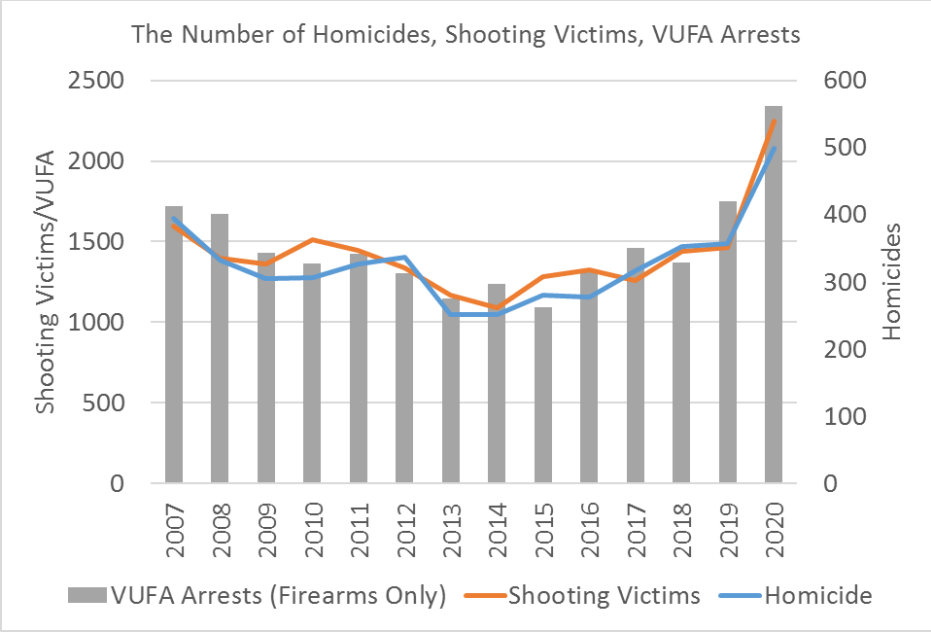
**If more "guns on the street" mean more shooting victims, how do we deter illegal firearm possession?** Comprehensive gun violence strategies should have equally balanced elements of enforcement, intervention, and prevention. As for enforcement, classical deterrence theory suggests three elements for deterrence: severity, swiftness, and certainty. Enhanced sentencing will not be the sole solution; however, being lenient against gun crimes at the time of the gun violence crisis should perhaps be scrutinized. Swiftness of the criminal justice system has always been a limitation to deterrence, but court closures during the pandemic as well as increasing number of gun cases coming in (an average of 7 VUFA arrests per day in 2021) will only aggravate this, unless dedicated and increased resources are allocated. Simply increasing the frequency of stops in hopes for strengthening the (perceived) certainly of arrests is not the solution either. Deterring illegal firearm possessions should be holistically addressed by implementing changes in policing, prosecution, and courts, as discussed in the recommendation section of this report.

[7] House Resolution 111. https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2021&sInd=0&body=H&type=R&bn=0111

# Detailed Analysis Results

## Overall gun violence

Despite the overall reduction in Part 1 violent and property crimes over more than 10 years, homicides and shootings have gone up, particularly during the Covid-19 pandemic and civil unrest, since 2015; simultaneous to the increase in gun violence has been the increase in VUFA arrests. In fact, the number of homicides, shootings, and VUFA arrests track alongside each other, suggesting that more guns on the street mean more shooting victims. The significant increase in shootings and homicides during the pandemic is not unique to Philadelphia; many major cities have also experienced a similar, drastic increase.[8]




## Characteristics of gun usage, recovery and transaction in Philadelphia

There has been a significant increase in crime gun recoveries (+59% from 2017), privately made firearms (aka. ghost gun) recoveries (+410% from 2019) and handgun sales (+140% from 2017 to 2020). The majority of crime guns recovered have been traced to original purchases within Pennsylvania (73%). The most common crime gun in Philadelphia has continued to be a semi-automatic pistol. In 2020, 77% of crime guns recovered were pistols, and 46% of crime guns were 9mm. There has not been any significant difference in

[8] abcNEWS. "'It's just crazy': 12 major cities hit all-time homicide records" https://abcnews.go.com/US/12-major-us-cities-top-annual-homicide-records/story?id=81466453

the trends of type and caliber of weapon for the last several years. The time-to-crime was often a very long time (60% of the recovered and traced guns showed more than 3 years between the original purchase and recovery). When the time from purchase to the use of the gun in a crime is a long period of time, there is less investigative value in the original source of the gun (first sale) that is obtained from tracing. The gun may have changed hands multiple times (legally or not).

**Statistics on Crime Gun Recoveries and Gun Sales in Philadelphia**

| | Crime gun recoveries | Ghost gun recoveries | handgun sales | long gun sales |
|---|---|---|---|---|
| 2017 | 3,552 | | 10,736 | 2,671 |
| 2018 | 3,662 | | 10,386 | 2,379 |
| 2019 | 4,258 | 95 | 11,487 | 2,263 |
| 2020 | 4,989 | 250 | 25,841 | 5,527 |
| 2021 | 5,920 | 571 | | |
| % change | 66.7% (2021 vs 2017) | 501.1% (2021 vs 2019) | 140.7% (2020 vs 2017) | 106.9% |

*Source: Office of Forensic Science; PA State Police*

## 100-shooter sample

An analysis of 100 most recent arrestees (at the time of the September 2020 committee presentation) may not be a representative sample; however, basic background characteristics resembled those of an additional 100 shooter random sample as well as all shooting arrestees in the past 5 years, as subsequent analysis indicated. Thus, the current section focuses on the first analysis sample of 100 most recent shooting arrestees and their victims.

| Motive | Count | % |
|---|---|---|
| ARGUMENT | 50 | 50% |
| DRUG* | 18 | 18% |
| ROBBERY | 8 | 8% |
| DOMESTIC | 15 | 15% |
| RETALIATION | 8 | 8% |
| OTHER | 8 | 8% |
| UNKNOWN | 7 | 7% |

Note: * Drug motive includes both primary and secondary motives; thus % do not add up to 100%

| gun source | Count | % |
|---|---|---|
| Firearm Recovered (but not murder weapon) | 10 | 10% |
| Illegal transaction | 8 | 8% |
| Stolen guns | 7 | 7% |
| Ghost Guns | 3 | 3% |
| Ilegally purcahsed / own / borrowed | 12 | 12% |
| No ownership records for recovered firearm | 2 | 2% |
| Firearm Not Recovered | 31 | 31% |
| Unknown/No Serial Number | 28 | 28% |

The most common motives for shootings with arrests were argument (50%) and drugs (18%). When examining the origin of the firearms, it is notable that the firearms were often not recovered (31%) or only limited information was available (e.g., lack of cooperation, obliterated serial numbers (28%)).

Offender and victim demographics resemble each other: for the arrested shooters, 94% were male, 95% were people of color (74% Black Male), and the peak age was in late adolescence and young adulthood (18-30 years old). Similarly, for victims, 86.5% were male, 88.5% were people of color (61.5% Black Male), and the peak age was in young adulthood to mid-thirties (21-35 years old).

Mirroring characteristics between offenders and victims go beyond demographics. Previous shooting victimizations are fairly common among both victims and offenders. Of the 100 shooting arrestees, 11 have been shooting victims (7 were shot prior to the shooting they were arrested for), and 3 of the 11 were shot previously in the relatively short time between January – August 2020 (this is notable, as the analysis was for recent arrestees as of August 2020). Similarly for victims, 5 had been shot previously out of the 96 shooting victims (1 was shot twice in the past, with his third and final shooting represented in the current analysis sample and that resulted in his death). While the percentages may appear low, it is important to contextualize such numbers: shootings are statistically rare events (there were 2,246 shooting victims in 2020 out of 1.5 million Philadelphians, or 0.1%).

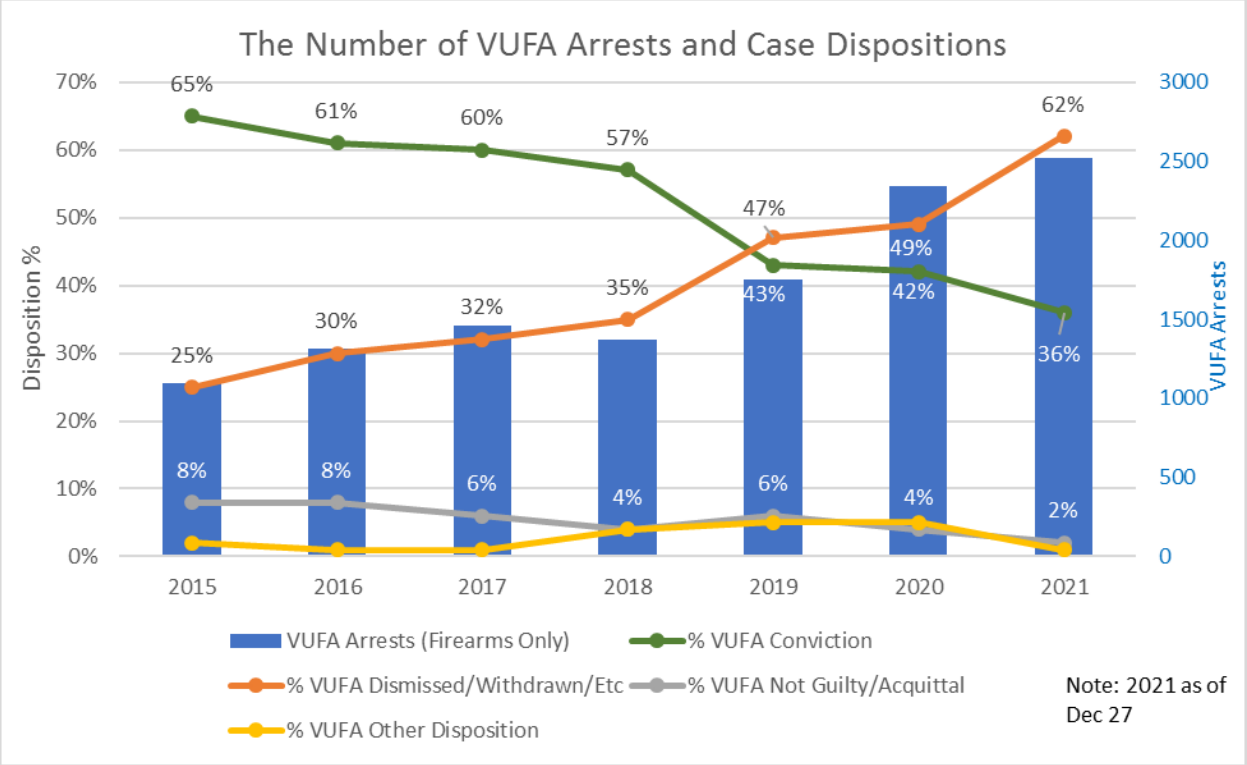
| **Arrest Background (Historical Charge Counts)** | Arrestees who have previous charge | Avg # of charges per person | | Shooting Victims who have previous charge | Avg # of charges per person |
|---|---|---|---|---|---|
| Violent misdemeanor/summary | 60 | 3.3 | | 38 | 2.5 |
| Other misdemeanor/summary | 56 | 1.5 | | 45 | 1.4 |
| Violent felony | 50 | 1.6 | | 32 | 1.1 |
| Narcotics possession | 50 | 1.9 | | 43 | 1.7 |
| Property misdemeanor/summary | 46 | 1.6 | | 40 | 1.7 |
| Other felony | 44 | 1.1 | | 38 | 0.8 |
| **VUFA** | **38** | **1.6** | | **28** | **1.4** |
| **Narcotics PWID** | **37** | **0.9** | | **29** | **0.6** |
| **Property crime felony** | **32** | **1.4** | | **29** | **1.4** |
| No prior | 24 | NA | | 37 | NA |
| | | | | | |
| **VUFA / Violent felony** | **57** | **3.2** | | **40** | **2.5** |
| **VUFA / Violent felony / PWID** | **68** | **4.1** | | **44** | **3.2** |

Note: charges were used; DA declined charges were excluded; arrest history limited to year 2000 and onward

Previous involvement in crimes is also common among both offenders and victims. 50% of the arrestees had a Violent Felony charge in their criminal history, as did 33% of the shooting victims. 38% of the arrestees had a "Violation of Uniform Firearms Act" (VUFA) charge, as did 29% of the shooting victims. 37% of the arrestees had a "Narcotics Possession with Intent to Distribute" (PWID) charge, as did 30% of the shooting victims. 57% of the arrestees had either VUFA or Violent Felony charges in their criminal history, as did 42% of the shooting victims. 68% of the arrestees had either VUFA, PWID or Violent Felony charges, as did 42% of the shooting victims. It should be noted that a prior criminal history is not the sole determinant or predictor of future involvement in shootings; however, it is certainly one of the important risk factors.

## VUFA case disposition analysis:

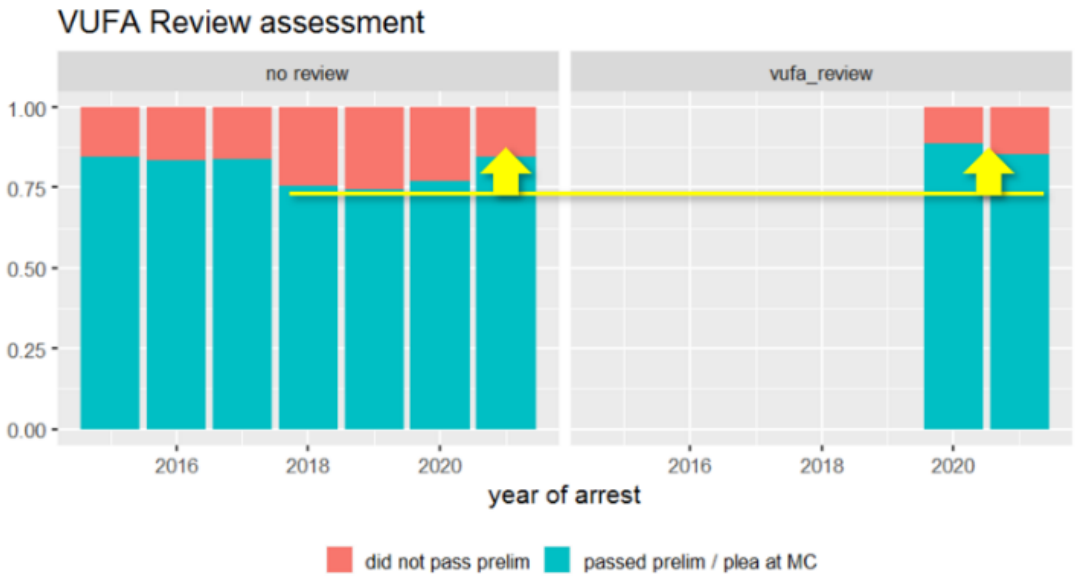
While the number of VUFA arrests (blue bars) has been increasing, the percentage of VUFA convictions (green line) has been steadily decreasing from 65% in 2015 to 42% in 2020. Simultaneously, the percentage of VUFA cases withdrawn/dismissed (orange line) has steadily increased from 25% in 2015 to 49% in 2019/2020.




It should be noted that the sudden jump in the dismissal rate in 2021 certainly is a side-effect of the court closures during the pandemic where cases that were disposed of likely were weak cases; strong cases that have passed preliminary hearings continue to

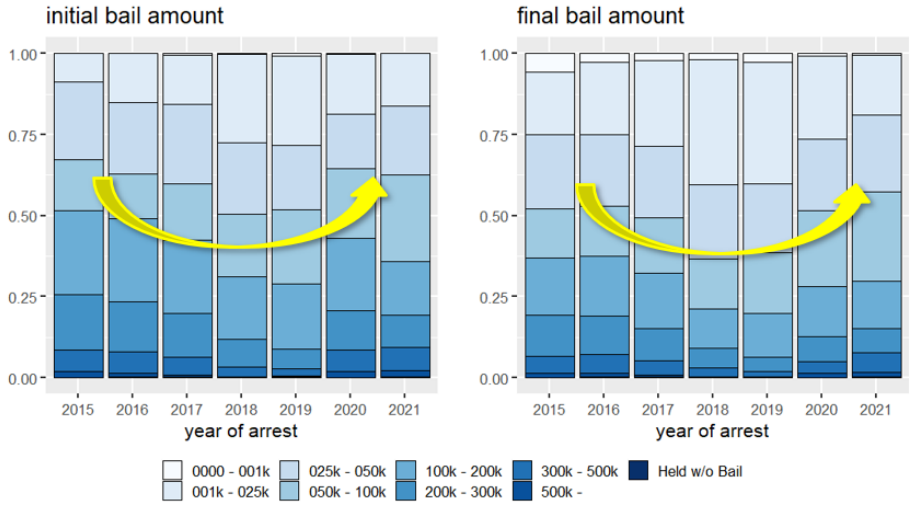
remain open without final dispositions, which may have artificially inflated the rate of dismissal in 2021. In fact, as of September 2021, there were more than 3,000 open VUFA cases (and the number continues to have increased with the current rate of 7 VUFA arrests per day). However, it is important to note that the decreasing rate of VUFA convictions is a long-term trend that pre-dates the pandemic; thus, special circumstances surrounding the pandemic alone will not explain this trend of VUFA case dispositions.

Nonetheless, there also is a positive indication from a recent initiative. An example is the weekly review of gun cases (started in December 2020) with DAO supervisors and PPD command staff to address investigative shortcomings prior to preliminary hearings. An exploratory analysis of reviewed cases showed an improved likelihood of passing preliminary hearings (as indicated by the green bars in the chart). Interestingly, even those cases that did not go through the review showed a higher percentage of passing preliminary hearings than previous years; this perhaps may be conceptualized as "diffusion of benefits" where issues identified through the reviews may be improving the overall investigative practice.



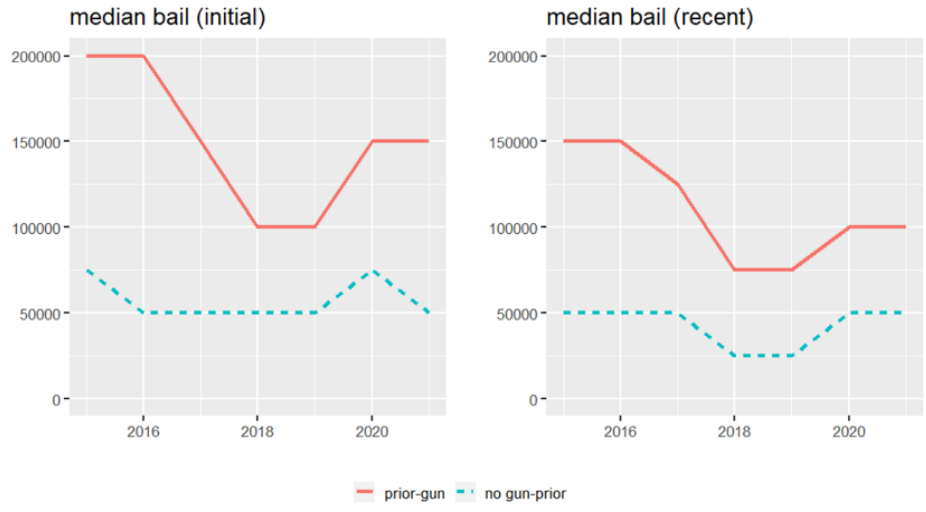

A more detailed analysis of VUFA case dispositions was conducted by utilizing case-level data that included offender information as well as bail and case outcomes; the data were provided by the District Attorney's office, while the analysis was led by the PPD team. In particular, the data focused on arrests with VUFA as the lead charge between 2015 and August 2021; specific charges included CC6105 Firearm prohibition (prior conviction); CC6106 Carrying firearms without licenses; and CC6108 Carrying firearms in the City of Philadelphia. It should be noted that the data and analysis results are as of Aug 14th, 2021;

this cut-off date should be taken into account when interpreting some of the analysis results (especially reoffending rates when recent arrestees had not had time to reoffend by the time of the analysis).

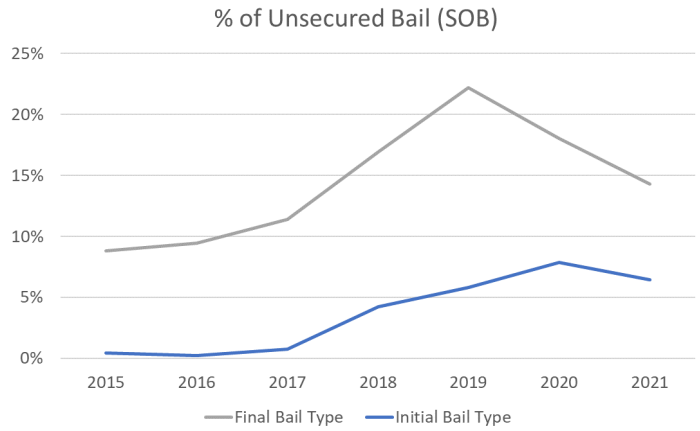



First, an analysis of bail amount indicated that bail amount went down between 2015 and 2019; it subsequently increased in 2020 and 2021. The chart on the far left is the trend of the bail amount that was initially set and the chart on the right is the final bail amount. The lighter color represents the share of a lower bail amount, and the darker color reflects a higher bail amount.

Notably, the reduction in bail amount was more evident among those with prior gun arrests. These charts compare the median bail amount over time; the two lines distinguish VUFA arrest offenders with (red) and without (green) prior gun crime arrests. The median bail amount among the no-prior gun crime arrests group barely changed, while a significant decrease was evident in the median bail amount for those VUFA offenders who already had such prior arrests.

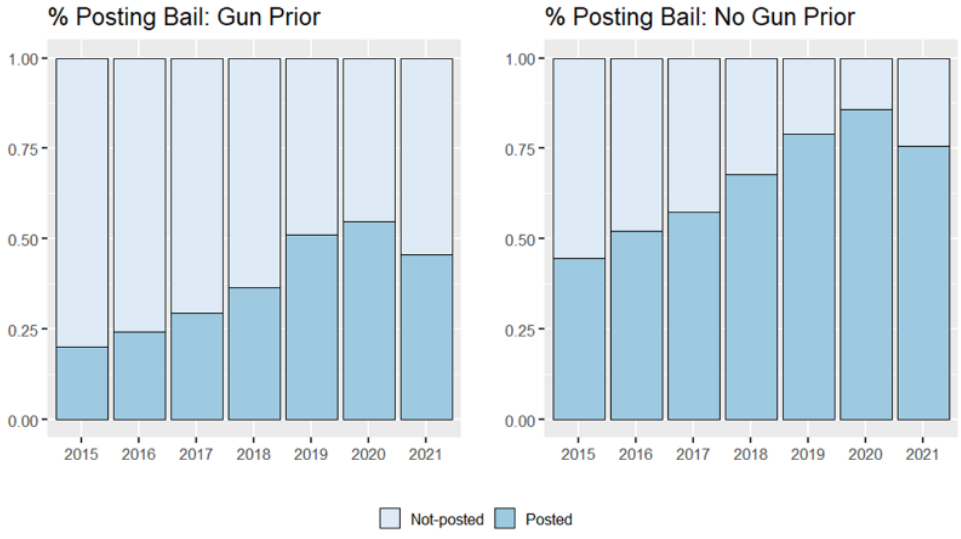


In addition to bail amount, the type of bail has also changed. In particular, the use of unsecured bail has increased, most notably between 2015 and 2019 when its usage exceeded 20% for the final bail type.

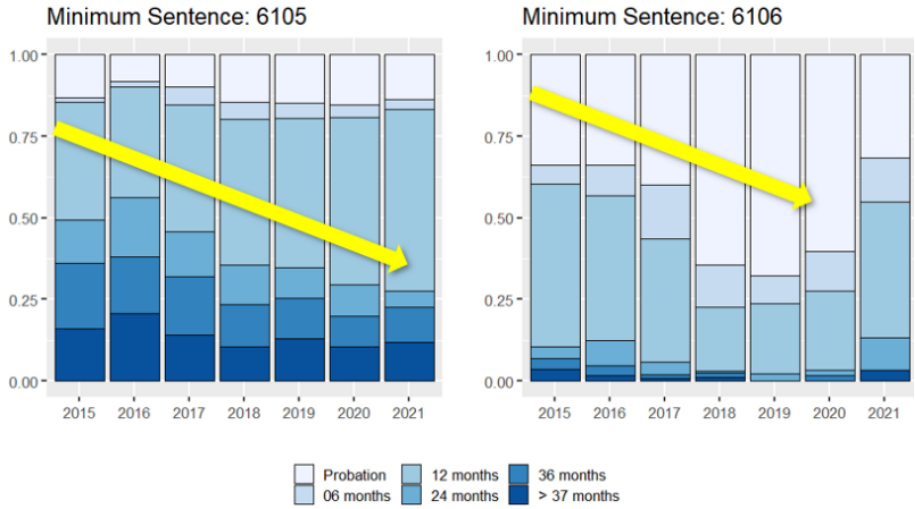



An unsurprising result from the reduction in the bail amount and the increased use of unsecured bail is the increase in the percentage of the defendants who posted bail. The increasing trend of bail posting was present for both those with and without gun crime arrests (gun priors). In 2019-2021, nearly 50% of the defendants with gun priors posted bail.

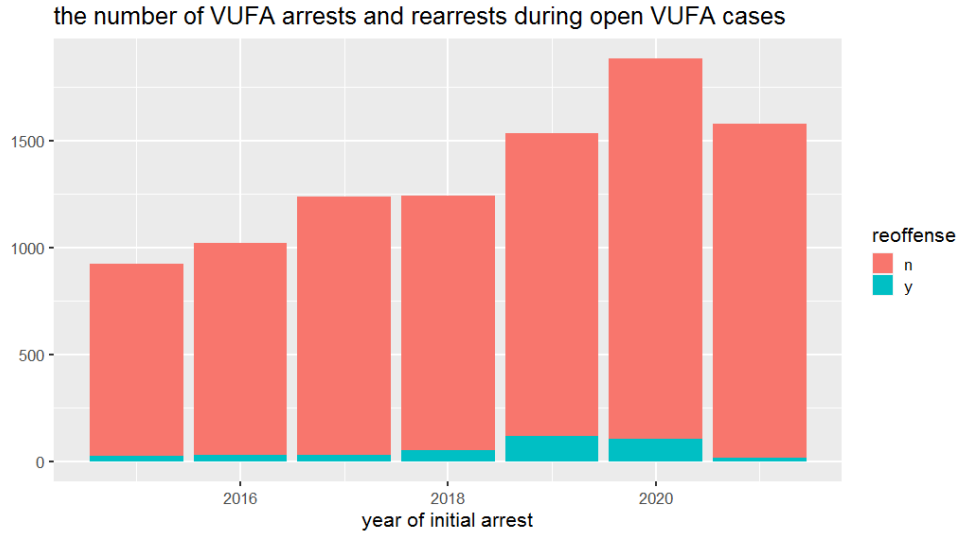
When looking at convicted cases, it appears that there is an overall trend to setting lighter sanctions. In this chart, the lighter color represents a shorter sentence. Sentences became shorter for CC6105 (firearm prohibition) cases, as indicated by an increasing share of light blue bars. Notably, the rate of incarceration did not change for the CC6105 cases. For CC6106 (no license) cases, the use of probation became more common.



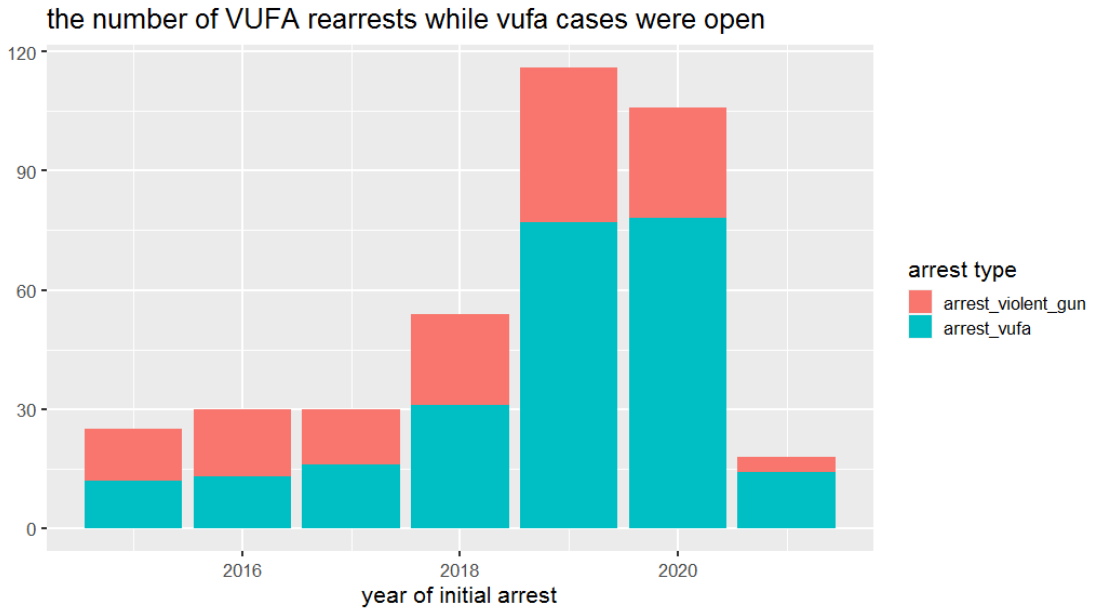
It should be reiterated that these trends including bail amount, bail posting, and sentence outcomes reflect long-term trends that pre-date the pandemic. A supplementary analysis of VUFA offender backgrounds did not support the idea that changing offender populations are the cause of such a change; for example, the average age of the offenders or the average number of prior arrests did not change over the study period (that is, the trend toward lighter sentences is not likely because offender populations have changed).



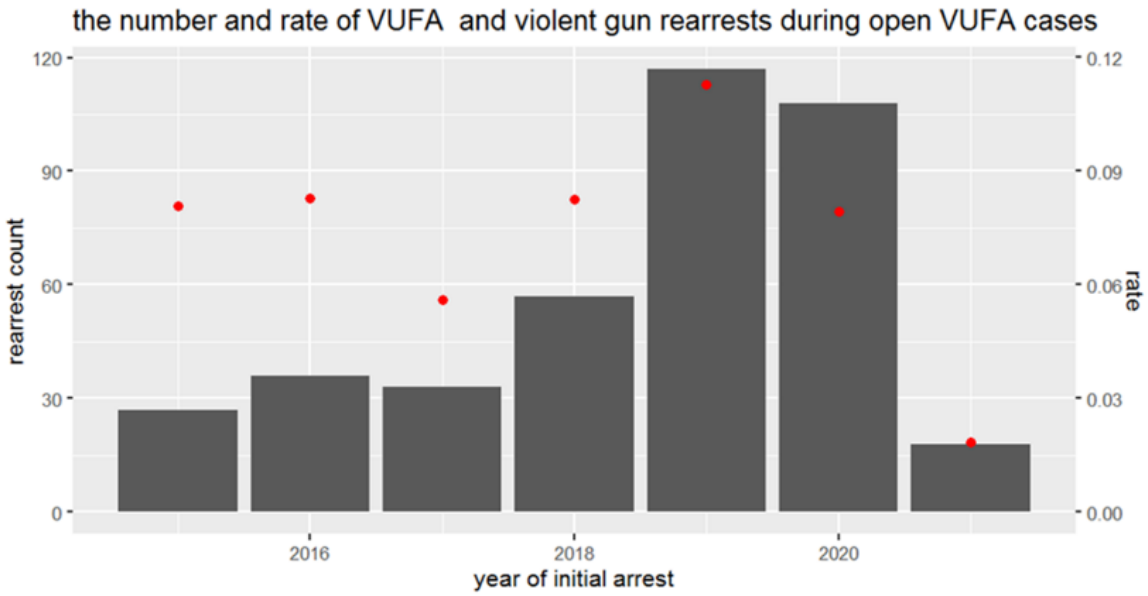

Finally, an analysis on recidivism was conducted. Recidivism in this analysis was defined as re-arrest for gun crimes (including VUFA/violence) during the time a defendant was having a VUFA open case. The number of reoffenders for another gun offense during VUFA open cases may be relatively small (green bar), compared to the overall number of cases.



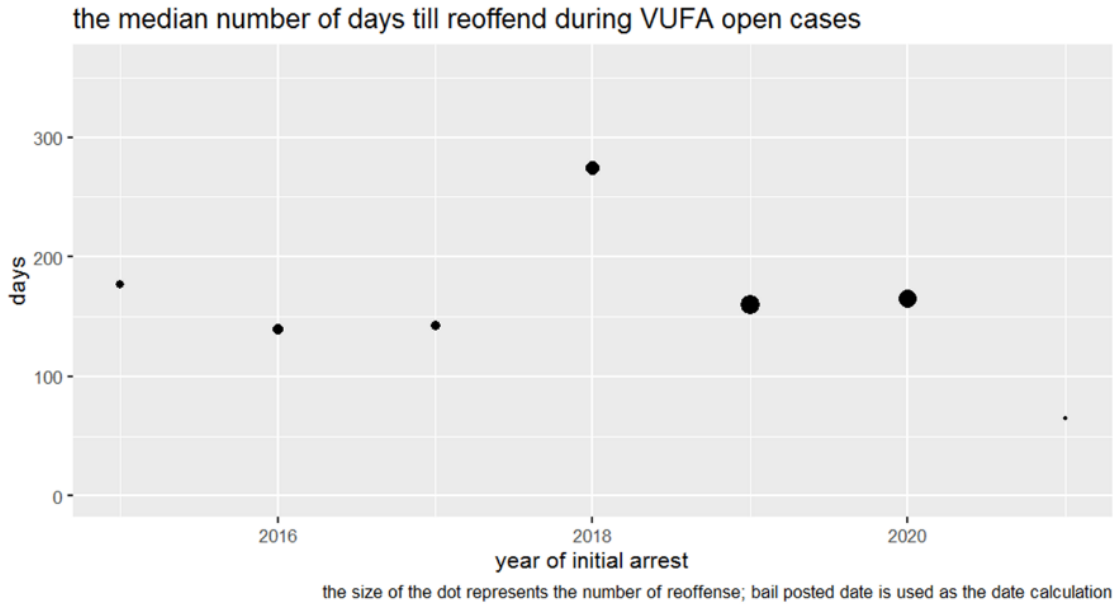
Nonetheless, there was an increase in the number of re-offenders in 2019 and 2020. There were less than 50 re-offenses in 2017 and earlier; the number went up to more than 100 in the 2019 - 2020 period. Most of these re-arrests were for another VUFA, but there was a sizable number of re-offenses that were violent gun crimes which included aggravated assault and robbery with guns. It should be noted that the low number for the 2021 cohort may simply be due to not having enough time to reoffend yet (the analysis cut-off date was August 2021, and no updated data were provided).




Given the change in the overall increase in VUFA cases, reoffending should be examined in terms of rates. In particular, the denominator of such a rate calculation should be the number of defendants who posted bail. Based on this calculation, the reoffending rate was about 8% in 2015 - 2016, which went up slightly to 11% in 2019 (red dots in the chart with the right-y-axis). This means that the increasing number of reoffending counts shown earlier is not the simple reflection of the overall increase in VUFA arrests. Furthermore, it is noteworthy to highlight the earlier analysis that showed that 2019 was when the median bail was the lowest and the use of unsecured bail was the highest.




It may be hypothesized that the increase in re-offending may be due to a longer period for cases to remain open during the pandemic and its accompanying court closures. In order to examine this, an analysis of the median number of days till re-offense during VUFA open cases was conducted (x-axis in the chart shows the median number of days for arrest cohorts in each year). The results showed that the median number of days till re-offense remained relatively steady between 150 to 200 days. That is, regardless of the court closures and cases remaining open longer, the VUFA offenders were arrested in 2019 and later committed another gun offense in about 6 months; such a trend did not change before or after the pandemic.



These patterns of increasing re-offending among VUFA arrestees was also found in a separate, supplementary analysis that did not limit re-offenses to during open cases. Such an analysis indicated that individuals rearrested for VUFA, with a previous gun crime arrest (within 3 years), had increased from 10% in 2015, to 17% in 2020.

Finally, in addition to the quantitative analysis and statistics indicating the increase in re-offending rates, there have been a number of instances where offenders have committed another crime while they were on bail or shortly after their VUFA cases were dismissed/withdrawn, as reported by various news stories. Recent notable examples may include:

- a series of robbery cases in Center City that were allegedly committed by a group of offenders who were on bail (The Inquirer, 2021)[9].
- a shooting near Temple University where the shooter had recently been arrested for a carjacking (robbery/VUFA) but his case was withdrawn due to a victim's failure to appear (The Inquirer, 2021)[10].
- In the Somerton area a shooter shot his ex-girlfriend while on bail for a pistol whipping incident weeks earlier (CBS Local News, 2021)[11].
- In Portland, Maine, a Philadelphia man randomly fired multiple gunshots near Maine Medical Center. Facing charges of reckless conduct with a dangerous weapon, possession of a firearm by a felon and violating the conditions of his bail in Philadelphia (Press Herald, 2021)[12].
- A man was fatally shot at the Philadelphia Mills mall by a shooter who was out on bail in several cases in Bucks, Montgomery and Philadelphia counties (Bucks Courier Times, 2021)[13].

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[9] The Inquirer (2021). Two Center City robbery suspects were out on bail. Philly DA Larry Krasner said the case demonstrates flaws in the system. https://www.inquirer.com/news/center-city-robberies-bail-reform-larry-krasner-20211220.html

[10] The Inquirer (2021). Suspect in killing of Temple student Samuel Collington — who had been arrested and released after a July carjacking — surrenders to police. https://www.inquirer.com/news/philadelphia-homicide-temple-suspect-latif-williams-20211201.html

[11] CBS Local News (2021). Philadelphia DA Larry Krasner Calls Out Those Who Set Bail After Man Accused Of Shooting Ex-Girlfriend. https://philadelphia.cbslocal.com/2021/11/15/philadelphia-shooting-somerton-gun-violence-james-white-bail-larry-krasner/

[12] Press Herald (2021). Philadelphia man charged with firing shots near Maine Medical Center. https://www.pressherald.com/2021/10/06/philadelphia-man-charged-with-firing-shots-near-maine-medical-center/

[13] Bucks County Courier Times (2021). Man charged in fatal shooting at Philadelphia Mills mall. https://www.buckscountycouriertimes.com/story/news/2021/04/29/philadelphia-mills-mall-murder-arrest-dominic-billa/4888242001/

Additionally, there have also been numerous examples of VUFA offenders being involved in violent crimes or arrested for another VUFA while on bail, as a handful of cases listed below from a district illustrate:

- An offender (25/M) was arrested for VUFA in 2000 while on probation for a previous VUFA; the offender was convicted and sentenced 11 ½-23 months; he was released (paroled) as soon as serving the minimum sentence.
- An offender (22/M) who had a 2019 robbery/VUFA case dismissed got involved in at least 1 homicide in 2020. The complainant witness for the 2019 robbery did not appear, although the VUFA case with the police witness also was thrown out altogether. He currently has an active warrant for the homicide.
- An offender's (18/M) 2019 VUFA case was dropped; he has been involved in multiple homicides and shootings in 2020. He initially shot 2 victims, killing one victim; his apparent intended target survived in the incident, but he subsequently shot the intended target again on a later date.
- An offender (19/M) was arrested for 2 VUFAs in the span of 3 weeks in 2020; his initial VUFA arrest had a $100,000 bail and he posted 10%. He was subsequently arrested again in 3 weeks; the initial bail was $200,000 but it was subsequently reduced to $75,000, and he posted it again.

## Analysis Result by DAO

The urgency of Philadelphia's crisis of fatal and non-fatal shootings will not be met by looking away from shootings. As noted above, City Council has led a valuable "100 Shooter Review," a title that makes clear what we already know: that shootings are the primary issue. Our efforts must be focused on preventing shootings and holding people who commit shootings accountable, and we should not accept arrests for gun possession as a substitute.[14]

Above all else, real solutions require that prevention be addressed. The pandemic itself proves, both locally and nationally, that when society shuts down and the moderate prevention that currently exists is stripped away from young people–e.g., no organized sports, closed classrooms, closed houses of faith and associated youth programming, closed recreation centers and swimming pools, closed summer camps and job programs, all leading to increased isolation and disrespectful use of social media–gun violence can increase. The pandemic also proves that when law enforcement and courts are significantly curtailed, intelligent enforcement may suffer and gun violence can increase. Intelligent, modern enforcement primarily directed at fatal and non-fatal shootings and secondarily directed at illegal gun possession by people who appear to be driving gun violence is also essential.

Technology can lighten the burden of investigating and prosecuting fatal and non-fatal shootings. All of government must work together to meaningfully invest in the preventative pro-social resources that atrophied during the pandemic, and in forensic science (both DNA and cell phone forensics) capable of solving massive numbers of new and old cases that remain unsolved. Other improvements in investigation and collaboration among governmental actors are also essential, as the recommendations below indicate.

Gun possession arrests that involve no violent acts present a secondary and important frontier in curbing gun violence, but must be targeted to distinguish between drivers of gun violence who possess firearms illegally and otherwise law-abiding people who are not involved in gun violence. On the one hand, the cases of people charged with

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[14] The DAO's analysis and recommendations reflect the collaboration of many people within the Philadelphia District Attorney's Office. Contributors include: Oren M. Gur, Michael Hollander, CJ Arayata, Yasmin Ayala-Johnson, Keziah Cameron, William Curtain, Mariel Delacruz, William Fritze, Gregory Holston, Sebastian Hoyos-Torres, Chance Lee, Sean Mason, Myra Maxwell, Christion Smith, Tyler Tran, Wes Weaver. The District Attorney's Transparency Analytics (DATA) Lab was the primary, regular collaborator with PIRPSC.

6105 (prohibited person in possession of a firearm) are carefully scrutinized to do individual justice, which will usually look like vigorous prosecution. On the other hand, another criminal charge that applies to people who have no felony conviction (carrying a gun in Philadelphia without having obtained a permit in Philadelphia) is only a felony in Philadelphia. The exact same offense in every other county in Pennsylvania (carrying a firearm without a permit to carry) is only a misdemeanor offense. In an equitable system, a permit to carry would be required everywhere in the Commonwealth of Pennsylvania or would be required nowhere. But the legislature's decision to more punitively criminalize and subject to more collateral consequences only the residents of its most diverse city is inequitable and obviously racist. That kind of selective prosecution against Pennsylvania's most diverse city has its purpose—the money and power upstate legislatures' jurisdictions obtain from incarcerating Philadelphians in their prisons (Remster and Kramer, 2019).[15] Justice and common sense gun regulation do not look like a commerce in the bodies of Philadelphians held in upstate prisons for doing what is not even a crime in the jurisdictions where they are held.

The role of the District Attorney's Office is to vigorously, justly, and accurately prosecute people who commit serious and violent crimes. Gun violence has been the most urgent public safety crisis in Philadelphia for decades; as such, the DAO considers the most serious, violent offenses such as homicides, rape, and gun violence our top prosecutorial priority. However, local law enforcement faces numerous challenges in our efforts to reduce shootings: namely, a lack of success in identifying shooters and removing them from communities and decades-long lack of sufficient PPD crime scene personnel and the capacity for widespread use of forensic science to solve crimes.

As part of our role in the 100 Shooting Review Committee, we identify a need to more intensely focus law enforcement efforts on accurately identifying and removing shooters from the streets, and conclude that the current intense focus on illegal gun possession without a license is having no effect on the gun violence crisis and distracts from successfully investigating shootings.[16] To reduce and solve shootings we must invest heavily in areas that have historically been neglected in Philadelphia, including through

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[15] Remster, B., & Kramer, R. (2019). Shifting power: The impact of incarceration on political representation. *Du Bois Review: Social Science Research on Race, 15*(2), 417-439. doi:10.1017/S1742058X18000206

[16] There are two main categories of illegal gun possession cases in Philadelphia: Possession of a firearm by a person who has been prohibited from carrying gun due to a past serious conviction (18 Pa.C.S. § 6105), and possession of a firearm without a license (18 Pa.C.S. § 6106). The former is generally viewed as the most serious illegal gun possession statute, while the latter is generally viewed as less serious than possession by a prohibited person.

preventative pro-social programming; for shootings that are not prevented, we must invest in forensic science so we have more evidence that can be used to solve shootings and to build overwhelming cases that will result in successful prosecutions; more effective alternatives to criminogenic jails for people who come into contact with the system; and scaling up resources and amenities in communities that have experienced disinvestment for so long, and in community-based organizations working in the places and with the people most impacted by gun violence and our systemic failure to address it adequately or holistically.

The DAO conducted a range of analyses and research to answer the central question posed by City Council's Special Committee on Gun Violence Prevention: "How can we use the data available to the city to reduce shootings?" Below we present findings relevant to improving shooting incident clearance rates and improving the strength of cases when a shooting results in arrest; improving gun case outcomes; deterrence of illegal firearm possession; and improving witness appearance rates. These results are used to inform the Goals and Policy Considerations and Recommendations in subsequent sections. In addition, the DAO makes recommendations regarding short-term investments in community-driven solutions for prevention, and upstream, long-term investments in communities most impacted by gun violence for sustainable reduction. Please see Appendix 7: DAO 2 for an overview of Data Sharing and Limitations, and we encourage reviewing the supplemental material referenced throughout the DAO analysis.

## Improving shooting clearance rates

When there is a shooting, we must find those responsible and hold them accountable. If we are unable to do this, we will be unable to stem the tide of gun violence. Unfortunately, the arrest rate in shootings has been very low in recent years in Philadelphia, with a marked drop as the number of shootings has increased. This focus on

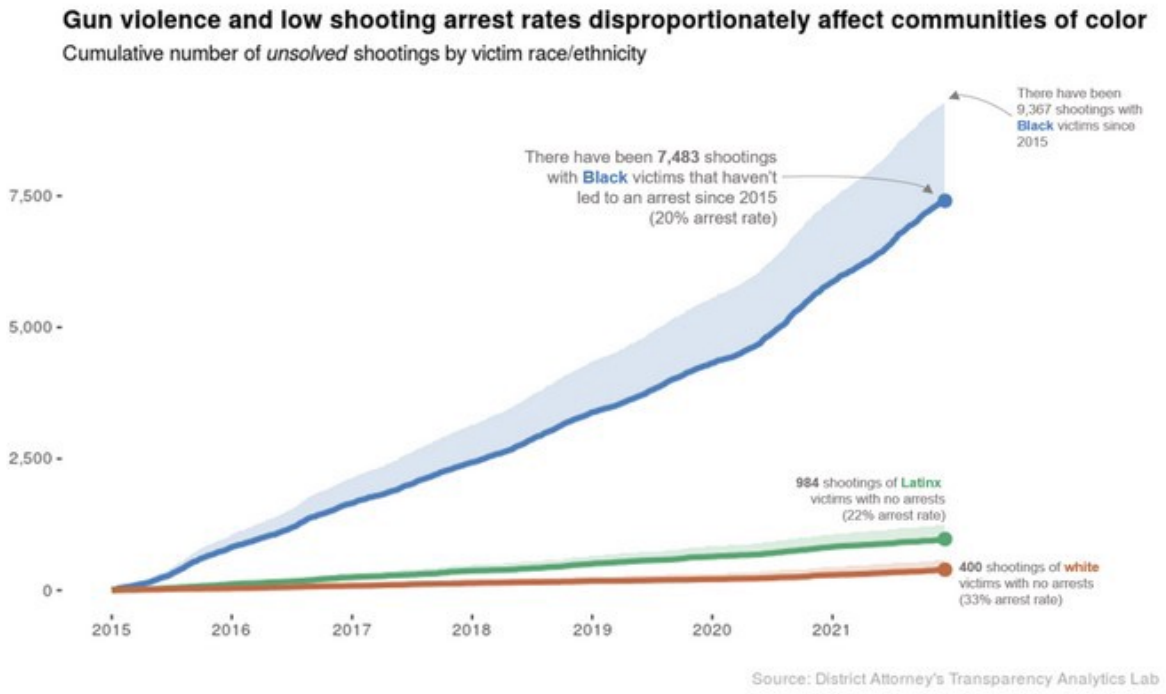
arrest clearance rates in homicide and non-fatal shootings is both local[17] and national.[18] Briefly, clearance rates are defined by the Federal Bureau of Investigations (FBI) as the number of resolved cases in a year divided by the number of incidents in the same year (or month, quarter, etc). In this analysis the DAO uses arrest rates: the proportion of incidents where an arrest has been made, regardless of when the arrest was made (See DATA Story on "Clearing up clearance rates" for more details).[19]

In recent years, four out of five non-fatal shootings in Philadelphia went unsolved (see Appendix 7: DAO 3). Out of 11,306 shootings in Philadelphia since 2015, 8,918 did not result in arrest, including 7,483 shootings in which the victim or survivor was Black (see graphic below). Police make arrests more frequently in fatal shootings, but improvement in fatal shooting investigations is needed as well: two thirds of fatal shootings in Philadelphia are not followed by an arrest (see Appendix 7: DAO 3). It is imperative that we improve the clearance rate in both fatal and non-fatal shootings; this should be our first priority as a city. As 2021 draws to a close, there have been arrests made in only 17% of non-fatal shootings and 28% of fatal shootings that occurred this year.

[17] Holden, Joe (December 20, 2021). "Sources: Philadelphia Police Department Close To Announcing New Non-Fatal Shooting Unit Amid Gun Violence Epidemic." *CBS Philly,* https://philadelphia.cbslocal.com/2021/12/20/sources-philadelphia-police-department-non-fatal-shooting-unit-gun-violence-larry-krasner/

[18] The Violent Incident Clearance and Technological Investigative Methods (VICTIM) Act (H.R. 5768) was recently sponsored seeking Congressional funding "to solve shooting cases [and] make neighborhoods safer." Evans, Dwight. (November 1, 2021). "Evans Co-Leads Bill to Provide $1 Billion to Solve Shooting Cases, Make Neighborhoods Safer" https://evans.house.gov/media-center/press-releases/evans-co-leads-bill-provide-1-billion-solve-shooting-cases-make, https://demings.house.gov/sites/demings.house.gov/files/VICTIM%20Act%20-%2010-26-21.pdf

[19] Tran, T. (December 29, 2021). "Clearing up clearance rates." Data Story, The Philadelphia DAO Justice Wire. https://medium.com/philadelphia-justice/clearing-up-clearance-rates-ff87cc33a31a




Throughout this collaboration the PPD and DAO have jointly reviewed information about shootings and arrests to consider factors that impact clearance rates in Philadelphia. We began by systematically reviewing the criminal histories of 100 people most recently arrested for shootings in Philadelphia, as of September 2020. We later expanded our review to all shooting arrestees since 2015. We found the groups were comparable across basic demographic and criminal legal factors, so we focused much of our analysis on the larger group. As of December 4, 2021, 2,249 people had been arrested for shootings in Philadelphia since 2015: 93% were male, 70% were under the age of 30, 76% had prior arrests, 51% had 3 or more prior arrests, 52% had a prior felony charge, 40% had a prior felony conviction, and 20% had pending court cases at the time of arrest. The most frequent prior charges include drug sales and drug possession, assaults, theft, robbery, and firearm possession without a license (see Appendix 7: DAO 4). For context, the prior charge histories of the 2,249 people arrested for shootings in Philadelphia since 2015 reflect the most common offenses people are arrested for in Philadelphia more broadly, including those never arrested for a shooting.

Although it may be appealing to consider building a predictive model to forecast future shooters and using it to incapacitate people who fit that model, the evidence does not support the idea that prior arrest patterns of people arrested for shootings in Philadelphia can be used to accurately forecast future shooters. There are several problems with such a model. First, due to very low arrest rates, any model would be based

only on the small number of people who are actually arrested for shootings. This means that the model reflects on a small subset of people who may be completely different from the majority of shooting perpetrators. For example, it may be that law enforcement can more easily clear a case against a shooter who has a prior criminal record due to the availability of arrest photographs, contact information, and knowledge of specific prior crimes. If so, shooters who have no prior criminal record are likely under-represented among this group. Second, it would cast a very broad net: thousands of people arrested each year for a number of crimes match the most common characteristics of shooting arrestees (see Appendix 7: DAO 5). Although we could potentially prevent dozens of future shootings by jailing thousands of people, holding so many people who would never engage in a shooting to prevent the actions of a few raises grave moral and constitutional concerns. It would also require funding a massive increase in mass incarceration that would drain funding for prevention or smart enforcement (e.g., forensics) that is likely far more effective in reducing future gun violence than additional incarceration, but has never been attempted in Philadelphia. By contrast, such models could help identify a broad group of people who might benefit from additional support that would help prevent future system contact. Third, recent high-quality Gun Violence Task Force (GVTF) investigations have produced strong cases against individuals who had no prior record or had not been arrested for several years—highlighting the limitations of a predictive model based on who is arrested and reinforcing the importance of robust investigative work and investment in forensics to improve clearance rates and strengthen cases when there is an arrest.

We also researched the social and system factors that impact shooting clearance rates. Using logistic regression, we considered how victim, incident, and police characteristics relate to clearance rates in fatal and non-fatal shootings. For non-fatal shootings, we found that investigations by units with more detectives were significantly more likely ($\alpha = 0.05$) to be cleared than shootings investigated by units with fewer detectives; that shootings where the PPD Special Investigations Unit (SIU) responded were significantly more likely to be cleared than shootings where line detectives responded; and shootings with female victims were significantly more likely to be cleared than shootings with male victims. For fatal shootings, we found that shootings with white victims were significantly more likely to be cleared than shootings with Black or Latinx victims; that shootings with child victims (13 or younger) were significantly more likely to be cleared than shootings with older victims; and that shootings that occurred when it was light outside were significantly more likely to be cleared than shootings that occurred when it was dark outside (see Appendix 7: DAO 6).

We also found that the number of non-fatal shootings that lead to arrest remained relatively flat regardless of the number of shootings in a month: in months with fewer shootings, the arrest rate was higher, and in months with high numbers of shootings, the arrest rate was lower (see Appendix 7: DAO 7). This suggests that capacity constraints in investigating non-fatal shootings hinder arrests: if there is a maximum number of shooting cases that can be investigated by the PPD at any point in time, as shootings rise, the arrest rate falls.

Finally, we used Philadelphia data to replicate an analysis done in Boston on how long it takes to solve shooting cases (Cook, Braga, Turchan, Barao, 2019).[20] We found that the majority of arrests happen within the first few months following a shooting; for non-fatal shootings, 75% of arrests occur within 61 days, while for fatal shootings, 75% of arrests occur within 125 days (see Appendix 7: DAO 8). In Boston, researchers found that the difference in clearance rates between fatal and non-fatal shootings to be "primarily a result of sustained investigative effort in homicide cases made after the first 2 days" (Cook, Braga, Turchan, Barao, 2019).

Together, these findings suggest organizational changes within the PPD could improve clearance rates. By increasing the number of specialized investigators available to handle non-fatal shooting cases and equipping them with greater crime scene and modern forensic capacity, the police will be able to solve more shootings (see Recommendations).

## Improving gun case outcomes

After an arrest is made, DAO prosecutors fully vet incident information about defendants, victims, witnesses, and evidence from police, and seek a conviction where the evidence is sufficient to show beyond a reasonable doubt that the individual arrested perpetrated a specific shooting. Although the DAO has consistently charged nearly every individual arrested by the police for a shooting,[21] in recent years, the withdrawal and dismissal rates in a broad range of gun cases has increased while the conviction rate has decreased (Amaral, Loeffler, Ridgeway, 2021; see Appendix 7: DAO 9).[22] In response, the

[20] Cook, P.J., Braga, A.A., Turchan, B.S., & Barao, L.M. (2019). Why do gun murders have a higher clearance rate than gunshot assaults? *Criminology & Public Policy, 18*(3), 525-551.

[21] For example, see "DATA Snapshot: Incidents, Arrests, and Charges -- November 2021" (December 6, 2021). By the Numbers, The Philadelphia DAO Justice Wire. https://medium.com/philadelphia-justice/data-snapshot-incidents-arrests-and-charges-november-2021-6d4d24cc1c96

[22] Amaral et al. (2021) analyzed 35,194 adult gun arrests and case outcomes between January 2010-March 2020 in Philadelphia. Preliminary results were presented at the 2021 American Society of Criminology Conference. Researchers at the University of Pennsylvania Department of

DAO undertook a number of efforts to improve outcomes in gun and shooting cases, including combining the Homicide and Non-Fatal Shootings Units[23] and working with the courts to prioritize prosecutions for non-fatal shootings.[24] By the first quarter of 2020, which was immediately before the COVID pandemic effectively shut down the Philadelphia courts, the DAO's conviction rate improved to 87% for fatal shooting cases and 78% for non-fatal shooting cases.

Following a DAO preliminary data analysis document the increase in withdrawals and dismissals in cases involving gun possession (but excluding shooting cases), the DAO undertook an intensive case file review of 400 randomly selected dismissed and withdrawn gun possession cases in summer 2020 to identify common reasons for those outcomes, and to find ways to improve gun possession cases. One of our main findings was an increase in "constructive possession" cases among dismissed and withdrawn cases. These are cases in which a recovered firearm was not actually physically possessed by the defendant at time of arrest (see Appendix 7: DAO 10). A constructive possession case might involve a gun found in the trunk of a car occupied by multiple passengers or a gun found under a car seat within reach of multiple passengers, none of whom own the car. It is the prosecutor's burden to prove beyond a reasonable doubt that anyone charged both knew where the gun was and intended to exercise control over it. Merely proximity to a gun or knowing of its existence is legally insufficient to obtain a conviction. Constructive possession cases are far more challenging to prosecute than cases where a firearm is recovered from someone's body.

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Criminology are working closely with the DAO and DATA Lab to research the impact of policy changes at the DAO. Amaral, M.F.A., Loeffler, C., & Ridgeway, G. (2021). Progressive prosecution and gun cases: Evidence from Philadelphia. *Poster presented at the American Society of Criminology, Chicago, Ill., November 18.*

[23] Philadelphia District Attorney's Office (September 18, 2018). "Krasner Announces Big Shakeup in Homicide Unit of DA's Office." *The Justice Wire.* *https://medium.com/philadelphia-justice/krasner-announces-big-shakeup-in-homicide-unit-of-das-office-3581160b8a51*

[24] Palmer, C. (September 9, 2019). "Philly courts, DA Larry Krasner try to speed up prosecutions of nonfatal shooting cases." *Philadelphia Inquirer*. https://www.inquirer.com/news/philadelphia-court-system-da-larry-krasner-non-fatal-shooting-prosecutions-20190909.html.

Philadelphia District Attorney's Office (September 9, 2019). "RELEASE: Philadelphia Courts, Justice Partners, to Implement Non-Fatal Shooting Program." *The Justice Wire.* https://medium.com/philadelphia-justice/release-philadelphia-courts-justice-partners-to-implement-non-fatal-shooting-program-539f3c07f657

Such evidentiary issues present challenges in the legal system, and cases often stem from car stops—where legal standards for searches of private property apply. If police illegally search a person or place for a gun, the gun recovered will be excluded at trial, rendering a conviction for the gun impossible in nearly every case. It is much easier to prove who possessed a gun when that gun is found on someone's person during a pedestrian stop, as compared to a gun recovered from the trunk of a car stopped with multiple occupants. The increase in car stops, where the person connected to the recovered gun is less clear, can be seen in data released as part of the city's "stop and frisk" litigation (*Bailey, et al. v. City of Philadelphia, et al.,* 2011).[25] That data shows that while the number of pedestrian stops conducted by police has steadily decreased from 175,000 in 2014 to 75,000 in 2019 (i.e.,pre-COVID), the number of vehicle stops has sharply increased, from 193,000 in 2014 to 389,000 in 2019. Overall, since 2014, Philadelphia Police have conducted 791,000 pedestrian stops and 1,929,000 vehicle stops (see Appendix 7: DAO 11).

Three recent court rulings have also changed both the policing and prosecution of gun possession cases, making them more challenging: *Commonwealth v. Hicks* (2019)[26] found that the police were not allowed to stop individuals merely because they possessed a concealed firearm and showed it to another person while police watched; *Commonwealth v. Perfetto* (2019)[27] required that traffic cases and criminal cases stemming from those traffic cases must be tried together or risk the criminal case being dismissed; and *Alexander v. Commonwealth* (2020)[28] required that the police seek a warrant to search a car during a car stop, rather than be allowed to search with mere suspicion of contraband. All three of these opinions apply retroactively and impact the growing backlog of active cases, and have resulted in a higher proportion of cases that have not resolved with a conviction. Responsive changes in police and prosecutor practice are needed and are being implemented in order to ensure cases are opened with evidence that will be admissible at trial.

In addition, unavoidable court closures due to COVID have very significantly hampered our ability to prosecute cases in a timely fashion. As a result, few cases have been resolved overall, and only cases that could be resolved quickly and without need for

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[25] Settlement Agreement, Class Certification, and Consent Decree, Bailey v. City of Philadelphia (E.D. Pa. June 21, 2011) (No. 10-cv-05952). See American Civil Liberties Union (n.d.). BAILEY, ET AL. V. CITY OF PHILADELPHIA, ET AL. https://www.aclupa.org/en/cases/bailey-et-al-v-city-philadelphia-et-al

[26] *Comm. v. Hicks*, 208 A.3d 916 (Pa. 2019)

[27] *Comm. v. Perfetto*, 207 A.3d 812 (Pa. 2019)

[28] *Alexander v. Comm.*, 243 A.3d 177 (Pa. 2020)

witnesses were resolved—leading to an unusually high number of dismissals as compared to convictions. To illustrate this, at the end of 2019, there were 182 pending fatal shooting cases and 261 non-fatal shooting cases open in the courts. As of mid-December 2021, there were 460 fatal shooting and 650 non-fatal shooting cases open. Firearm possession by a prohibited person increased from 615 to 1,177 over the same time period, while firearm possession without a license cases more than tripled, from 628 to 2,284 (see Appendix 7: DAO 12). With these limitations, less serious firearm possession cases are disposed of more quickly and efficiently, while more serious cases awaiting trial or plea negotiation with defense counsel take longer to complete. As courts resume, the percentage of cases resolved with a conviction should return to pre-COVID levels as the case backlog is addressed. Perhaps most importantly, the unavoidable reduction in available trial rooms for jury trials and bench trials have disincentivized defendants, especially those who are out of custody or face potentially lengthy sentences, to resolve their cases in the near future.

In Summer 2020 the DAO established a DAO Intelligence Unit to improve the collection and dissemination of information with DAO Investigative and Trial Units, the PPD, and other local, state, and federal law enforcement partners. The Intelligence Unit expanded in January 2021, and now has an Intelligence Analyst stationed at the Delaware Valley Information Center (DVIC), helping the Intelligence Unit function as a centralized point-of-contact for receiving intelligence from the PPD, improving collaboration and communication. The Intelligence Unit maintains, organizes, and disseminates intelligence information collected by the DAO and law enforcement partners to ADAs, and also works closely with the PPD to identify drivers of violence crime and to prioritize these drivers of violence crime for arrest, charging, and prosecution.

To strengthen cases in light of the increase in firearms recovered from vehicle stops and higher legal standards to search, in December 2020 the DAO and PPD began meeting weekly to review VUFA (or gun possession) and non-fatal shooting arrests made the previous week. Led by the Deputy Commissioner of Investigations in the PPD and the Director of Intelligence in the DAO, this collaboration includes PPD Detectives, Assistant District Attorneys (ADAs) who have reviewed the cases, ADAs from the Law Division who provide guidance on changing legal standards, and data personnel to track progress. The weekly VUFA and non-fatal shooting case review proactively focuses on improving cases at an early stage by creating a dialogue among members of the DAO and PPD, helping to identify evidentiary issues sooner to bring the strongest cases possible. Individual cases as well as case trends are improved through systematizing discussions of evidentiary needs and by offering guidance on the implications of changes in the law for police practice,

training, and policy. Over 2,300 cases were reviewed between December 2020 and 2021, and the proportion of cases that passed the preliminary hearing improved following the implementation of the collaborative review process: of the 1615 cases that received a preliminary hearing, 81% were successfully held for trial and are awaiting final disposition (see Appendix 7: DAO 13). We reduce harm to the community and enhance system efficiency by identifying and correcting evidentiary issues early and strengthening the cases we do bring so they are more likely to result in conviction.

Just as the weekly VUFA/non-fatal shooting review shows that outcomes are improved through collaboration, the Gun Violence Task Force (GVTF) in the Philadelphia DAO shows the importance of conducting high-quality, often longer-term and collaborative investigations that generate strong cases. One strategy the GVTF uses is to identify group conflicts, and then find cold cases associated with those conflicts. Utilizing social media, electronic forensic evidence, and the Grand Jury process to facilitate witness participation, the GVTF engages in targeted prosecution of people who are driving gun violence, often seeking high bail or no bail eligibility following an arrest. See, for example, recent investigations that produced strong cases, including against individuals who had no prior record or had not been arrested for several years (see Appendix 7: DAO 14).

Taken together, a range of factors have produced a long-term trend where more gun cases, particularly those involving charges of gun possession, are being withdrawn or dismissed. We have been working to address this by implementing institutional changes in the DAO and developing collaborative processes and practices with our partners, especially the PPD. These include combining the DAO's Homicide Unit with Non-Fatal Shootings, creating the DAO Intelligence Unit, expanding the GVTF in the DAO, and developing the non-fatal shooting track in partnership with the courts and the VUFA/NFS review process with the PPD, among other initiatives.

## Deterrence of illegal firearm possession

One frequently cited way to reduce shootings is to enhance enforcement against illegal possession of firearms[29]—in spite of little research supporting the approach (Peterson and Bushway, 2020).[30] Because of the ease in accessing guns and the relative threat that some feel if they do not carry a gun, we do not believe that arresting people and convicting them for illegal gun possession is a viable strategy to reduce shootings. Some people who illegally possess firearms in Philadelphia present a real danger to the community and merit vigorous prosecution to conviction and incarceration. Others are basically law-abiding people who have not obtained a license. There is a huge difference between these two groups and public safety requires that they be held accountable in different ways. It is at best ineffective and at worst counterproductive for the police to treat these groups the same and focus on enforcement of firearm possession laws rather than focus on shootings. More resources are needed to deter shootings through police presence in communities, through a higher capacity in forensics, and more detectives to investigate and solve shootings when they occur. Our analysis of the data also finds that—contrary to recent statements from some city officials and in spite of the obvious point that guns are used in shootings—very few people arrested for illegal gun possession are later arrested for committing a shooting (see Appendix 7: DAO 15).

To deter someone from an act through enforcement, one has to ensure that the punishment for that act is 1) certain and 2) swift. Our experience in Pennsylvania and the U.S.—a state that has outpaced national incarceration rates and has among the most severe sentences in a country with the highest incarceration rate and longest sentences in the world—is that severe punishment has not been successful in deterring people from carrying guns or shooting people. With respect to gun possession, deterrence requires that the state sanctions for illegal gun possession are more certain and swift than the risk of not

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[29] Palmer, C., Purcell., D., Newall, M., & Dean, M.M. (March 30, 2021). "Philly gun arrests are on a record pace, but convictions drop under DA Krasner." Philadelphia Inquirer. https://www.inquirer.com/news/philadelphia-gun-arrests-2021-convictions-vufa-20210330.html; CBS3 Staff (December 14, 2021). "Pennsylvania AG Josh Shapiro says Philadelphia making progress in reducing gun violence." CBS 3 Philly. https://philadelphia.cbslocal.com/2021/12/14/josh-shapiro-danielle-outlaw-west-philadelphia-shootings-gun-violence/; PA Attorney General Josh Shapiro (December 14, 2021). "AG Shapiro Shares Results of New Law Enforcement Partnership." YouTube.com. https://youtu.be/Oh0y2aYmUME

[30] Peterson, S., & Bushway, S. (2020). Law enforcement approaches for reducing gun violence. RAND. https://www.rand.org/research/gun-policy/analysis/essays/law-enforcement-approaches-for-reducing-gun-violence.html

carrying a gun.[31] In Philadelphia, this presents a challenge: we are a City and Commonwealth awash in guns[32] and with a high number of shootings and low clearance rates, people do not feel protected by the police or other government agencies or local resources. These two factors create a situation where some people view the risk of being caught by police with an illegal gun as outweighed by the risk of being caught on the street without one (Sierra-Arévalo, 2016; Fontaine, La Vigne, Leitson, Erondu, Okeke, Dwivedi, 2018).[33]

The number of guns in the U.S., Pennsylvania, and Philadelphia is overwhelming, in great part because of weak state and federal regulations that make it impossible to know exactly how many guns are in a community and who is in possession of them. There were more than 12.9 million guns legally sold or transferred in Pennsylvania between 1999 and 2020, an average of over 1,600 per day; 266,186 were sold in Philadelphia (33 per day), and 1,824,614 in Philadelphia, Bucks, Montgomery, Chester, and Delaware counties combined

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[31] Deterrence theory also suggests severity of punishment is important, but research has not found support for this aspect of the theory (National Institute of Justice, 2016). National Institute of Justice (2016). "Five Things About Deterrence." National Institute of Justice., NCJ No. 247350. https://www.ojp.gov/pdffiles1/nij/247350.pdf.

[32] Of the nearly 13 million guns sold in Pennsylvania during this time, 266,186 were sold in Philadelphia, and 1,543,112 in Philadelphia, Bucks, Montgomery, and Delaware counties combined (Pennsylvania State Police, n.d.). There were an estimated 393,000,000 guns in circulation in the United States six years ago (Small Arms Survey, 2015), with 408,477,515 National Instant Criminal Background Firearm Backgrounds Checks between November 1998 through November 2021 (Federal Bureau of Investigations, 2021). Furthermore, a national survey found that 22% of recent gun purchasers reported buying their gun without a background check (Miller, Hepburn, Azrael, 2017). (See Appendix 7: DAO 16).

- Small Arms Survey (2015). Annual Report. https://smallarmssurvey.org/sites/default/files/resources/SAS-Annual-Report-2015.pdf.
- Federal Bureau of Investigations (2021). NICS Firearm Background Checks: Month/Year November 30, 1998-December 31, 2021. FBI. https://www.fbi.gov/file-repository/nics_firearm_checks_-_month_year.pdf
- Miller, M., Hepburn, L., & Azrael, D. (2017). Firearm acquisition without background checks: Results of a national survey. *Annals of Internal Medicine, 166*, 233-239. doi:10.7326/M16-1590

[33] Sierra-Arévalo, M. (2016). Legal cynicism and protective gun ownership among active offenders in Chicago. *Cogent Social Sciences, 2*. https://isps.yale.edu/sites/default/files/publication/2016/09/cogentsocialsciences_2016_sierra-arevalo_legal_cynicism_and_protective_gun_ownership_among_active_offenders_in_chicago.pdf
Fontaine, J., La Vigne, N.G., Leitson, D., Erondu, N., Okeke, C., & Dwivedi, A. (2018). "We Carry Guns to Stay Safe": Perspectives on Guns and Gun Violence from Young Adults Living in Chicago's West and South Sides. *Urban Institute Justice Policy Center*, https://www.urban.org/sites/default/files/publication/99091/we_carry_guns_to_stay_safe_1.pdf

(227 per day) (Pennsylvania State Police, n.d.).[34] From 1999 through 2019, only 165,717 guns were seized by law enforcement in Pennsylvania, fewer than 22 per day, with the PPD accounting for more than half (97,905, or 12 per day) (Attorney General's Office, n.d.).[35] That means that, each day in Philadelphia over the last 20 years, for every 3 guns legally bought or sold (i.e., in circulation that we know about), roughly 1 "crime gun" was seized (i.e., removed from circulation). Compounding the problem, in Philadelphia, only 1 in 4 recovered "crime guns" were purchased in Philadelphia (Attorney General's Office, n.d.), and only half of crime guns seized by law enforcement statewide were purchased in Pennsylvania; the rest were purchased out of state or have no known origin (see Appendix 7: DAO 16).

With so many guns available, a law enforcement strategy prioritizing seizing guns locally does little to reduce the supply of guns, and, if it entails increasing numbers of car and pedestrian stops, has the potential to be counterproductive by alienating the very communities that it is designed to help. People of color are disproportionately stopped in Philadelphia and arrested for illegal gun possession in Philadelphia and statewide. As the use of vehicle stops has increased, the proportion of PPD vehicle stops where a person of color was driving increased sharply during the same time period, regularly approaching 80% in recent years (see Appendix 7: DAO 11). In Philadelphia, approximately 80% of people arrested for illegal gun possession are Black; statewide, approximately 66% are Black (see Appendix 7: DAO 17). Focusing so many resources on removing guns from the street while a constant supply of new guns is available is unlikely to stop gun violence, but it does erode trust and the perceived legitimacy of the system. This in turn decreases the likelihood that people will cooperate and participate in the criminal legal system and associated processes, reducing clearance, conviction, and witness appearance rates.

It is again worth noting the inequity perpetuated by our state legislature, which made it a felony to carry a firearm without a license in only one county, Philadelphia, which is also its most diverse county. All state prisons in Pennsylvania are located in counties other than Philadelphia.[36] And many of those counties have lost their steel and coal

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[34] Publicly available Pennsylvania State Police data was organized and shared by Dr. David Johnson. See, e.g., Pennsylvania State Police (n.d.). Firearms Annual Reports. Pennsylvania State Police. https://www.psp.pa.gov/firearms-information/Pages/Firearms-Annual-Reports.aspx

[35] Few agencies have been submitting data since 1999, and currently not all law enforcement agencies report gun seizure information (Attorney General's Office, n.d.).
Attorney General's Office (n.d.). Pennsylvania Gun Tracing Analytics Platform. https://www.attorneygeneral.gov/gunviolence/pennsylvania-gun-tracing-analytics-platform/

[36] Pennsylvania Department of Corrections (n.d.). State Prisons. https://www.cor.pa.gov/Facilities/StatePrisons/Pages/default.aspx

industries, only to replace them with a state prison industry that brings tremendous financial and political benefit to those counties (Remster and Kramer, 2019). Those financial and political benefits only flow fully if those state prisons cells are occupied. It does not appear that our state legislature's primary interest is incarcerating people who carry firearms without a license. Our legislature's primary interest is incarcerating Philadelphians, most of them Black and brown, in their far less diverse counties for the money and the power it brings them. Philadelphia should recognize this commerce in Philadelphians' bodies for what it is—referred to in scholarship as "prison gerrymandering" (see Remster and Kramer, 2019 for a study of prison gerrymandering in Pennsylvania).

## Improving victim and witness appearance rates

Prosecution in the criminal legal system relies on the participation of civilian witnesses and other actors, such as arresting officers, to present and authenticate evidence necessary to prove every element of a crime beyond a reasonable doubt. A DAO analysis found that victim and witness Failure to Appear (FTA) in court is the cause of approximately half of all gun possession cases being dismissed or withdrawn in Municipal Court (see Appendix 7: DAO 18). This is an obvious problem that needs to be remedied.

While there is often attention placed on defendants failing to appear, a preliminary analysis of misdemeanor cases in Philadelphia found that it is more likely that at least one non-defendant will fail to appear for at least one hearing (e.g., victim, witness, law enforcement officer, or attorney) than it is for a defendant to fail to appear (Graef and Ouss, 2021). When witnesses or court actors (e.g., law enforcement, attorneys) do not appear, at best cases require multiple listings to resolve, and in some instances cases may be dismissed due to a lack of key testimonial evidence.

In a study of Philadelphia misdemeanor cases, witnesses and victims were most likely to miss at least one hearing in cases involving violent crime. Police, by contrast, were likelier to miss appearing to testify in less serious incidents (e.g., traffic, drug, public order, property); defense attorneys also sometimes did not appear in these less serious cases. Reasons given for law enforcement failing to appear included being sick (30%), injured on duty (IOD) (12%), on vacation/out of town (10%), or no reason given (26%) (Graef and Ouss, 2021, see Appendix 7: DAO 18).

The DAO has received grant funding and continues to seek additional funding to develop the technological capabilities necessary to maintain communications with victims and manage the Victim Witness Services (VWS) Unit caseload.

- The $4.6M grant the DAO received to create the District Attorney's Transparency Analytics (DATA) Lab also supported the hiring of developers for the DAO's Information Technology (IT) Unit to create a custom-built case management system, "DA-Work Station" (DAWS). This will help us to better manage our cases, including allowing VWS to better track their contacts with victims and witnesses.
- The DAO has applied for grant funding to offer text messaging services that the DAO IT Unit would integrate with DAWS. Well-crafted text message reminders help increase witness appearance rates in court (Cooke et al, 2018).[37]

New technologies will be critical going forward, including DAWS and solutions like text messaging that help DAO Victim Witness Coordinators communicate with victims and witnesses. These technologies and tools will be especially needed as arrest clearance rates improve, allowing the DAO VWS Unit to provide support to more victims and witnesses (state funding only allows the DAO VWS to work with victims after an arrest is made).

Beyond improving technological systems, the analysis by Graef and Ouss (2021) also suggests that systemic change could improve witness appearance rates: reducing the volume of non-violent misdemeanor arrests would reduce the number of cases where police are required to but often do not appear. This would improve both system efficiency, and perhaps the experiences of victims and witnesses in misdemeanor cases. When a court case fails to advance because of a court actor's FTA, causing further hardship in terms of travel, missed work or school, or with childcare or other logistical issues among those who do appear to testify, public confidence and trust in the system erodes. Improving officer appearance rates in misdemeanor cases is not a viable strategy, as that would remove officers from the streets of the communities where they are needed to deter gun violence with their physical presence. Furthermore, for many cases misdemeanor enforcement has been shown to be criminogenic (Agan, Doleac, Harvey, 2021). Notable progress has been made in Philadelphia since 2015 and during COVID to reduce arrests for property and drug offenses; there were over 20,000 property and drug arrests in 2017, and fewer than 10,000 property and drug arrests in 2021 (Palmer & Orso, 2021).[38] Therefore, criminal justice partners must continue to collaborate to reduce prioritizations of arrests and prosecutions for low-level offenses, particularly against people who are in crisis due to poverty,

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[37] Cooke, B., Diop, B.Z., Fishbane, A., Ouss, A., Hayes, J., & Shah, A. (2018). Using Behavioral Science to Improve Criminal Justice Outcomes: Preventing Failures to Appear in Court. UChicago Crime Lab. https://www.povertyactionlab.org/evaluation/text-message-reminders-decreased-failure-appear-court-new-york-city

[38] Palmer, C., & Orso, A. (December 31, 2021). "Philly's homicide crisis in 2021 featured more guns, more retaliatory shootings, and a decline in arrests and convictions." Philadelphia Inquirer. https://www.inquirer.com/news/philadelphia-murders-shootings-gun-violence-2021-20211231.html

homelessness, mental illness, or substance use disorder (Shefner, Sloan, Sandler, & Anderson, 2018).[39]

[39] Shefner, R.T., Sloan, J.S., Sandler, K.R., Anderson, E.D. (2018). Missed opportunities: Arrest and court touchpoints for individuals who fatally overdosed in Philadelphia in 2016. *International Journal of Drug Policy, 78*, https://doi.org/10.1016/j.drugpo.2020.102724

# Analysis Result by PDPH

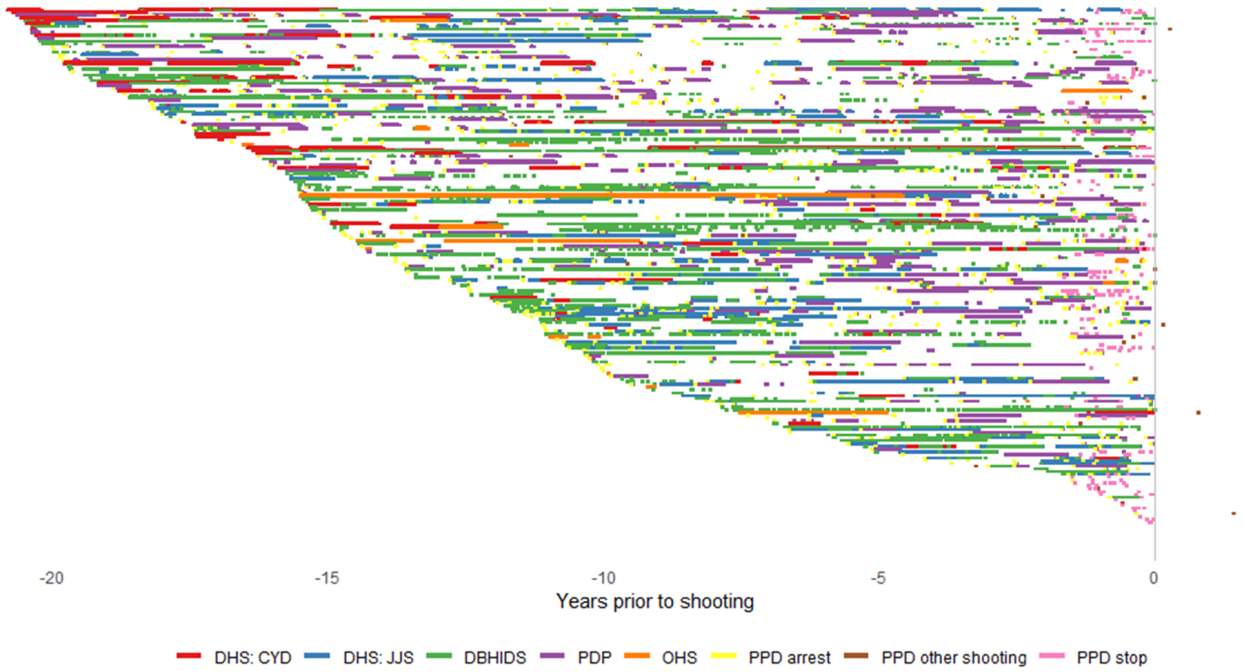
Although individuals with arrests for shooting related crimes have prior contacts with the criminal justice system, a true public health approach takes into account a much broader view of their prior experiences and exposures, which provides an opportunity to consider preventative approaches. To this end, the Philadelphia Department of Public Health[40] conducted an analysis of where individuals with prior arrests for shooting incidents were seen in the CARES integrated data system.

The CARES integrated data system is managed by the data management office within the department of health and human services. This database provides administrative data from multiple city agencies. To better understand the life course and experiences of those arrested for shootings, the Philadelphia Department of Public Health performed an analysis investigating where individuals with arrests for shootings between May and October of 2020 had previously encountered city services. These included contacts with the department of human services including contacts with the children and youth division (CYD) or juvenile justice services (JJS), the division of behavioral health and intellectual disabilities, the Philadelphia police department, the Philadelphia department of prisons, and the office of homeless services. When evaluating 196 individuals arrested for shootings in this time frame, a few key conclusions emerged:

- Most individuals with arrests for shootings have had contact with city agencies in the past,,
- These points of contact extend for years before their arrests,
- The most common service types are variable and include:
    - Behavioral health services(DBHIDS)
    - Incarceration in the Philadelphia prison system
    - Arrests by the Philadelphia Police Department for narcotics-related charges

Our analysis identified many touch points between individuals in our cohort prior to the sentinel event (the shooting arrest). Specifically, 93% of our cohort had touch points with either a criminal justice or a Health and Human Services (HHS) agency. On average, the first touch point was 11.5 years prior to the shooting incident, but some individuals had touch points with city services that occurred 20 years or more before their arrest (figure 1).

[40] Contributions to this section were from the Injury Prevention Program and the Chronic Disease and Injury Prevention (CDIP) data lab. We are thankful to the City of Philadelphia Data Management Office for their assistance.




We don't currently know about touchpoints that occurred prior to approximately the year 2000. This means that we have the most information about the youngest people in our cohort, and we have incomplete information for older individuals (specifically, those who were born before 1980-1985 have little or no information for the time prior to their 18$^{th}$ birthday). Despite this limitation, a notable number of touchpoints are occurring when people are juveniles (figure 2).




This is important in noting what programs and supports individuals might be eligible for as juveniles and how their interactions with the criminal justice system might differ, potentially providing more opportunities for resource provision and diversion.

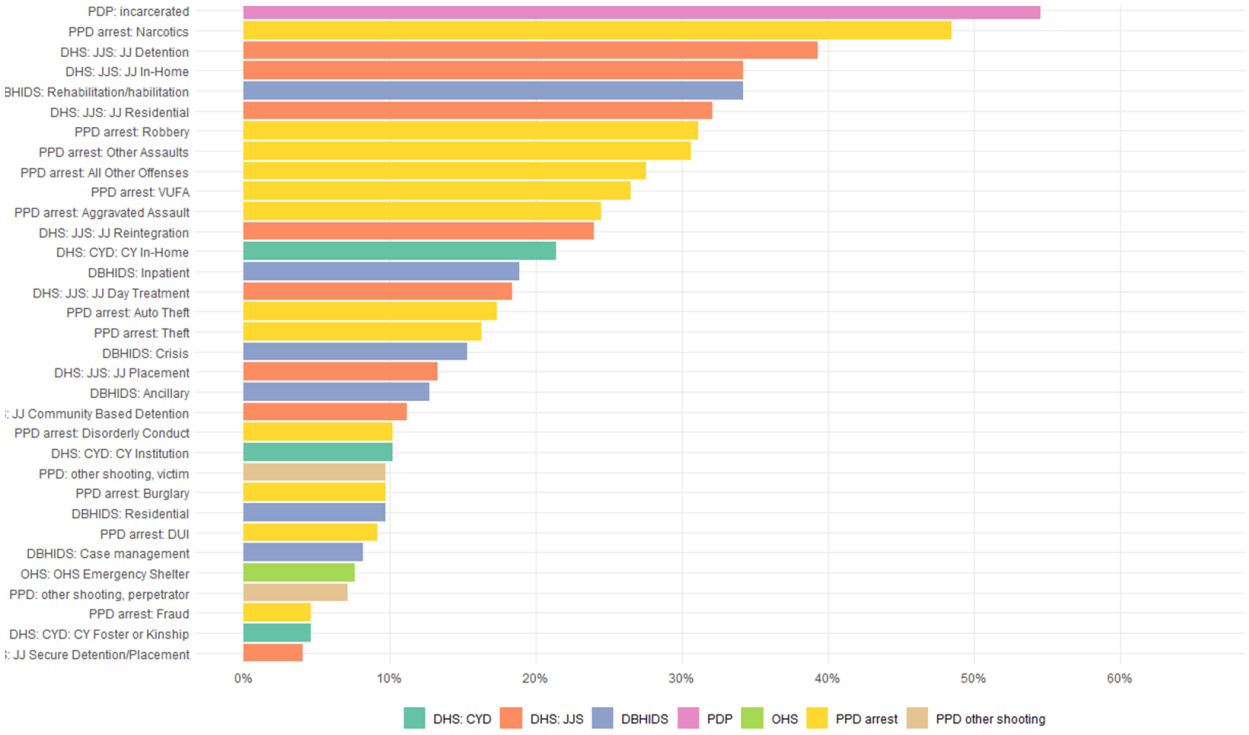
Our analysis is likely an underestimate of touchpoints. For certain data types, information is only available for a limited period (for example, for police stops we only have information in the two years prior to the shooting incident). This means we are interacting with individuals even more often than we are able to capture with this analysis. This might suggest even more opportunities for thoughtful intervention than are represented by these images.

In general, analyses such as this should focus on a few key outcomes, namely, the earliest touchpoints, touchpoints that happen when individuals are youths (for the reasons noted above) which may or may not be the same as the earliest touchpoints, and finally, the most frequent touchpoints .

We need a comparison group to draw further conclusions. Because 80% of shootings aren't associated with an arrest, and because individuals with similar exposures may not have similar outcomes, this analysis only begins to suggest opportunities for effective interventions. We also don't know about interactions people may have with

services that are not provided by the city. We don't yet know if outcomes differ depending on what the earliest and most frequent points of contact. In addition, we don't know if we are more likely to have data on individuals who are likely to be arrested for their shooting, or if people are more likely to be arrested for their shooting if they are frequently in city systems. An ideal comparison group would look at these points of contact for peers without the same arrest history—ideally individuals with similar demographic characteristics, from similar regions of the city. Determining common points of contact for a broader cohort will help us know how typical or atypical the patterns of contact we have identified here are, and how that informs prevention efforts.

What we do know about the most common touchpoints is that over 60% of individuals had some sort of outpatient contact with the Department of Behavioral Health and Intellectual Disabilities (DBHIDS), the most common contact found (figure 3).




It's important to note that the administrative data cannot specify the nature of this contact. This contact could be a screening, or bundled services with other agencies such as the Department of Human Services (DHS). While this doesn't necessarily signify a behavioral health diagnosis or treatment, it does signify an opportunity for a need to be named and identified.

The second most common point of contact is with the Philadelphia Department of Prisons (PDP). Over 50% of this cohort made contact with PDP. Nearly 50% also had a prior arrest specifically for narcotics related charges. This raises a question as to whether diversion and resource provision for narcotics related charges should be coupled with preventative violence intervention strategies. Many evidence based models involve a warm handoff between people in various systems, such as hospital systems or probation and parole, and preventative case management that extends to the individual's home life. This includes hospital-based violence intervention programs (HVIPs) and Cure Violence models, both of which are active in Philadelphia. The health department has convened city-wide collaboratives, beginning with all city HVIPs. Cure Violence programs are working to develop a collaboration under a similar model. A key question for those efforts will be identifying where there are opportunities for warm handoffs. People can be engaged from prisons, probation and parole, courts, and schools, in addition to hospitals and through community contacts. This could build on existing resources, provide opportunities for engaging those at highest risk, and increase coordination between agencies, all key objectives of PIRPSC and its partners.

Another key conclusion from our work is that integrated data sets such as CARES hold great promise for the ability of a city to work collaboratively towards more public-health oriented, preventative action. Ensuring that these efforts are supported and that critical interagency partnerships can occur using shared data increases our ability to find solutions that cross sectors. Currently, there are critical data elements such as education and employment data that are not available in this data set. In addition, enrollment in violence prevention programming is not part of the CARES data set. In the future, streamlining the ability to expand this data set can decrease the silos between violence prevention efforts in different agencies.

# Analysis Result by Defender Association

## National Landscape and Root Causes of Community Violence

With 2,332 criminal shooting victims this year - 501 of which resulted in death - [41] Philadelphia is unquestionably facing a crisis of gun violence, the likes of which have not been seen in recent years. As 93% of shooting victims in the city this year were Black and/or Hispanic, this epidemic not only presents a public health emergency but an unconscionable racial injustice. This level of community violence, while shocking, is not entirely unique to Philadelphia. While COVID-19 is consistently cited as a factor contributing to recent increases in violence, community violence in Philadelphia[42] and cities across the nation, is a persistent problem that predates the pandemic.

It is a problem that we can, and must, solve. But traditional criminal justice system solutions alone are insufficient to stem increased community violence.[43] These responses simply cannot adequately address perceived threats to personal safety, particularly in communities with high rates of community violence, and often exacerbate destabilizing factors that place communities and individuals at increased risk of violence.[44]

We cannot arrest or incarcerate our way out of this problem. We must remain mindful that the enforcement of laws throughout our city is not a race-neutral process. "Tough on crime" approaches, particularly to non-violent behavior, greatly contribute to the crisis of mass incarceration and its harmful impact on urban communities of color. This does not mean we abandon law enforcement and criminal justice strategies. Rather, we should implement policies and practices that strategically and sustainably address root causes of individual and community level violence.

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[41] Source: Philadelphia Police Department

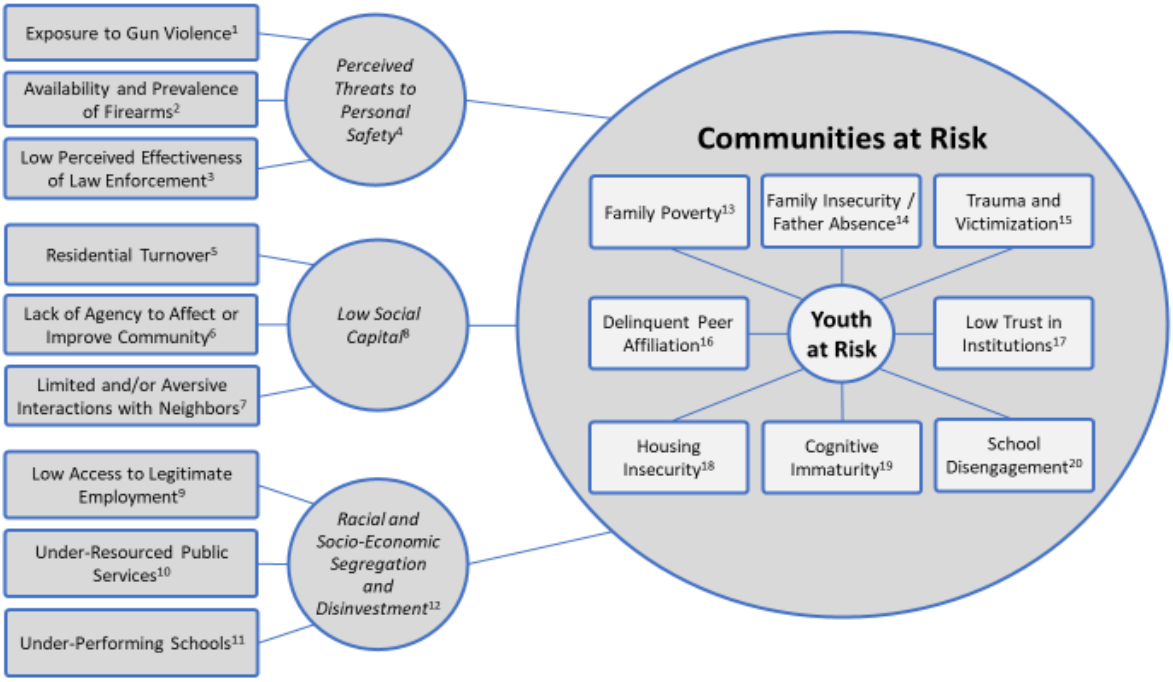
[42] https://www.phila.gov/Newsletters/Youth_Violence_Strategic_Plan_%20FINAL%20September%202013.pdf reporting that Philadelphia had the 4th highest homicide rate among the 50 largest US cities, with African American men disproportionately represented as victims of and arrestees for homicide.

[43] Giffords Law Center, A Second Chance: The Case for Gun Diversion Programs , citing the Vera Institutes conclusion that incarceration is "neither the most effective way to change people nor the most effective way to keep people safe." And establishing that "most studies estimate the crime-reducing effect of incarceration to be small and some report that the size of the effect diminishes with the scale of incarceration."

[44] Clear, T.R., & Montagnet, C.L. (2020). Impact of Incarceration on Community Public Safety and Public Health" in Robert Greifinger, ed. Improving Public Health Through Correctional Health Care. 2nd ed. (NY: Springer, 2020). A growing body of research suggests that high rates of incarceration in areas experiencing high rates of crime actually make the community less safe by decreasing social cohesion and economic health

Factors that consistently place communities and individuals within those communities at elevated risk to experience violence include the following:

**Figure 1:** The Ecology of Community Violence[45]
Model developed by Dr. William Barta, PhD - Defender Association of Philadelphia




Exposure to violence is dependably reported as a risk factor for future involvement in community violence, either as a victim or participant, a cycle Defender staff regularly observes in the clients we serve. In a recent survey, 82% of Defender clients pending 1st degree felony charges[46] reported witnessing violence prior to the age of 18, with 56% of them reporting witnessing multiple incidents of violence. Because our clients are indigent, their access to culturally competent, timely, affordable mental healthcare is limited. Many have never received any support to address the trauma they've experienced.

Furthermore, periods of incarceration, the tool most commonly available to criminal justice system partners to address prohibited behaviors, exacerbate the very factors that contribute to community and individual violence. Jails themselves are dangerous places and detainees report that they experience fear for their personal safety, sleep deprivation,

[45] Refer to Appendix 9 to review complete annotated footnotes used to develop this model

[46] First degree felonies represent the most serious charges in Pennsylvania.

and other stressors.[47] The current conditions of our local jail, where 18 incarcerated people died in 2021, expose detained people to additional trauma.[48] The harmful impact of incarceration is not limited to post-adjudicatory sentencing. Incarcerated people, detained pretrial for even relatively brief periods, experience higher rates of pretrial re-arrest following their release than similarly situated peers.[49] This higher rate of re-arrest is observed not only in the immediate time following release but up to two years later.[50]

While the criminogenic impact incarceration has on people who return home from jail is well-documented, perhaps less discussed is the impact pretrial detention has on case outcomes and the collateral consequence even relatively brief periods of incarceration has on families and communities.

### Case Outcomes

Even relatively brief periods of pretrial detention have short- and long-term consequences for arrestees and their families. Detained people plead guilty, regardless of their actual culpability, if it allows them to leave jail.[51] If detainees take their cases to trial, they are more likely than non-detained persons to be found guilty, serve longer prison sentences[52] and face larger financial penalties in the form of fines and fees.[53]

### Employment Outlook

But this period of pretrial detention has a long-lasting impact. Harvard researchers studied pretrial detention outcomes in Miami and Philadelphia between 2007 and 2014 to examine economic effects. Between 3 and 4 years later, defendants who had experienced pretrial detention still had greater difficulty finding employment as compared to non-detained defendants. They were 9.4% less likely to be employed. On average, they had

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[47] Blevins, K.R., Johnson Listwan, S., Cullen, F.T., & Lero Jonson, C. (2010). A General Strain Theory of prison violence and misconduct: An integrated model of inmate behavior. *Journal of Contemporary Criminal Justice*, *26* (2), 148–166.
[48] https://www.inquirer.com/news/philadelphia-jail-deaths-lawsuit-prison-conditions-20211227.html
[49] Lowenkamp, C.T., VanNostrand, M., & Holsinger, A.M. (2013). The hidden costs of pretrial detention. New York: Laura & John Arnold Foundation
[50] Lowenkamp, C.T., VanNostrand, M., & Holsinger, A.M. (2013). The hidden costs of pretrial detention. New York: Laura & John Arnold Foundation
[51] Petersen, N. (2020). Do detainees plead guilty faster? A survival analysis of pretrial detention and the timing of guilty pleas. *Criminal Justice Policy Review*, *31* (7), 1015-1035.
[52] Leslie, E. & Pope, N.G. (2017). The unintended impact of pretrial detention on case outcomes: Evidence from New York City arraignments. *Journal of Law and Economics*, *60*, 529-557.
[53] Op cit Stevenson, 2016

lost $29,000 in income as compared to other defendants.[54] Among persons who are later convicted, the unemployment rate one year after release from prison is 50%.[55]

## Housing Instability

The economic impact of incarceration is not limited to incarcerated people. Sociologist Matthew Desmond has drawn attention to the relationship between the incarceration of men and eviction rates of their marital or domestic partners. The loss of the male partner's income makes it more difficult for their partners to afford rent. This has led to an epidemic of evictions, disproportionately impacting low-income, Black women. Desmond notes that, "In high-poverty Black neighborhoods, one male renter in 33 and one woman in 17 is evicted. In high-poverty White neighborhoods, by contrast, the ratio is 134:1 for men and 150:1 for women." In Philadelphia, we observe racial disproportionality in evictions with 56% of the 112,449 evictions filed between 2015 and 2020 occur in communities where the majority of residents are Black and an overwhelming 81% in communities of color.[56] And an estimated three quarters of people represented by The Philadelphia Eviction Prevention project are Black women.[57]

When men have a history of incarceration, their partners often sign the lease for the couple. So when there is an eviction, it is a mark against the partner. This eviction carries a stigma and is a matter of public record. People who have a record of eviction face greater difficulty securing an apartment, are more likely to be denied housing services, have poorer credit, and are at increased risk of homelessness.[58] This is especially true in places like Philadelphia, where the public court record of the eviction case is not sealable and is available to prospective landlords regardless of case outcome.[59] Desmond has identified eviction as a key contributor to severe downward economic mobility in urban communities – concluding that while Black men get locked up, Black women get locked out.[60]

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[54] Dobbie, W. & Yang, C.S. (2021). The economic costs of pretrial detention. Brookings Institution, www.brookings.edu/bpea-articles/the-economic-costs-of-pretrial-detention/

[55] Western, B. & Sirois (2018). Racialized re-entry: Labor market inequality after incarceration. *Social Forces*, 1-29.

[56] Breaking the Record Report, Community Legal Services, November 2020.

[57] Breaking the Record Report, Community Legal Services, November 2020.

[58] Desmond, M. (2014). Poor Black women are evicted at alarming rates, setting off a chain of hardship. MacArthur Foundation Policy Brief. See also Desmond, M. (2012). Eviction and the reproduction of urban poverty. *American Journal of Sociology*, *118* (1), 88-133.

[59] Breaking the Record Report, Community Legal Services, November 2020.

[60] Desmond, M. (2014). Poor Black women are evicted at alarming rates, setting off a chain of hardship. MacArthur Foundation Policy Brief. See also Desmond, M. (2012). Eviction and the reproduction of urban poverty. *American Journal of Sociology*, *118* (1), 88-133.

## Intergenerational Harm

This "epidemic of eviction" has consequences for the dependent children of incarcerated persons. Children who change homes and change schools are at significantly greater risk of dropping out of school and are more likely to associate with peers who engage in problematic behaviors.[61] These high rates of school mobility also adversely impact children who remain in the same school without their friends and peers. Children of incarcerated parents are at even greater risk for disengaging from school, as they tend to experience a higher rate of truancy than peers.

Parental incarceration results in temporary separation from a parent, but it may also mean that the parent permanently loses custody.[62] Children face the trauma of separation from a parent and decreased parental supervision. This leads to psychological challenges that often manifest as reduced engagement in classroom activities and increased involvement in troublesome behaviors.[63]

## Impact on Neighborhoods

The impact of incarceration extends beyond the people who experience it and their families. When we use the term "mass incarceration," it implies that the sheer number of people being incarcerated is such that it can alter the fabric of entire neighborhoods. For example, when researchers look at neighborhoods in which a relatively large proportion of residents are incarcerated, they find that eviction rates are significantly higher than in other economically disadvantaged neighborhoods.[64] Communities with high levels of incarceration have consistently been hollowed by the collective impact of individual incarceration. A study of neighborhoods in Baltimore found that 'high incarceration' "communities experience higher unemployment, greater reliance on public assistance, higher rates of school absence, higher rates of vacant and abandoned housing, and more addiction challenges than the city as a whole."[65]

Researchers say that these conditions give rise to "social disorganization." Because people are continually moving into and out of these neighborhoods, there are fewer

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[61] S. Baughman (2017). Costs of pretrial detention. *Boston University Law Review*, *97* (1), 1-29.
[62] Ortiz, N.R. (2015). County Jails at a Crossroads. An Examination of the Jail Population and Pretrial Release. Why Counties Matter paper series, 2. Washington, DC: National Association of Counties.
[63] Nichols, E. B., Loper, A. B., & Meyer, J. P. (2015). Promoting educational resiliency in youth with incarcerated parents: The impact of parental incarceration, school characteristics, and connectedness on school outcomes. *Journal of Youth and Adolescence*, *45* (6), 1090–1109.
[64] Desmond, M. & Gershenson, C. (2016). Who gets evicted? Assessing individual, neighborhood, and network factors. Social Science Research, http://dx.doi.org/10.1016/j.ssresearch.2016.08.017
[65] Justice Policy Institute (February 2015). *The Right Investment? Corrections Spending in Baltimore City*.

long-term residents, neighbors are less likely to form relationships with one another, and are less able to identify suspicious "out of place" persons in the neighborhood. Residents of these neighborhoods also tend to be mistrustful of police; therefore, police are hampered in their ability to find witnesses and solve crimes.[66] Over time, high neighborhood-level incarceration rates may lead to an increase in crime.[67]

Many researchers who study social disorganization theory have suggested that, in neighborhoods affected by high residential turnover and joblessness, residents experience low "collective efficacy." Where collective efficacy is low, residents do not believe that they can influence crime or quality-of-life issues in their own neighborhood, feel helpless to make constructive changes, and therefore lack motivation to attempt changes. If this theory were valid, then one would predict that an increase in collective efficacy would lead to a reduction in crime. A recent study put this to the test locally. Low-income homeowners living in disadvantaged Philadelphia neighborhoods were given small grants ($20,000 each) to make structural repairs to their homes. Following this intervention, the researchers found that, on improved blocks, there was a significant decrease in police-reported homicide, assault, burglary, theft, robbery, disorderly conduct, and public drunkenness. Overall, crime was reduced by nearly 22%.[68]

Public opinion in recent years reflects an increasing awareness that a "tough on crime" approach to nonviolent behaviors does not actually increase public safety or reduce crime. Yet tens of thousands of Americans are arrested and incarcerated each year for nonviolent weapon possession charges.[69] A public health lens and commitment to alleviate conditions that contribute to community violence suggests we rethink traditional criminal justice system approaches to nonviolent, but unlawful, gun possession – particularly in neighborhoods where firearms are carried as a shield not a sword.

## The Tipping Point

Several criminologists believe that a theoretical "tipping point" is reached when increases in a neighborhood's incarceration rate no longer yields a measurable benefit in terms of public safety (refer to Figure 2, below). A growing body of research suggests that this is

[66] Lerman, A.E. & Weaver, V. (2014). Staying out of sight? Concentrated policing and local political action. *The ANNALs of the American Academy of Political and Social Science*, *651*, 202-219.
[67] Clear, T.R., Rose, D.R., Waring, E., & Scully, K. (2003). Coercive mobility and crime: A preliminary examination of concentrated incarceration and social disorganization. *Justice Quarterly*, *20* (1), 33-63.
[68] South, E.C., MacDonald, J. & Reina, V. (2021). Association between structural housing repairs for low-income homeowners and neighborhood crime. *JAMA Network Open*, 4(7):e2117067. doi:10.1001/jamanetworkopen.2021.17067
[69] Giffords Law Center (December 2021). A Second Chance: The Case for Gun Diversion Programs

likely the case. Once truly dangerous individuals are removed from the community, additional removals do not produce measurable crime reductions. Instead, it becomes increasingly likely that the sheer number of people who are removed from the community will have a disruptive effect. This can be measured in terms of a high prevalence of families in which a parent has been forcibly removed, number of evictions, and other metrics.[70] Hannon and DeFina (2012) have shown that "revolving door" incarceration contributes to a significant increase in juvenile delinquency and perpetuates an intergenerational cycle of criminal justice involvement.[71]

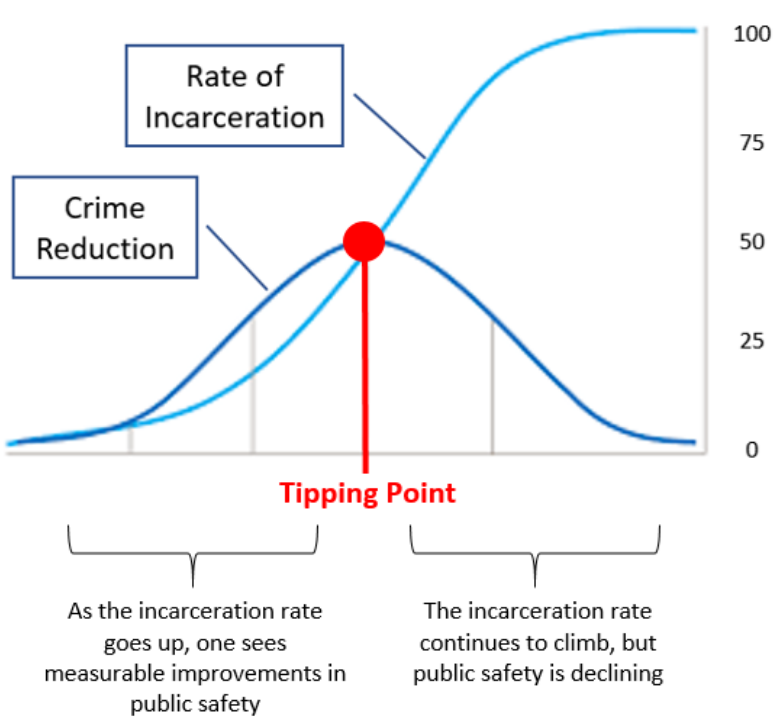



**Figure 2:** The Tipping Point.

[70] Clear, T.R., Frost, N.A., Carr, M. et al. (2017). *Predicting Crime through Incarceration: The Impact of Rates of Prison Cycling on Rates of Crime in Communities in Boston, Massachusetts, Newark, New Jersey, Trenton, New Jersey, and Rural New Jersey, 2000-2010*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]. doi:10.3886/ICPSR35014.v1.
Clear, T.R., Rose, D., Waring, E. & Scully, K. (2003). Coercive mobility and crime: A Preliminary examination of concentrated incarceration and social disorganization. *Justice Quarterly*, *20* (1): 33–64.
Gross, L.A. & Frost, N.A. (2012). Coercive mobility and the impact of prison-cycling on communities. *Crime, Law, and Social Change*, *57*, 459-474.
Kirk, E.M. (2021). Community consequences of mass incarceration: Sparking neighborhood social problems and violent crime. Journal of Crime and Justice, DOI:10.1080/0735648X.2021.1887751
[71] Hannon, L., & DeFina, R. (2012). Sowing the seeds: how adult incarceration promotes juvenile delinquency. Crime, Law and Social Change, 57 (5), 475–491. doi:10.1007/s10611-012-9374-1

### Trends in the Prosecution of Possessory Firearm Offenses

The idea that increasing the number of convictions for illegal gun possession in high-crime areas will improve public safety has driven national and local criminal justice policy initiatives for two decades.[72] Project Safe Neighborhoods, (PSN) launched in 2001 during the Bush Administration, is a national initiative to reduce serious community violence. It is credited with shifting national policy to streamline arrests for nonviolent possession of firearms and the initiative resulted in dramatic increases in the number of federal prosecutions for possessory firearm offenses.[73] But, while there were severe consequences for communities of color there were no corresponding reduction in firearm related homicides reported.[74]

More recently, researchers from Loyola found that people who are convicted of nonviolent possessory firearm offenses do not contribute significantly to violent crime in Chicago. However, devoting police resources to arresting persons for possessory offenses did result in fewer arrests for all other crimes including crimes of violence.[75]

Findings like these do not suggest system partners should abandon enforcement of laws regulating nonviolent possession of firearms. However, we do need to commit to strategies to reduce community violence that do not contribute to mass incarceration. Programs that effectively divert nonviolent possessory offenses away from traditional criminal justice solutions, discussed below, demonstrate that we can safely balance the need to address nonviolent possessory offenses without saddling young men of color with felony level criminal convictions or further destabilizing families and communities.

## Local Analysis

In November of 2021, Defender Association of Philadelphia reviewed pretrial outcomes for all Philadelphia cases alleging nonviolent possession of a firearm, from 2015 through the first half of 2021. Our analysis confirmed what many people in neighborhoods across the city already know:

- charges alleging non-violent possessory firearm offenses have increased dramatically since 2015,

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[72] Giffords Law Center (December 2020). America at a Crossroads: Reimagining Federal Funding to End Community Violence.
[73] Ibid, Giffords Law Center (December 2020).
[74] Ibid, Giffords Law Center (December 2020).
[75] Where 93% of people convicted of unlawful possession offenses remained violent crime free, even 3 years following their conviction.

- criminal justice policies related to the enforcement of these laws,
- the reliance on the use of monetary bail to detain or secure release for people pending these charges, and
- the imposition of default periods of incarceration following conviction for these offenses

almost exclusively impact young men of color and their families.

### Trends in Non-Violent Possession Cases

In Philadelphia, non-violent possessory firearm offenses have been consistently rising – with twice as many cases in 2020 as there were in 2015. The overwhelming majority (95%) of arrestees facing non-violent possessory firearm charges are men of color.[76]

Similarly, the proportion of cases alleging the possession of a firearm without a license,[77] as opposed to possession of a firearm by a person prohibited by law to possess a firearm[78] have also increased dramatically. In 2015, 47% of non-violent possessory cases involved the possession of a firearm without first obtaining the proper license. But by the first half of 2021, arrests for unlicensed possession represented 61% of the non-violent possessory firearm cases. Increasingly, arrests of young people are driving both the overall increase in non-violent possessory firearm cases and the shift in the proportion of cases alleging possession without a license. While possession by persons prohibited cases have remained relatively stable, arrests for unlicensed possession have consistently increased with significantly more young people charged with unlicensed possession cases each year.

[76] Demographic information is collected by law enforcement at the time of the arrest and does not always reflect the client's self-identified race or ethnicity. The fields are insufficient to capture people identify as bi-racial or multiple mixed racial background, or non-binary genders. We use the terminology 'Hispanic' or 'Non-Hispanic' throughout to be consistent with the labels used in the data fields.

[77] Carrying a firearm in a vehicle, concealed on one's person or in the open in Philadelphia without first obtaining a license to do so is criminalized pursuant to the provisions of 18 PA CS 6106 and 6108.

[78] A person who was previously convicted of a qualifying offense or series of offenses or adjudicated incompetent or involuntarily to a mental institution for inpatient care or treatment, or is the subject of an active final protection from abuse order, fugitive of justice, undocumented resident, is prohibited from lawfully possessing a firearm pursuant to the provisions of 18 PA CS 6105.

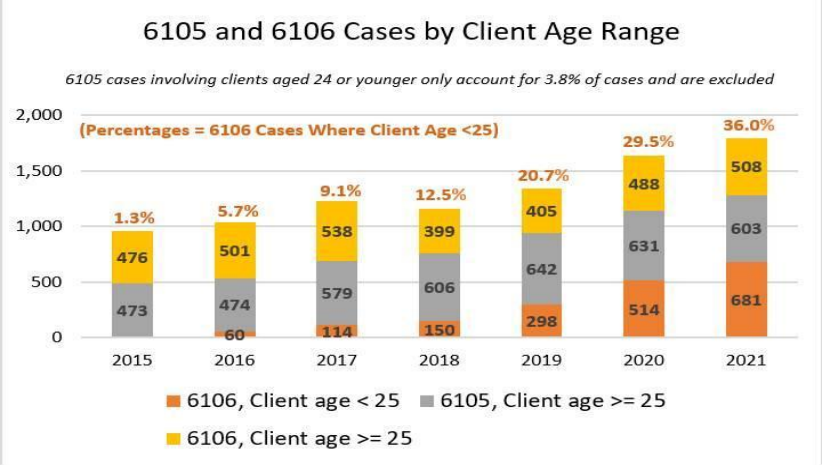
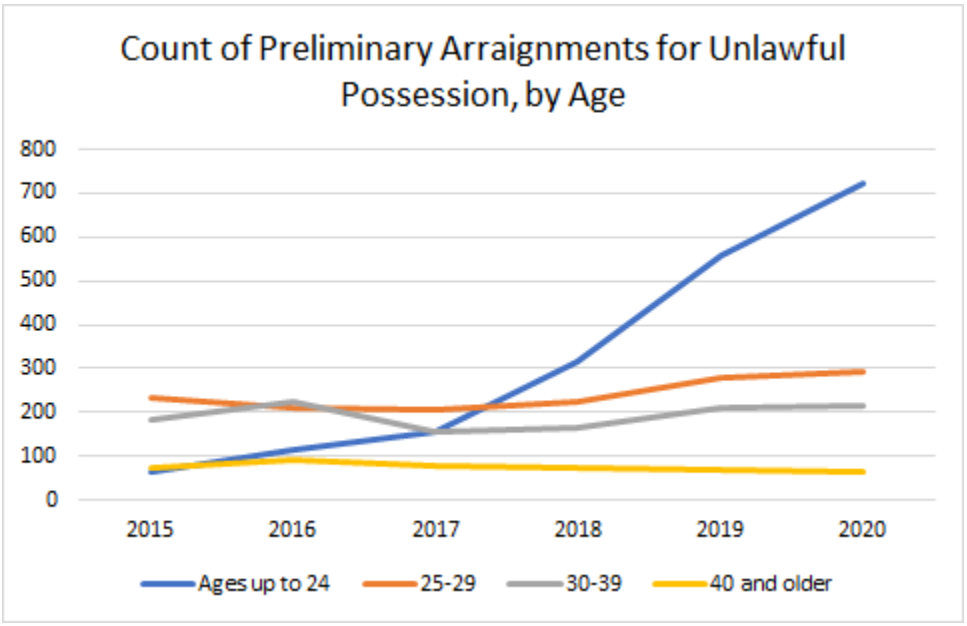



**Figure 3:** Non-Violent Possessory Firearm Cases by Type and Age over Time

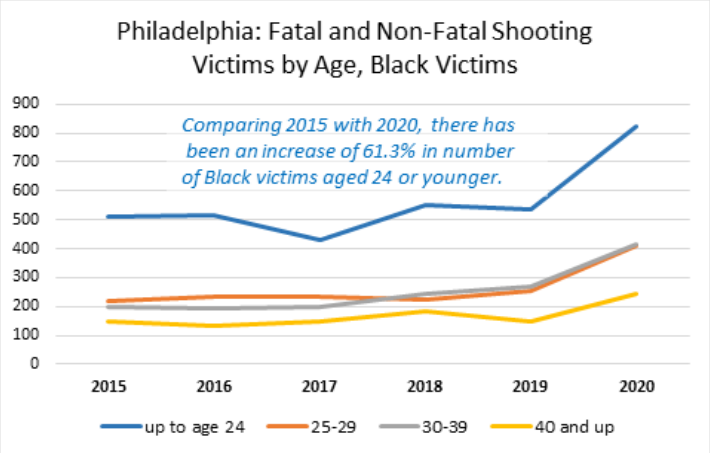
Beginning in 2017, we see a sharp increase in youthful arrestees pending charges for unlicensed possession of a firearm.

**Figure 4:** Age of all arrestees pending a lead charge alleging unlawful possession of firearm



This is particularly true for Black arrestees with unlicensed possession of a firearm charges. In 2015, arrestees aged 18-24 comprised less than 3% of the unlicensed possession cases against Black arrestees. But by the first half of 2021, that percentage jumped to 56%. The increase in unlicensed possession cases with young arrestees coincided with increased victimization of young Black Philadelphians.

**Figure 5:** Age of Black Victims of Fatal and Non-Fatal Shootings.

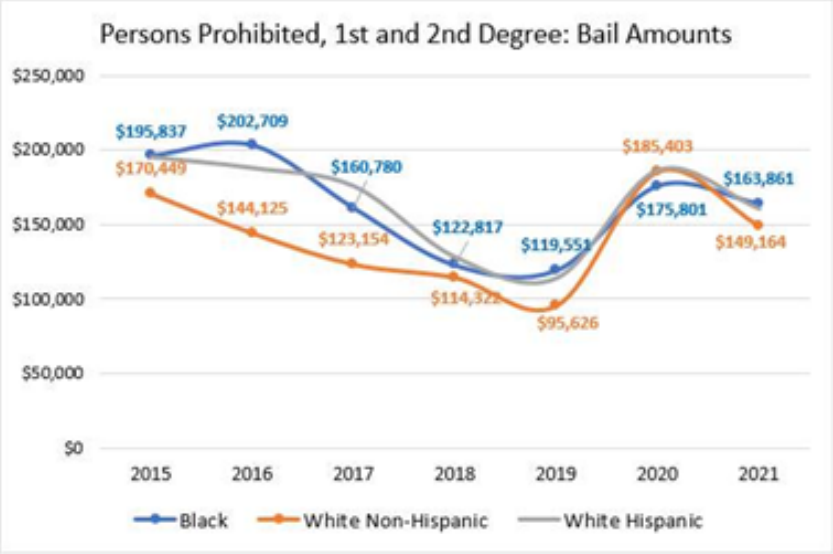



## Trends in Bail

In the overwhelming majority (96%) of cases alleging a non-violent possessory firearm offense secured bail is set when the arrestee is first presented for preliminary arraignment.[79] While average bail amounts have fluctuated over the years, higher average bail is consistently set in cases alleging persons prohibited charges than for those against arrestees, otherwise eligible to carry a firearm, who fail to obtain the proper license. We typically see differences in the adjusted average amount of bail set for these charges by race and ethnicity. **But the significant underrepresentation of white arrestees limits conclusions as to racial disparities in initial bail amounts set.**

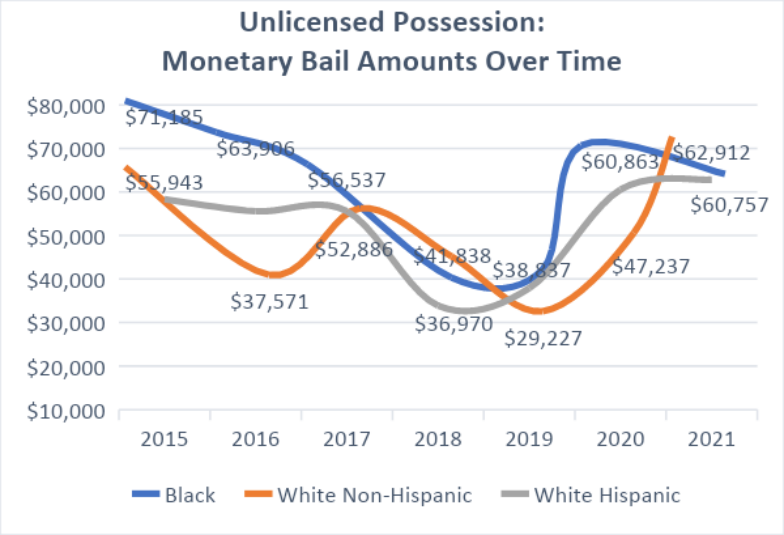
**Figure 6:** Average Bail Amounts for Persons Charged with Poss. by Prohibited Person

[79] Arrestees are brought before magistrates often at or near the time of their arrest for an initial determination of the amount and type of bail and appointment, if financially eligible, of counsel.




**NOTE**: 2021 is a partial year (ending 6/12/2021)

**Figure 7:** Average Bail Amount for Persons charged with Unlicensed Possession (3rd Degree)




The average bail initially set is often well outside the typical indigent arrestees' ability to pay and the use of financial conditions to secure release often places additional economic burdens on individuals and communities already at the greatest risk for violence. Following the initial decision to set bail, the court may review and modify the amount and type of bail set in light of individual factors unique to the arrestee, his circumstances, or the likelihood of conviction. This review typically takes place after both the District Attorney's Office and defense counsel are able to gather more information relevant to the individualized factors courts must consider when setting bail.

## Trends in Pretrial Outcomes

Concerns that people released while pending resolution of nonviolent possessory firearm offenses are driving the increases in community violence in Philadelphia are not supported by the data. When reviewing nonviolent possessory firearm cases initiated and resolved since 2015, we found the following:[80]

- The arrestee was not subsequently rearrested during the pretrial period for any new offense in 89% of the cases.

[80] Because Defender did not have access to jail population data, we could not determine which arrestees pending possessory firearm offenses achieved pretrial release and instead reviewed the entire universe of cases. Increased data sharing with the Philadelphia Police Department as to admissions and releases, if only for Defender clients, would greatly improve our analysis capacity and ability to connect clients with pretrial supports.

- The arrestee was not subsequently rearrested during the pretrial period for a possessory firearm offense in 98% of the cases.
- The arrestee was not subsequently rearrested during the pretrial period for a subsequent crime of violence, as defined by the Uniform Crime Report, in 97% of the cases.
- The arrestee was not subsequently rearrested during the pretrial period for a subsequent crime of violence, as defined by the Uniform Crime Report, or a subsequent possessory firearm offense in 95% of the cases.

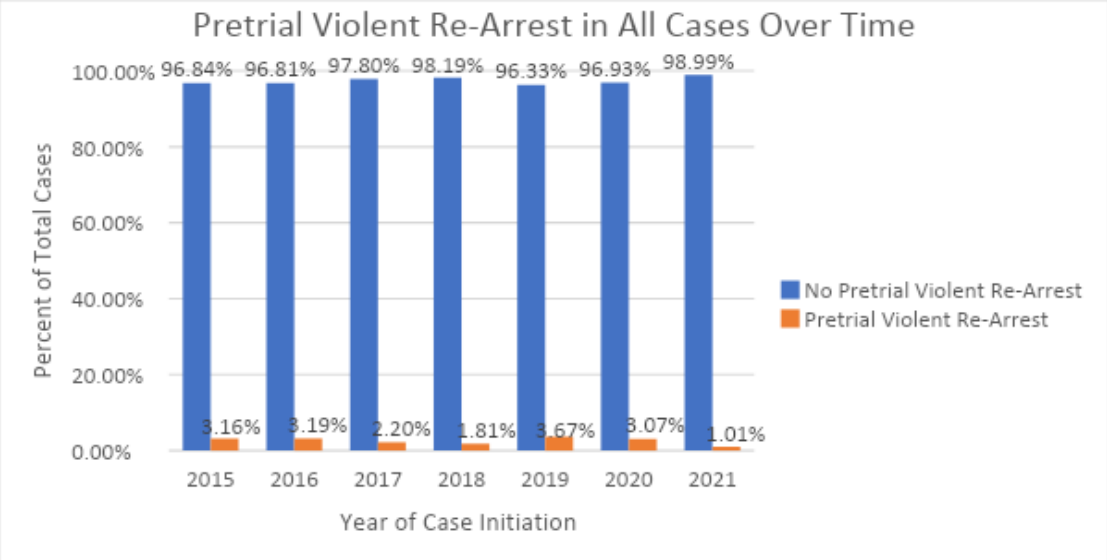



**Figure 8:** Pretrial Re-Arrest for Non- Violent Possessory Firearm Cases Over Time

## Improving gun case outcomes

Improving outcomes for possessory firearm cases must expand beyond securing convictions and imposing default periods of incarceration. They must also include an assessment as to whether these traditional responses are effective in reducing violent crime in the short– and long term.

In Philadelphia, enforcement of non-violent firearm laws is directed almost exclusively at communities of color, and in recent years, men under the age of 25. That the number of shootings continues to rise despite dramatic increases in arrests for nonviolent possessory offenses suggests that simply increasing arrests for gun possession is not the most effective strategy to reduce community violence.

In some ways, strategies designed to enforce possessory firearm laws place a heavy burden on relationships with the very communities the strategies are designed to protect.

For example, pedestrian and vehicle stops in neighborhoods that are primarily Black, brown, and poor to enforce motor vehicle code violations are one tactic sometimes relied upon to investigate and enforce violations of possessory firearm laws. Unfortunately, these tactics sometimes breed significant mistrust in communities of color without improving public safety or efficiently recovering firearms. For example, 74% of the 196,651 motor vehicle stops conducted from January of 2020 through July of 2021 involved Black drivers. But less than ½ of 1 percent of the stops from January of 2020 through March of 2021, resulted in the recovery of a firearm.

The mistrust is compounded when some policing of this nature has been done in violation of the Constitution and laws as residents of the affected neighborhoods who are not involved in criminal activity are humiliated and embarrassed by unjustified searches. Such interactions make it difficult for residents of communities impacted by gun violence to view police as agents of public safety with whom they want to engage as victims, survivors, or witnesses of various types.

Similarly, securing convictions and the most severe sanction permitted by law for nonviolent possession of firearms has not yielded the reductions in gun violence that we need to see. This may be attributable to the criminogenic effect of prison, meaning the effects of prison place many individuals at risk for re-arrest upon exiting the system[81] and the aggregate consequences this approach has on communities at risk of experiencing violence.

There are a handful of jurisdictions that balance the need to hold people accountable for unlawfully possessing firearms without exacerbating conditions that lead to community violence by permitting people with nonviolent possessory charges who appear to be uninvolved in driving gun violence to enter diversion programs. Outcomes from Minneapolis and Brooklyn lead the Giffords Law Center to recommend that jurisdictions partner with community-based efforts to divert some of the individuals facing these charges.[82] Minneapolis' diversion program for example, provides a model. Despite a high conviction rate for non-violent possession of firearms, the city's attorney noted that individuals' life outcomes remained poor. So in 2016, the city sought competitive bids from community based organizations to develop a highly structured trauma-informed program for people pending non-violent possessory firearm offenses.

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[81] David Roodman, "The Impacts of Incarceration on Crime," *Open Philanthropy Project*, September 25, 2017, http://dx.doi.org/10.2139/ssrn.3635864; Francis T. Cullen, et al., "Prisons Do Not Reduce Recidivism: The High Cost of Ignoring Science," *The Prison Journal* 91, no. 3 (2011), DOI: 10.1177/0032885511415224, https://doi.org/10.1177%2F0032885511415224.

[82] Giffords Law Center (December 2021). A Second Chance: The Case for Gun Diversion Programs

While the program is still small, the initial results are encouraging. At the time of their last report, 126 of the 214 eligible arrestees agreed to participate in the program where participants can avoid a conviction while receiving intensive case management, trauma centered care, and life skills. 59 participants graduated, 46 were still actively engaged and 21 either dropped out or were terminated. Of the graduates, only 6 (10%) were subsequently reconvicted for any offense with only one crime of violence, a misdemeanor offense of domestic violence.[83]

Diversionary programs hold people accountable with a period of supervision and other requirements with an eye toward avoiding a conviction if they are fully compliant; this often includes supportive programming. People admitted to the program who do not meet its demands are sent back to court to face trial and conviction. People who are accountable by meeting the program's requirements avoid a conviction that would likely stigmatize and preclude them from fully participating in everything that is preventative of future criminal activity—jobs that pay well, housing, loans for education, real estate and vehicles (Pager, 2003; Pager et.al, 2009; Decker et.al 2014).[84]

[83] Giffords Law Center (December 2021). A Second Chance: The Case for Gun Diversion.

[84] Decker, Scott & Ortiz, Natalie & Spohn, Cassia & Hedberg, Eric. (2015). Criminal stigma, race, and ethnicity: The consequences of imprisonment for employment. Journal of Criminal Justice. 43. 10.1016/j.jcrimjus.2015.02.002.

Pager, D. (2003). The mark of a criminal record. American Journal of Sociology, 108(5), 937-975.

Pager, D., Bonikowski, B., & Western, B. (2009). Discrimination in a low-wage labor market: A field experiment. American Sociological Review, 74(5), 777-799.

# 5. Goals and Policy Considerations

In order to guide the analysis and to support the development of policy recommendations, the Committee has set the below policy-oriented goals that go beyond the original resolution's descriptive goal of analyzing 100 shooter characteristics.

- Reducing gun violence through Deterrence of illegal firearm possession; Improving gun case outcomes; Improving shooting incident clearance rates; Improving witness appearance rates.

Additionally, given the importance of the long-term, sustainable solution to prevent gun violence, the data-sub committee took the liberty of adding the below two goals:

- Reducing gun violence through short term investments in community driven solutions for prevention
- Reducing gun violence through upstream, long-term investments in communities most impacted by gun violence for sustainable reduction

The next section, 6. Recommendation, discusses specific, actionable programs and practices to accomplish these goals.

# 6. Recommendations

Specific, actionable recommendations are organized by policy goals as set forth by the committee. It should be noted that some recommended initiatives/programs are inter-related to each other, cutting across multiple goals.

## Recommendations by the PPD

### Improving gun case outcomes

#### Dedicated Court for illegal gun possession cases and vertical prosecution

Establishing a dedicated courtroom(s) for illegal firearm possession cases is an example of a problem-solving court with multiple evaluation studies finding improved case outcomes and lowered recidivism rates for participants, including studies that focused on Philadelphia's implementation in the early 2000s. Although study findings show little evidence of such courts' effect on lowered gun crimes across the city, evaluation studies have found improved process outcomes and reduced reoffending among specialized court case participants. Dedicated resources among stakeholders (courts, defenses, and prosecution) also help strengthen individualized attention to each case to determine the best criminal justice response, which may range from diversion with supervision and support for minimum risk individuals to incarceration for those driving gun violence. The current increasing trends of gun arrests, open cases, and the presence of a sizable proportion of gun arrestees who commit another gun crime during open cases (the analysis section of the current report) certainly indicate that establishing a dedicated court for gun cases is a promising strategy to consider.

Typical aims of a problem-solving court for gun cases are to decrease the time from arrest to disposition, increase guilty pleas for gun cases, reduce recidivism for participants, increase education on gun safety, and in some cases provide alternatives to incarceration (OJJDP, 2010, Makarios, M. D., & Pratt, T. C., 2012)[85]. The Adult Probation and Parole Department (APPD) for Philadelphia (Kurtz,et al., 2007)[86] released an 18-month evaluation of the previous Philadelphia Gun Court. They found an increase in convictions for VUFA

[85] OJJDP (Office of Juvenile Justice and Delinquency Prevention). (2010, September). *Gun court literature review*. https://ojjdp.ojp.gov/mpg/literature-review/gun-court.pdf

[86] Kurtz, E., Malvestuto, R., Snyder, F. Reynolds, K., McHale, J & Johnson, F. (2007) *Philadelphia's gun court: Process and outcome evaluation executive summary*. https://www.courts.phila.gov/pdf/criminal-reports/Gun-Court-Evaluation-report-executive-summary.pdf.

cases from 51% in 2001 to 57% in 2003. When limiting to Gun Court cases, the conviction rate rose to 65% in 2005. Additionally, the APPD found an increase in guilty pleas and reduction in waiver trials. Lastly, the APPD evaluated re-offending for pre- and post-implementation. The results were a lower rate of re-arrest (20% v 12%) and a zero rate of reoffending for lead cause of VUFA in the year after probation started (Kurtz,et al., 2007). An additional evaluation showed that the Philadelphia model effectively reduced disposition days (the time between arrest and disposition) as compared to similar cases before its implementation (Hill, G.D., 2008)[87].

Notably, Philadelphia has already created dedicated preliminary hearings for gun cases amid the pandemic; given the increasing rate of VUFA arrests and gun recoveries (an average of 7 VUFA arrests and 16 gun recoveries per day), an increased and dedicated resource to process not only preliminary hearings but also Common Pleas court trials is a practical consideration. The creation of dedicated courts for gun cases also has side-benefits to establish a unified front across the criminal justice system to address the gun violence crisis, sending a clear and solidified message to the community.

Furthermore, dedicated courts for gun cases also help develop such a prosecution model as vertical prosecution, which is an approach where the same prosecutor is assigned to a case from beginning to end. While rigorous evaluations may be sparse, various agency experiences indicate that vertical prosecution has shown to improve conviction rates, reduce victim trauma, and provide more consistent, appropriate sentencing.

For example, the City of Seattle implemented a crime plan which included vertical prosecution (Scales and Baker 2000)[88]. Seattle's effective strategy for prosecuting juvenile firearm offenders highlights benefits in vertical prosecution. Utilizing this approach led to greater continuity and consistency in prosecution. The average days to file cases went down and filing backlogs were eliminated. An increase in guilty trial convictions occurred. Pretrial dismissal rates were reduced as well as an increase in juveniles detained at their first appearance hearings occurred. Communications improved between the prosecutor, police, judges, and probation officers.

Vertical prosecution is already in place for shooting/homicide cases with successes, as indicated by a high conviction rate. It is recommended to expand its scope to serious, illegal gun possession cases (e.g., CC6105 prohibited possession of firearms by felons); as

[87] Hill, G.D. (2008) The new Philadelphia gun court: Is it working? (1459465) [master's thesis, University of Nevada, Reno]. ProQuest LLC.
[88] Scales, B and Baker, J. (2000) OJJDP, Seattle's Effective Strategy for Prosecuting Juvenile Firearm Offenders. OJJDP Juvenile Justice Bulletin. March 2000.

the current analysis has shown correlation among shootings/homicides/VUFA, and existing literature suggests the importance of addressing gun possession cases to achieve violence reductions (Koper & Mayo-Wilson, 2012; McGarrell et. al. 2010)[89] [90].

It is important to note that vertical prosecution can address multiple and specific problems that the current analysis has identified: for example, witness failure to appear (FTA) can be addressed by having consistent ADAs assigned to each case and by building rapport with victims. However, vertical prosecution cannot be implemented without the establishment of dedicated courtrooms, because of physical and logistical reasons (physical, dedicated court rooms will be essential in ADAs' operations).

### Collaborative review of gun cases

A collaborative review of gun cases is not necessarily a crime prevention measure, instead it is a vehicle to facilitate inter agency relationships. It can also facilitate the identification of emerging new trends in order to swiftly address them through multi-agency coordination. Both the PPD and DAO are learning organizations; a formalized review process allows us to more deeply understand why there are an increasing number of adverse case dispositions and to adjust training and improve policing/investigations in a timely manner. This collaborative review process can also engage other stakeholders as well, such as ATF. Some aspects of this collaboration can also be made public (e.g., statistical dashboards on gun crime trends and case outcomes), increasing the transparency in the City's gun violence strategies.

While rigorous evaluations may not be available or may only provide mixed findings regarding the impact on crimes in the community,a collaborative review of gun cases can benefit us in multiple ways while organizing and aligning existing programs/initiatives:

- The PPD already has a weekly shooting review with a variety of law enforcement partners. Additionally, the PPD also has a separate, weekly VUFA case review with the DAO.
- The PPD has already been selected for the U.S. Department of Justice's National Public Safety Partnership (PSP); GunStat (a similar collaborative model) is one of the "menu" options that the PSP provides both technical and subject matter expertise support for.

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[89] Koper CS, Mayo-Wilson E. Police strategies to reduce illegal possession and carrying of firearms: effects on gun crime. Campbell Systematic Reviews 2012:11 DOI: 10.4073/csr.2012.11

[90] McGarrell, E.F., Corsaro, N., Kroovand Hipple, N., & 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.

Anecdotal evidence also suggests that gun crimes were at a historical low when Philadelphia implemented GunStat in 2012. While this may not be a rigorous evaluation, prior experiences along with existing initiatives and PSP's support can ensure that this review process gets implemented properly.

## Improving shooting clearance rates

### Creating a centralized non-fatal shooting investigation team

Improving shooting clearance rates is a crucial matter. It affects the public's confidence in policing, provides justice to victims and can prevent future violence through the disruption of cycles of violence. A multitude of factors affect the likelihood of shooting case clearances, but recent studies argue that allocation of dedicated resources as well as establishment of standardized investigative processes for non-fatal shootings will result in substantial increase in clearance rates (Braga, 2021)[91]. The current report's analysis of Philadelphia shooting data also has indicated that organizational structure and investigative capacity are the key factors affecting clearance rates.

The non-fatal shooting investigation team, which will be centrally located and will work in concert with the homicide unit, will align the PPD's organizational structure of the shooting investigation detective unit to that of DAO's Homicide/Non-Fatal Shootings Unit in a central manner. The team should be staffed with the combination of experienced detectives and civilian analysts who can search electronic databases quickly and develop investigative leads through systematic/innovative analyses.

The creation and proper staffing of the team should also be followed by the development and implementation of an investigative training curriculum focusing on shooting cases, with the establishment of uniform operating procedures that will cover standardized, best practice in relentless follow-ups of open cases. Currently, detectives only go through generalized training at the time of promotion, and they will practically learn as they go, while the reality is that shooting case investigations are more complex than ever; a variety of techniques need to be mastered, including the facilitation of witness collaboration, collection/interpretation of forensic evidence, and innovative use of technology (e.g., cell-phone records). The PPD should leverage existing partnerships and external resources, such as the U.S. Department of Justice's National Public Safety Partnership and local academic partners to develop the "detective master class." Successes

[91] Braga, A. (2021). Improving Police Clearance Rates of Shootings: A Review of the Evidence. Manhattan Institute.
https://www.manhattan-institute.org/improving-police-clearance-rates-shootings-review-evidence

accomplished by the Boston PD and Baltimore PD in improving shooting case clearances through organizational and procedural changes are just a few examples to follow.

## Improving victim and witness appearance rates

Improving witness appearances will require multiple initiatives, both for civilian and sworn witnesses. For civilian witnesses, these may include police-provided witness transportation, as was provided in the past for serious cases, with follow-up calls before court dates by victim service officers/DAO personnel. Additionally, the implementation of policing models that enhance the community outreach, such as the home visits for non-law enforcement matters (nj.com, 2019)[92] and foot patrols can also build general trust in policing among community members, which in turn can facilitate witness collaboration and appearances.

For sworn witness appearances, stronger accountability around police witness failure to appear (FTA) may be needed. While the vast majority of police witnesses for gun cases are properly appearing, the percentage of police witness FTA appeared to have increased, based on a preliminary analysis. Technological investment should also be considered for faster and accurate monitoring. During the pandemic, automated court notice generation processes in the preliminary arraignment/booking system (PARS) have been terminated. A standard operating procedure should be reviewed and revised, as needed (e.g., elimination of the same day court notices to ensure officer appearances). Technological integration with OnePhilly should also be considered for a long-term initiative to ensure that ADAs will have officer availability information at their fingertips in the courtroom.

## Preventing gun violence in the community

### Expand foot patrols

Foot patrols are evidence-based policing tactics against violent crimes that can lead to much needed immediate results. Rigorous evaluations utilizing a randomized control experiment design found that foot patrol resulted in a 23% reduction in violent crimes

[92] Sierra-Arévalo, Michael. (2019). Opinion: 1 single good encounter with a cop engenders a lot of trust, study finds. NJ.com https://www.nj.com/opinion/2019/09/1-single-good-encounter-with-a-cop-engenders-a-lot-of-trust-study-finds.html

around hot spots in Philadelphia (Ratcliffe et al., 2011)[93]. Furthermore, foot patrols can lead to multitudes of additional benefits, including boosting the confidence in policing, reducing fear of crimes, improving the quality of life, and engaging the community. As officers develop intimate knowledge of their assigned beats, in addition to deterring and preventing crimes, the officers can also act as a problem-solver of neighborhoods, identifying and addressing environmental risk factors of crimes (e.g., abandoned vehicles, broken streetlights). Foot patrols can also be implemented with other tactics in concert, such as home visits for non-law enforcement matters that resulted in a significant increase in perceived police legitimacy (nj.com, 2019)[94] as well as the PPD's mobility projects where cellphones are issued to officers. It is notable that the improvement in the community perception and trust in policing was the strongest among residents of color.

The benefit of expanding foot patrols in Philadelphia is that we know how it works, when it works, and why it works based on prior implementation and evaluations. It should go without saying that foot patrols (or any policing tactics) need to be implemented thoughtfully; for example, a subsequent evaluation of foot patrols found that foot beats need to be sufficiently small and the right type of officers needs to be assigned (Groff, et al., 2015; Ratcliffe and Sorg, 2020)[95] [96]. The selection of foot beats also needs to be data-driven in order to gain the biggest bang out of a buck.

Doing this right requires appropriate resources. During the initial foot patrol evaluation, 240 officers fresh out of the academy were assigned to small beats for 3 months in the summer, which resulted in significant violent crime reductions. The police academy has graduated only 126 recruits in a total of 3 classes in the past 2 years (the current class size is 41 recruits). Given that 24% of the officers are currently at the retirement age (more than 25 years on the job) and that the department is already facing officer shortages (in addition to an increase in officers in IOD (injured on duty) and

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[93] Ratcliffe, J.H., Taniguchi, T., Groff, E.R. & Wood, J.D. (2011) The Philadelphia Foot Patrol Experiment: A randomized controlled trial of police patrol effectiveness in violent crime hotspots, Criminology, 49 (3): 795-831.

[94] Sierra-Arévalo, Michael. (2019). Opinion: 1 single good encounter with a cop engenders a lot of trust, study finds. NJ.com https://www.nj.com/opinion/2019/09/1-single-good-encounter-with-a-cop-engenders-a-lot-of-trust-study-finds.html

[95] Groff, E.R., Ratcliffe, J.H., Haberman, C.P., Sorg, E.T., Joyce, N. and Taylor, R.B. (2015) Does what police do at hot spots matter? The Philadelphia Policing Tactics Experiment, Criminology, 53(1): 23-53.

[96] Ratcliffe, J. and Sorg, E. (2020). More Foot Patrol. Violence Reduction Project. https://qualitypolicing.com/violencereduction/ratcliffe_sorg/

limited/restricted status), more hiring is needed anyway. Stronger recruitment efforts may also be needed to enhance the diversity of the PPD personnel. [97]

It is interesting to note that there apparently was some skepticism regarding the effectiveness of foot patrols among commanders prior to the Philadelphia Foot Patrol Experiment (Center for Security and Crime Science, 2015)[98], but the evaluation found immediate and significant success. The PPD's recently implemented special district initiative that heavily uses foot patrols, the Kensington District, has also shown reductions in violence. The initiative is also coupled with the mobility project where cellphones are issued to the officers that facilitate community-oriented policing and information sharing. Finally, Ratcliffe and Sorg (2020)[99] also highlight that the success of the foot patrols in violent crime reductions in Philadelphia was accomplished at the time of social/economic climate that is similar to now, including economic hardship and low confidence in policing.

### Prioritized 311 response

While the committee's original request focused on people (i.e., shooters), it is equally important, if not more, to examine places where violent crimes cluster and address such hot spots. In addition to foot patrols, crime hot spots can be tackled by carefully coordinating non-law enforcement resources. In particular, abundant evidence exists that addressing underlying environmental risk factors of crimes can lead to immediate and sustainable success (Caplan et a., 2018; Kennedy et al, 2015)[100] [101].

The Philadelphia Roadmap for Safer Community (PRSC), where multiple city departments participate in the city's efforts to tackle gun violence, is a perfect vehicle to accomplish that task. In particular, it is recommended to incorporate in its framework the

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[97] Oftentimes, bicycle patrols may be suggested as a substitute for foot patrols, as bikes can cover larger areas and may still be able to connect with the community more effectively than squad car patrols. However, there has not been a rigorous evaluation of bicycle patrols; if bike patrols are to be pursued as an alternative to foot patrols, the PPD should also invest in properly and comprehensively evaluating the tactics.

[98] Center for Security and Crime Science. (2015). Philadelphia Foot Patrol Experiment. https://www.youtube.com/watch?v=0NUQsK0vnnM

[99] Ratcliffe, J. and Sorg, E. (2020). More Foot Patrol. Violence Reduction Project. https://qualitypolicing.com/violencereduction/ratcliffe_sorg/

[100] Caplan, Joel, Leslie Kennedy, and Grant Drawve. 2018. "Risk-Based Policing in Atlantic City: 2017 Report." http://www.rutgerscps.org/publications.html .

[101] Kennedy, Leslie W., Caplan, Joel M., and Piza, Eric L. (2015). A Multi-Jurisdictional Test of Risk Terrain Modeling and a Place-Based Evaluation of Environmental Risk-Based Patrol Deployment Strategies, 6 U.S. States, 2012-2014. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2018-05-29. https://doi.org/10.3886/ICPSR36369.v1

standardized operation procedures among all participating departments to prioritize 311 requests around crime hot spots and risky places as identified by the PPD. For example, this may entail faster, prioritized response in removing abandoned vehicles, fixing street lights, investigating nuisance bars, and addressing littering and short-dumping. Such actions can be monitored and tracked in a CompStat-like style, where managers in each department will be held accountable for progress on a regular basis. The number of actions taken, personnel assigned, and even financial resources spent in these hot spots by each department can also be reported out to achieve both strong accountability and transparency. Such a framework can also go along with performance-based budgeting for environmental improvements. It will be ideal to have budgets for non-law enforcement departments that are focused on designated high crime areas to ensure funding is reaching the communities that need it most. Finally, existing research partnerships with academic researchers should also be leveraged to rigorously evaluate such efforts (e.g., randomized control evaluation of rapid/prioritized response).

### Support the "Policing Reform Efforts through Data Analytics and Modernization"

The foundation of this report is research and data analysis; analytics can support not only crime prevention and intervention efforts, but it can also support policing reforms. As stated previously, the city has surpassed the historical high count of homicides and shootings. Concurrently, the department is faced with numerous challenges, such as the covid pandemic, civil unrest, diminishing trust in law enforcement, and declining staffing levels. In order to respond to such challenges, the department has proposed a multi-faceted budget request for policing reforms through data analytics, modernization, and innovation. It attempts to modernize the Philadelphia Police Department practices and technologies to streamline operations to do "more with less" with strong accountability in place. Specifically relevant for the current report are:

- Data analytics and rigorous statistical modeling around investigatory stops
- Mobility project (cell phones)

The first initiative builds upon the audit of investigatory stops with the Bailey agreement plaintiff, and takes it to the next level through data analytics and sophisticated statistical modeling. While recognizing the utility of proactive policing in crime prevention (ref), the department also realizes that we need a strong accountability process around investigatory stops. The order puts in place a data-driven, quarterly CompStat-style, or "PedStat", process to remediate both 4th and 14th Amendment procedural justice issues with investigative stops. Already in development is the activation of a prototype "Digital Dashboard" that provides data on a real-time basis to PPD Commanders and other

high-level supervisors regarding investigative stops and post-stop actions, including frisks, searches, and arrests. Understanding that not all racial disparities in stop demographics are police-driven, the dashboard will include results from specific analyses and benchmarks designed by statisticians and criminologists intended to scientifically detect potential racial bias issues, and evaluate intervention measures to mitigate them. Especially with today's gun violence crisis, Police Reform must be balanced with the need for public safety. Proper monitoring of operations with transparency, and acting when necessary with interventions grounded in evidence, is how 21st Century Police Departments will be successful in keeping our citizens safe from gun violence while preserving legitimacy with the community.

The second initiative, the mobility project, expands a currently piloted cell phone project to the city-wide so that officers will have department-issued cell phones. This will have multitudes of benefits, including officer safety, reduced city liability (officers without department issued phones will be forced to use personal phone), resource allocation analysis of foot beats and bikes who do not have mobile data terminals (MDT; a computer in a car), increased community engagement, investigative support (direct line to assigned detectives / beat officers), and better information sharing (pushing crime patterns, pulling street knowledge). Increased community contact can also be more formalized through such research efforts as no-law enforcement matter home visit, as noted previously[102].

# Recommendations by the DAO

## Improving shooting clearance rates

### Support the PPD's Creation of a Non-Fatal Shooting Investigation Unit

As our analysis shows, the PPD is most effective at solving shootings when the investigation is undertaken by a unit trained in and dedicated to solving shootings. (see Appendix 7: DAO 6, DAO 8). We support the PPD's research-informed decision to create a dedicated Non-Fatal Shooting Investigation Unit (Cook, Braga, Turchan, Barao, 2019).

### Invest in Forensic Technology

One of the clear lessons of the DAO's Conviction Integrity Unit work—which has, to date, exonerated over 20 people nearly all of whom were innocent and spent decades in

[102] Sierra-Arévalo, Michael. (2019). Opinion: 1 single good encounter with a cop engenders a lot of trust, study finds. NJ.com https://www.nj.com/opinion/2019/09/1-single-good-encounter-with-a-cop-engenders-a-lot-of-trust-study-finds.html

jail)[103]—is that Philadelphia has long lagged peer cities in investing in forensic DNA technologies to improve fatal and non-fatal shooting clearance rates and gun case outcomes. This technical forensic obsolescence leads to weak investigations, cases that fail in court for want of strong evidence, and, at worst, wrongful convictions of innocent people. This is no reflection upon Police Commissioner Outlaw or the excellent director of the PPD's Office of Forensic Science (OFS), Dr. Michael Garvey, both of whom inherited a PPD culture in Philadelphia that they did not make.

Enhancing the capabilities and capacity of the OFS to test certain kinds of ballistic evidence taken from all or nearly all gun violence crime scenes for DNA could massively increase clearance rates for these crimes, and the addition of robust DNA evidence would strengthen cases, improving just outcomes and helping prevent wrongful convictions. In addition to improving cases going forward, forensic technologies could help bring accountability and closure in some of the nearly 9,000 shootings since 2015 for which there have been no arrests by identifying incidents with the same DNA to provide new leads and spur additional investigations. Serious investment in forensic cell phone analysis technology is also necessary, as cell phones provide many kinds of compelling evidence to solve and prosecute gun violence. The DAO's Gun Violence Task Force has invested in a small amount of cell phone forensic technology that, in collaboration with PPD, has proven very successful as an investigative tool. That success should be expanded.

Ideally, a great city like Philadelphia would not only have a great director of the PPD's OFS and a Police Commissioner increasingly supportive of forensics as an investigative tool (as Philadelphia does now), but it would have the space, staffing and funding necessary to make a huge difference in gun violence. OFS space would triple to about 150,000 square feet. Staffing would increase significantly after a period of hiring and training. Capacity to process evidence would massively increase with an increase in staffing for PPD crime scene personnel. The one-time price tag for this massive improvement would be approximately 5% of the PPD's annual budget, which is quickly approaching $1 Billion. Serious improvement in forensics could be made for less than 5% in one-time expense. Either way, some annual expenses would also increase. However, every dollar invested would come back to the city, with dividends, in avoiding future litigation brought by innocent and wrongfully convicted people, in saving the cost of incarcerating the innocent, and in all the economic improvements and tax base improvements that accompany effective reduction of violent crime. Improving gun case outcomes

[103] Philadelphia District Attorney's Office (n.d.). Exonerations. Public Data Dashboard. https://data.philadao.com/Exonerations.html

## Improving gun case outcomes

### Institutionalize Interagency Collaborations and Processes

Changes in gun case outcomes are part of a long-term trend reflecting shifts in the law and law enforcement practices, among other factors. We have been working to address this trend by implementing institutional changes in the DAO and developing collaborative processes and practices with our partners. These include combining the Homicide and Non-Fatal Shooting Units, creating the Intelligence Unit, and expanding the work of the GVTF in the DAO (including to handle preliminary hearings in gun cases), and developing the non-fatal shooting track in partnership with the courts and the VUFA/NFS review process with the PPD. The DAO recommends continuing to support these new initiatives, and looks forward to incorporating the PPD's new Non-Fatal Investigations Unit into these collaborations and processes.

### Invest in and Expand DAO Collaborative Intelligence, Investigations, Community-Centered, and Victim-Centered Efforts

Invest in the DAO's recent expansion of its collaborative intelligence, investigative, community-centered, and victim-centered efforts, all of which are aimed at effective prosecution of gun violence, intervention in communities that suffer from gun violence, and prevention in underserved and traumatized communities. These investments would support competitive salaries, new positions (e.g., analysts in the Delaware Valley Information Center (DVIC), social media analysts, personnel to support 57 Blocks Initiative), and new initiatives (e.g., Intelligence Unit; Gun Crime Strategies; expanding Crisis Assistance, Response, and Engagement for Survivors (CARES); diversion expansion; 57 Blocks Initiative), including new efforts undertaken in the last few years without additional funding that were supported by both the PPD and DAO.

## Improving victim and witness appearance rates

### Prioritize Building Trust Between Communities and Law Enforcement

Building trust should improve clearance rates, witness appearance rates, and gun case outcomes, and therefore should be a top priority of all agencies. Trust can be developed in many ways, including by increasing positive interactions with law enforcement and elevating community engagement. Research in New Haven, Conn., found that "a single non-enforcement interaction can, in fact, improve the public's attitudes toward police" (Sierra-Arévalo, 2019). In the study, half the residents who received a

baseline survey were then randomly selected to receive a "non-enforcement interaction with a uniformed officer in which the officer introduced themselves, asked about neighborhood issues, and then gave the resident a business card with the officer's hand-written work phone number" (Sierra-Arévalo, 2019). Results found "that one non-enforcement community policing interaction markedly increased residents' perceptions of police legitimacy and willingness to cooperate with police [… and] the results were strongest among Black residents and those with more negative attitudes about police" (Sierra-Arévalo, 2019).

### Reduce Counterproductive Misdemeanor Arrests and Cases

Meanwhile, police should engage in less misdemeanor enforcement to build trust, improve appearance rates, and so that they can spend a higher proportion of their time deterring or working on more serious cases. This would require additional support for non-law enforcement responses to many events police are currently called to respond to (Ratcliffe, 2021),[104] but would also reduce the burden to other system actors from prosecuting and processing these cases in the court system. According to August Vollmer, the "Father of American Policing," the enforcement for crimes of morality, such as substance use and sex work, should "not [be] a police problem; [drug addiction] never has been and never can be solved by policemen" (Vollmer, 1936, 117-8).[105] Involvement in such enforcement "engenders disrespect both for law and for the agents of law enforcement" (Vollmer, 1936, 237). Problems with misdemeanor enforcement—which research has found to be criminogenic (Agan, Doleac, Harvey, 2021)[106]—are exacerbated when witnesses, including law enforcement, do not appear in court to testify in those misdemeanor cases. When a court case fails to advance because of a court actor's FTA, causing further hardship in terms of travel, missed work or school, or with childcare or other logistical issues among those who do appear to testify, public confidence and trust in the system erodes. Improving officer appearance rates in misdemeanor cases is not a viable strategy, as that would remove officers from the streets of the communities where they are needed to deter gun violence with their physical presence, e.g., on foot patrols. More low-level offenses and misdemeanors could be handled with citations, like the city did with cannabis (PPD

[104] Ratcliffe, J.H. (2021). Policing and public health calls for service in Philadelphia. *Crime Science, 10(*5): 1-6.
[105] Vollmer. A. (1936). The police and modern society. Berkeley, Calif., University of California Press.
[106] Agan, A.Y., Doleac, J.L., & Harvey, A. (2021). Misdemeanor Prosecution. National Bureau of Economic Research. https://www.nber.org/papers/w28600

Directive 3.23, 2021).[10727] Therefore, criminal justice partners must continue to collaborate to reduce arrests and prosecutions for low-level offenses, particularly of people who are in crisis due to poverty, homelessness, mental illness, or substance use disorder.

### Invest in Communication Technology, Transportation, Relocation, and Trauma Support for Victims and Witnesses

The DAO has been investing and continues to seek funding to improve its technological infrastructure, which has not kept pace with advancements and changes in how people communicate, among other issues. Correspondence sent through the mail is slow and ineffective, and busy schedules can make it hard to find time to connect on the phone, so communicating via text messages and cell phone applications offers a promising way to improve victim and witness experiences with the criminal legal system and appearance rates. To begin to improve its technological infrastructure, the DAO received funding to build a new custom case management system in-house, including a new module for the Victim Witness Services (VWS) Unit. In addition, the DAO is seeking external partnerships and funding to utilize text messaging tools to quicken and improve our ability to communicate with victims and witnesses via text messages and phone apps.

- Text messaging services are used by the Defender Association of Philadelphia, and in hundreds of jurisdictions across the U.S.
- In addition to facilitating communication, text messaging can be used to coordinate services for victims and witnesses with community-based organizations, make it easier for victims to file paperwork to receive compensation and send Victim Impact Statements, and provide transportation vouchers (see below)
- Since 2010, there have been over 2,500 cases where either intimidation or retaliation were charged in Philadelphia, and there would likely be more but for the lack of additional technologically-mediated reporting mechanisms.

Therefore, the DAO recommends increasing local investment in technology to facilitate communication with victims and witnesses.

Due to funding limitations, the DAO is only able to offer free transportation to court in the form of van rides or ride-share vouchers to people who are elderly and/or disabled. Among low-income clients, reasons frequently cited for not appearing in court include a lack of transportation or a lack of childcare. Expanding our free court transportation

[107] Philadelphia Police Department (2021). Directive 3.23: POSSESSION OF SMALL AMOUNTS OF MARIJUANA (30 GRAMS OR LESS) CITY CODE CHAPTER §10-2100. http://www.phillypolice.com/assets/directives/D3.23-PossessionOfSmallAmountsOfMarijuana.pdf

program would allow us to also send ride vouchers to those who simply lack transportation or live in areas of the city where public transit is not as easily accessible. We also supply a discounted parking voucher to aid victims willing to drive to court. However, the discount is so small that many victims on low or fixed incomes are still unable to afford the parking cost. This is also a problem for victims dealing with mobility issues, as the only parking garage that supplies vouchers is several blocks away from both courthouses. Transportation logistics could be organized through a mobile app, which would allow people to sign up for transportation vouchers and let the DAO send ride-share vouchers through messaging on the app. Therefore, the DAO recommends vastly increasing its capacity beyond only providing transportation to those who are elderly and/or disabled to instead provide free rides to court for every victim or witness who has a need.

Beyond staying in touch and helping with transportation to court, sometimes people need to relocate from their home and community to feel safe participating in the criminal legal process. The Witness Relocation Program is intended to quickly assist in the relocation of witnesses from areas where they are victims of real or potential intimidation, harassment, or harm because of their witness status. Assistance may include, but is not limited to, reasonable moving expenses, security deposits, rental expenses, storage unit rental, P.O. Box fees, and utility startup costs. The aim is to help victims and witnesses relocate without financial loss or reduction in their standard of living. This assistance includes facilitating moves within Philadelphia Housing Authority (PHA), which can take time; the DAO advocates on behalf of victims/witnesses to substantially reduce the PHA waitlist timeline and to assist with relocation costs.

Relocation may include multiple family members. Currently, victim service staff regularly shift families from one impoverished neighborhood to another with similar crime rates, neighborhoods that may only be blocks away from the location where the underlying crime occurred. The need to relocate families is extremely high and, as a result of the crime oftentimes occurring within feet of the family residence or victim's home, there is an enormous amount of trauma and fear for family members (especially children). Most families are unable to move from the area of danger due to financial barriers. Furthermore, some victims/witnesses may not qualify for certain relocation assistance programs (such as the PAAG's Witness Relocation Program) due to criminal history, lack of cooperation with law enforcement, or other factors.

Depending on the family size, financial barriers to relocation, and the need to utilize temporary lodging accommodations, relocation expenses can be substantial; current funding levels do not meet the level of need, which is certainly substantial, with over 550 homicides and numerous shootings. Given that the DAO has seen an increase in the

amount relocation referrals not qualified for State assistance (50% of relocation referrals received in 2021 do not qualify for the PAAG program, compared to only 15% in 2018), it will be necessary to increase our office's relocation budget in order to assist community members who may not meet State requirements. Currently, the budget for 2022 is $260,000, though the allocation tends to vary year-to-year; e.g., it was $165,000 in 2018. The DAO recommends increasing the budget of the Witness Relocation Program to at least $1 million dollars to improve the ability of the legal system to achieve justice by relocating more people so they can feel safe and participate as witnesses. Combined with strong safety planning, hard work by victim advocates on a case-by-case basis, and other relocation dollars, more resources would create a greater impact for those in most need of this type of support, and improve witness appearance rates. This is, in effect, an effort to be more inclusive when it comes to assisting community members who are directly and indirectly affected by violent crime.

## Preventing gun violence in the community

### Invest in Community- and Place-Based Non-Law Enforcement Solutions in Historically Traumatized and Under-Resourced Communities at Risk of Gun Violence

Structural racism has caused disinvestment and poverty in specific areas of Philadelphia, which has, in turn, created the conditions in which shootings occur (see Appendix 7: DAO 1). Law enforcement cannot solve systemic divestment. Philadelphia needs to proactively work to end the de facto redlining of poor Black communities, expand new investment and living-wage jobs in Black communities through monies from the American Relief Act and the recent Infrastructure legislation, use new techniques like the proposed Philadelphia public bank to invest in Black communities, and sanction or prosecute institutions that discriminate. We must see the availability of affordable housing throughout Philadelphia and the fair and full funding of our schools as central to our crime prevention strategy.

The DAO recommends making coordinated and targeted investments of money and resources in parts of Philadelphia harmed by structural racism, including financial investments in community-based violence prevention efforts and city services that do not involve law enforcement. Some of the most rigorous evidence we have that non-law enforcement strategies can reduce violence is based on research conducted in Philadelphia (South, 2021).[36] There is evidence that the following strategies lead to reductions in violence in Philadelphia, while improving other positive outcomes:

- Greening vacant lots (Branas et al, 2018)[108]
- Planting trees (Branas et al, 2018)
- Picking up trash (Branas et al, 2018)
- Structurally repairing occupied homes (South, MacDonald, Reina, 2021)[109]
- Remediating abandoned houses (MacDonald, n.d.)[110]

In addition to the above Philadelphia-based research, there is evidence from Chicago that improving street lighting can reduce crime (Chalfin, Hansen, Lerner, Parker, 2021).[111] Recent reporting on issues with repairing lighting in Philadelphia underscore the need to include such non-law enforcement responses in any broader violence prevention strategy (Marin and Briggs, 2021).[112] In addition to prioritizing responding to 311 calls in areas most impacted by gun violence, the DAO recommends developing and implementing a place-based non-law enforcement violence-prevention plan that proactively targets areas most impacted by gun violence, redlining, and mass incarceration and supervision for positive improvements, such as greening vacant lots, planting trees, picking up trash, repairing occupied and abandoned homes, and improving lighting. The DAO is working to create such a plan: the "57 Blocks Initiative."

### Create Fund Modeled on The Chicago Fund for Safe and Peaceful Communities to Increase Private and Institutional Funding for Philadelphia-Based Community Gun Violence Prevention Organizations

Philadelphia should create a fund for prevention and intervention modeled on the Chicago Fund for Safe and Peaceful Communities[113] to help increase funding of grassroots

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[108] Branas, C.C., South, E., Kondo, M.C., Hohl, B.C., Bourgeois, P., Wiebe, D.J., & MacDonald, J.M. (2018). Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear. *Proceedings of the National Academy of Sciences, 115*(12), 2946-2951. https://www.pnas.org/content/115/12/2946

[109] South, E.C., MacDonald, J.M., & Reina, V. (2021). *JAMA Netw Open., 4*(7): e2117067. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2782142

[110] MacDonald, J.M. (2019). A randomized trial of abandoned housing remediation, substance abuse, safety, and violence. ISRCTN Registry. https://www.isrctn.com/ISRCTN14973997

[111] Chalfin, A., Hansen, B., Lerner, J., & Parker, L. Reducing Crime Through Environmental Design: Evidence from a Randomized Experiment of Street Lighting in New York City. *Journal of Quantitative Criminology*, 10.1007/s10940-020-09490-6; http://achalfin.weebly.com/uploads/8/5/4/8/8548116/lights_04242016.pdf

[112] Marin, M., & Briggs, R.W. (November 30, 2021). Broken streetlight complaints in Philly triple due to botched city contract. Philadelphia Inquirer. https://www.inquirer.com/news/street-light-outages-philadelphia-crime-rates-20211130.html

[113] The Chicago Fund for Safe and Peaceful Communities (n.d.). Home page. www.safeandpeacefulchi.com

community-based organizations in Philadelphia. "The Chicago Fund for Safe and Peaceful Communities seeks to work with individuals, organizations and institutions to empower communities, strengthen relationships and build trust across Chicago." It is "supported by institutional and individual donors" -- including academic and private contributors -- and "offers rapid-response grant opportunities designed to support community-based actions and activities that make neighborhoods safer." The strategies pursued through the funding align with those recommended in this report: Street Outreach, Support Services and Jobs; Police Reform and Community Relations; Gun Policy; Community Safety & Peace.[114] Accordingly, committing to this recommendation would support the long-term success of the other recommendations, such as investing in historically redlined communities, Cure Violence models, and community-based organizations. Research shows that "every ten additional organizations formed to address violence and build stronger communities led to a 9% drop in the murder rate."[115]

### Request that State and Federal Law Enforcement Partners Collaborate to Increase Random Inspections of Federally Licensed Gun Sellers

Given that relatively few guns are seized by local law enforcement compared to the number of guns legally bought and sold each day, and that enforcement efforts to date have produced racial disparities in gun possession offenses, the DAO recommends going further upstream to increase inspections of federally licensed gun sellers. This is in some ways analogous to efforts to use data to identify potentially problematic opioid prescribing practices.

Information presented in Appendix 7: DAO 16 supports this recommendation to expand collaborations around inspections and investigations of gun sellers. Specifically, a preliminary analysis of national data found that as the percentage of gun dealers that are inspected increased, the number of gun dealers decreased (David Johnson, personal correspondence). Extrapolating these findings to Philadelphia and Pennsylvania, increasing inspections of gun dealers in and around Philadelphia would reduce the number of gun dealers, and hence the flow of guns into Philadelphia. While Philadelphia has relatively few gun sellers compared to neighboring counties, many guns sold in other guns are recovered

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[114] Partnerships for Safe and Peaceful Communities (n.d.). Our Strategies. https://safeandpeaceful.org/our-strategies/

[115] Sharkey, P. (January 25, 2018). "Op-Ed. Community investment, not punishment, is key to reducing violence." Los Angeles Times. https://www.latimes.com/opinion/op-ed/la-oe-sharkey-violence-community-investment-20180125-story.html; Sharkey, P. (2018). *Uneasy peace: The great crime decline, the renewal of city life, and the next war on violence.* WW Norton & Company Inc.

by law enforcement in Philadelphia, requiring cross-county collaborations to address. However, 4 gun sellers in Philadelphia are among the top 10 in the state in terms of selling guns later recovered by law enforcement, suggesting local efforts would also be beneficial. In addition to proactive policing strategies and inspections, other efforts could be made to collect more information at the point of sale that could deter straw purchases and make them easier to investigate. For example, legislation could require that more information be collected from buyers, such as vehicle information, and missing information could trigger a suspension of operations until an inspection has been completed. We recommend beginning with random inspections of the highest-volume dealers and those with the most guns recovered by law enforcement in parts of the city and state with the highest concentrations of gun violence. Historically, such strategies have been supported and often led by community and religious groups, and law enforcement can use data available from the local, state, and federal partners to support these efforts. To date, the DAO negotiated with the Pennsylvania Attorney General's Office to more than double funding for the Philadelphia GVTF to support increased staffing and expand capacity for investigation and prosecution of cases involving guns.

### Convene All Stakeholders Who Play a Role in Gun Violence Prevention at the PIRPSC Data Table

The DAO recommends expanding PIRPSC to include representatives and data from additional agencies involved in preventing gun violence, including the Philadelphia Sheriff's Office, the Philadelphia Adult Probation and Parole Department (APPD), and the Philadelphia Department of Prisons (PDP). Sharing data will promote transparency and accountability in Philadelphia.

For example, the Philadelphia Sheriff's Office is responsible for working with the PPD to remove guns from homes following a Protection From Abuse (PFA) order,[116] a stated priority of Sheriff Bilal.[117] Based on research conducted in Philadelphia on domestic calls for assistance in 2013 (Sorenson, 2017),[118] we recommend more regular efforts to

[116] Philadelphia Police Department (2021). Directive 3.9: DOMESTIC ABUSE AND VIOLENCE. http://www.phillypolice.com/assets/directives/D3.9-DomesticAbuseAndViolence.pdf

[117] The Editorial Board (December 9, 2019). "What's the point in having gun control if Philadelphia doesn't enforce it?" Philadelphia Inquirer. https://www.inquirer.com/opinion/editorials/gun-control-philadelphia-violence-domestic-abusers-law-sheriff-20191209.html

[118] Sorenson, S.B. (2017). Guns in intimate partner violence: Comparing incidents by type of weapon. *Journal of Women's Health, 26*(3), 249-258. www.liebertpub.com/doi/pdf/10.1089/jwh.2016.5832

- ensure guns are taken from homes of abusers as the law allows (Sorenson, 2017),
- document enforcement of this state law (Sorenson, 2017)

Enforcing the state law to seize guns in such cases should help mitigate fear of retaliation following arrest and trauma associated with being threatened with a gun (Sorenson, 2018),[119] but we do not have data available to us on that process. In addition, we recommend having our law enforcement partners conduct regular welfare checks on homes where guns were seized following a PFA; engaging in less low-level misdemeanor enforcement would make it possible to instead spend time performing regular welfare checks on survivors of domestic violence, among other preventative law enforcement.

APPD, meanwhile, is responsible for supervising and providing services to people during the pretrial period between arrest and adjudication, and often as part of a sentence. An analysis of homicides in Philadelphia between 1996-1999 found that 25% of people arrested for committing a murder were on probation or parole at the time of the murder, while 29% were awaiting trial or sentencing (Tierney, McClanahan, Hangley Jr., 2001).[120] While these findings should be considered in light of what we know of wrongful convictions during that era (e.g., 3 of the people exonerated by the DAO in the last 4 years were originally convicted between 1996-1999),[121] without incorporating APPD data and work into our analysis, we are not able to replicate the 2001 analysis 20 years later. More generally, without regular access to APPD data, we do not have an efficient data-driven way of knowing who is being supervised, their level of supervision, whether they violated their probation or parole, and whether and when they may have had a detainer issued to hold them in jail. We include this recommendation in the hopes that the APPD, which has previously hesitated to share data, will join PIRPSC (see Appendix 7: DAO 2).

Lastly, the PDP would be a valuable addition to PIRPSC. Historically, the PDP has refused requests by the DAO to share data that would improve our ability to identify who is in custody each day, including people arrested for gun crimes (see Appendix 7: DAO 2). This information is critical as, based on the analysis by DPH, we know that over half of those

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[119] Sorenson, S.B. (November 12, 2018). A woman terrorized with a gun is a woman harmed by one. The Trace. www.thetrace.org/2018/11/coercive-control-domestic-violence-guns-public-health

[120] Tierney, J.P., McClanahan, W.S., & Hangley Jr., B. (2001). Murder is no mystery: An analysis of Philadelphia homicide, 1996-1999. Public/Private venture. https://www.ojp.gov/ncjrs/virtual-library/abstracts/murder-no-mystery-analysis-philadelphia-homicide-1996-1999

[121] Philadelphia District Attorney's Office (n.d.). Exonerations. Public Data Dashboard. https://data.philadao.com/Exonerations.html

arrested for shootings had previously been in PDP custody (see DPH Analysis). Access to PDP data would also help the DATA Lab improve our analyses and research by more precisely accounting for incapacitation while incarcerated.

# Recommendations by PDPH

## Targeted strategies to address the drivers of violence

Beyond enforcement, identifying the upstream drivers of firearm violence that predispose certain individuals and communities to being exposed to violence and its effects is the best way to orient ourselves around a public health approach. Although there is often concern that transformative interventions that address root causes fail to have an immediate effect, it is encouraging to note that many of the interventions that have demonstrated potential to reduce shooting and homicides demonstrate these effects within a couple of years of implementation. This means that careful, rigorous implementation of some of these strategies in 2018-2019 as violence was increasingly could translate to significant returns for communities now. As an example, some of the original research on greening done here in Philadelphia demonstrated significant reductions in violence as well as other key outcomes within the first couple of years in the study period (Branas et al 2018)[122].

Below, we lift up a few violence intervention program models that have shown promise in Philadelphia and elsewhere and are particularly well suited to address individuals arrested for shootings or at risk for such arrests. **We recommend identifying effective upstream interventions, concentrated in neighborhoods with the highest rates of firearm violence, that have three key features: addressing trauma, providing opportunity, and reducing entry into the criminal justice system for those most vulnerable to firearm violence.**

There are a few key strategies that are particularly relevant to those most vulnerable to being drawn into the cycle of violence. For example, the Cure Violence model attempts to stop the spread of violence in communities by using the methods associated with infectious disease control–detecting and interrupting conflict, identifying and treating those

[122] Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear Charles C. Branas, Eugenia South, Michelle C. Kondo, Bernadette C. Hohl, Philippe Bourgois, Douglas J. Wiebe, John M. MacDonald Proceedings of the National Academy of Sciences Mar 2018, 115 (12) 2946-2951; DOI: 10.1073/pnas.1718503115

most vulnerable, and changing community norms. This is accomplished by engaging affected communities and credible messengers from within those communities. Prior analyses of this model in Philadelphia showed a 30% reduction in shootings in treatment areas (Roman et al, 2017)[123]. These results were within 2 years of implementation. It's also important to note additional outcomes of interest for some of these strategies. For example, connection to critical resources and addressing social norms are in themselves worthy outcomes to pursue.

The READI Chicago model is another model that connects specifically to men at high risk of exposure to violence with a combination of cognitive behavioral therapy, paid transitional jobs, and support services. This is achieved through a strategy of relentless engagement over a 24 month period. Although this model, unlike the Cure Violence model, has been implemented and studied predominantly in one city thus far, it has demonstrated that it indeed finds the right participants (those most vulnerable to exposure to violence and its effects). The model reports identifying individuals over ten times more likely to be shot and killed than their neighbors. In addition, 35% of the population in early analyses had been previously shot, and the average number of prior arrests was seventeen. This demonstrates the critical overlap between victimization and perpetration, underscoring why trauma healing and a trauma-informed response is needed. The early analysis also suggested that participants are also more likely to remain engaged and may have reductions in shooting and homicide involvement (Heartland Alliance, May 2021)[124].

As a final example, Advance Peace is another model that centers on those acutely impacted by cyclical and retaliatory gun violence, focuses on healing the individual and supporting change in the community. This program helps participants develop a map of their future and assists in providing tangible steps to achieve those goals. The program also makes the need for trauma healing central. Importantly, the program tracks future

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123 https://cvg.org/wp-content/uploads/2020/03/SummaryofPhilaCeaseFireFindingsFormatted_Jan2017.pdf

124 https://www.heartlandalliance.org/wp-content/uploads/2021/07/READI-Chicago-Mid-Study-Analysis-May-2021-FV.pdf

involvement in crime, future gun-related injuries and deaths, employment, and receipt of social services among participants annually (Corburn et al, 2021; advancepeace.org)[125],[126]

The common thread in these programs is that they hold potential to lift those most vulnerable from the cycle of violence and connect them to necessary trauma healing, employment, and support. This has the potential to keep people out of the cycle of violence once and for all. Further research and longitudinal follow up is needed to evaluate the impact of these programs over time.

The CARES analysis suggests that there might be many opportunities to identify those in need of trauma healing and resource provision. The city's firearm homicide review team, modeled after the Milwaukee Homicide Review Commission (MHRC), is aimed at mapping those points of contact for those on the other side of the gun–a cohort of individuals killed and injured by firearms– to identify opportunities for prevention. Our early findings suggest multiple points of contact, with health care and law enforcement being the most common, for individuals who later are victims of firearm violence. The MHRC takes a multidisciplinary, multi-agency approach, making recommendations that range from "micro-level strategies and tactics to macro-level policy change" (Milwaukee Homicide Review Commission)[127]. Implementation of MHRC recommendations in treatment districts of Milwaukee was reportedly associated with a 52% reduction in homicide in those districts (Azrael et al, 2013)[128]. This shows how building on the data-sharing and collective impact of multi agency efforts can lead to actionable recommendations, with a focus on critical, highly vulnerable people and places. **We recommend continued commitment to interagency collaboration bridging law enforcement, public health, and other key stakeholders to identify innovative opportunities for prevention.**

Philadelphia has, or is exploring, many of the interventions cited above. However, the final stage of a public health approach is to implement and scale effective programs. This can't be done without rigorous evaluation. **We recommend committing resources to**

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[125] Corburn, J., Boggan, D., Muttaqi, K. et al. A healing-centered approach to preventing urban gun violence: The Advance Peace Model. Humanit Soc Sci Commun 8, 142 (2021). https://doi.org/10.1057/s41599-021-00820-y

[126] https://www.advancepeace.org/wp-content/uploads/2021/10/Advance-Peace-Stockton-2020-Summary-Rev.pdf

[127] https://www.mcw.edu/departments/epidemiology/research/milwaukee-homicide-review-commission

[128] https://www.ojp.gov/pdffiles1/nij/grants/240814.pdf

**evaluating violence prevention efforts and programs and outlining plans to expand and scale those that show promise.**

Finally, to understand and prevent firearm related crime and injury, we need to engage the voices of those with lived experience. PIRPSC conducted a handful of informal interviews with individuals with prior experience with arrests for firearm related crimes, and has been approved to conduct a formal qualitative study of recent (<10 years) arrestees. Stories from early interviews describe a narrative supported by the CARES analysis and others above—early involvement in the criminal justice system (often for drug-related charges), unaddressed trauma, and challenges engaging trusted role models. **We recommend continued engagement with those with lived experiences in enacting the programs and policies noted above.**

## Recommendations by Defender Association

The root causes of violence are tightly intertwined and historically efforts to focus on them individually have been ineffective. The primary findings of our analysis suggest that all city agencies must align their work to principally focus on violence prevention and interventions. All city services play a role in contributing to or alleviating the root causes of violence. This requires that city agencies realign its individual case management data systems to identify and connect victims or witnesses of violent crime with supports; to partner with community led interventions designed to reduce community violence, particularly in communities of high need; and guide decision makers in how the city directs its time, city resources and investments.

### 1. Build public trust and confidence by Incorporating residents with lived experience into continued city and community stakeholders collaborative efforts to reduce community violence.

Criminal justice stakeholders must demonstrate that we can improve public safety without exacerbating racial inequities in the criminal justice system through partnership with community stakeholders. Our collaborative efforts in the Driving Equality Act provide a model. In response to the racial disparities observed in the enforcement of the motor vehicle code, community and city stakeholders, including law enforcement, worked together to become the first major U.S. city to develop a plan to reduce racial disparities in motor vehicle stops without compromising public or pedestrian safety. Similarly, city stakeholders in this working group (PIRPSC) collaborated to analyze and understand data,

develop high level agreements as to the causes of community violence, and where possible, make shared recommendations as to proposed solutions.

This collaboration has demonstrated the value in engaging city agencies outside the criminal justice system in the fight against gun violence. But future efforts must also include members of the community who have experienced gun violence - either as a victim or participant. People impacted by violence, as victim, witness, and /or participant must continue to be directly involved in designing, implementing, and making decisions related to funding anti-violence programming at every stage.

Similarly a transparent budget process, with city agencies reporting as to the specific actions they are taking, and their impact, to reduce factors that contribute to community or individual violence would build more trust between city stakeholders and residents.

## 2. Prioritize justice-system involved people residing in communities with high levels of violence for supports and explore community based alternatives to traditional justice system responses to prohibited behaviors.

We must rethink policies that exacerbate conditions that contribute to violence by prioritizing justice system involved people, their families, and 'high incarceration' communities for programming. For example, priority could be given to justice-system involved people and their families to participate in programs that already exist to stabilize housing, protect against eviction, or assist with home ownership, repairs and maintenance. The arrest itself could trigger eligibility for workforce development programs.

For people with unlawful possession offenses, otherwise unlikely to engage in future violent behavior, structured diversionary opportunities may be a better long-term investment in safety.

Similarly, investments in expanding and evaluating innovative community based pretrial supports, like those offered by Defender's Pre-entry Partnership model, may improve pretrial re-arrest rates without burdening government services. Increased funding to support Defender's pretrial advocates will increase our capacity to connect people with the supports they need to address root causes of behaviors that lead to criminal justice system involvement. This network of local community based supports, of which the Defender is a part, offers neighborhood based individual support in lieu of supervision. But frequently, Defender staff is unable to provide individual and sustained case management to support our clients during length periods of pretrial release.

## 3. Expand meaningful community partnerships that support civilian responders and credible messengers in the community.

We must invest in and partner with community leaders, including formerly justice system involved people, in their work to interrupt and end violence. Increased reliance in civilian responders to identify and mediate conflict before it escalates to violence is a promising national practice and particularly promising for Philadelphia since 'arguments' are reportedly one of the main drivers of shootings. Cure Violence, for example, is a public health model that relies on trusted community mediators, who learn about conflicts that have the potential to turn violent and mediate them to a peaceful resolution. The violence interrupters partner with outreach workers who connect people to services to support more positive life outcomes. And both work with trusted leaders to mobilize community social networks to change norms surrounding the use of violence.[129] The model itself relies on workers who are credible messengers in the communities they serve, which in practice typically means justice system involved people who are long-term residents in the neighborhoods where they work. Similar to the Cure Violence Model, stakeholders in Richmond, VA implemented a community mediator program as part of a package of interventions designed to reduce violence. Neighborhood Change Agents, as they are called in Richmond, build relationships with clients most at risk to engage in or be the victim of violence, direct them to supports, and intervene as necessary to defuse potentially violent situations as they arise. In conjunction with this model, the city also developed an intensive paid mentoring program, called Operation Peacemaker Fellowship, for people most at risk of violence. We too must consider developing programming that connects people most at risk to be impacted by gun violence, who are not quite ready to engage with workforce development with paid mentorship opportunities. While many of these types of programs already exist throughout the city, the programs themselves need sustainable streams of funding so they are able to recruit and retain dedicated qualified staff and provide a continuity of support that survives changes in leadership in city agencies. Additionally, while implementing evidence-based practices is important, we cannot exclude innovative local efforts simply because they are too novel to be a tried and true practice. For example, the developers of the Philly Truce efforts to harness technology as a tool for young people to turn to community mediators to help resolve conflict is an exciting twist to traditional community mediation programs[130]

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[129] Giffords Law Center (December 2020). American at a Crossroads: Reimagining federal funding to end community violence.

[130] https://6abc.com/philadelphia-gun-violence-philly-truce-app-youth-mentorship-power-up/11286188/

## 4. Develop more victim centered systems and invest in robust, culturally competent victim services.

National trends direct the lion's share of federal and statewide victims' crime compensation funds to law enforcement, prosecuting attorney's offices and agencies that support survivors of domestic violence and sexual assault. But our city needs us to continue to expand funding opportunities for community-based victims' services and advocacy led by people of color in neighborhoods most impacted by violence.[131]

Similarly, victims' crime compensation funds and services must reach victims and their families in traditionally underserved communities. In practice this means even people with criminal justice system entanglement must still be eligible for support. Restrictions on eligibility for direct financial compensation adversely impact victims, particularly those who reside in communities where violent crime rates are high, from obtaining funds specifically earmarked to support them. Local legislators can leverage their relationships for statewide changes to eligibility criteria while ensuring that city funds do not contain harmful eligibility criteria.

Similarly, investments that support every city agency's capacity to identify victims and witnesses of violent crime will increase opportunities to connect them with supports they need and bring a trauma centered lens to the delivery of all services. Focused interventions that direct supports to youth who have witnessed or been the victims of violence are a sound investment. And prioritizing funding that supports treatment providers in communities most at risk for violence will ensure that victims have access to culturally competent support in the communities where they reside. Investments in Increased resources for Defender's Social Services Unit will enable our office to connect our clients, especially our youth in both the dependency and delinquency systems, who may be reluctant to report their victimization to law enforcement, with the supports they need.

## 5. Take statewide action to leverage federal and statewide funding to expand hospital-based violence intervention programs and join in efforts to strengthen legislation regulating the sale of firearms.

Hospital Based Violence Intervention Programs (HVIPs) are an effective strategy to break the cycle of violence. Studies from around the nation show how HVIPs improve public safety by significantly lowering the risk that participants will be violently reinjured, perpetrate violence, or otherwise become ensnared in the criminal justice system in the

[131] https://www.inquirer.com/news/anti-violence-grant-shootings-philadelphia-20211014.html

years following hospital discharge."[132] Neighboring states, such as New Jersey, have directed Byrne JAG funds to expand and sustainably fund hospital-based violence intervention programs.

Finally, Philadelphia residents require solutions to stem the flow of firearms to the neighborhoods most at risk for community violence. Local legislators and city agencies have an important role in working leverage data, relationships, and advocacy for more responsible gun laws aimed at reducing gun trafficking and limiting bulk purchases of handguns

[132] Giffords Law Center (December 2020). American at a Crossroads: Reimagining federal funding to end community violence.

# Appendices

## Appendix 1: Resolution #200436

**RESOLUTION**

Authorizing the City Council Committee on Public Safety and the Special Committee on Gun Violence Prevention to hold hearings to review and examine the perpetrators of the last 100 shootings in Philadelphia, as well exploring the source of the guns used to commit violent crimes and the role of the criminal justice system in the offender's life.

WHEREAS, From the period of January 1, 2020 to present, there have been over 1,100 acts of gun violence in Philadelphia, with more than 301 gun-related homicides. To date, homicides in the City of Philadelphia are up 34% when compared year-to-date with 2019, and over 100 children have been victims of gun violence. In August 2020, 275 Philadelphians were victims of gun violence, the highest monthly total since 2007. In the past week alone, there have been 50 Philadelphians falling victim to gun violence; and

WHEREAS, Homicides in the city have been steadily rising over the past few years, with 2019 seeing 356 homicides compared to 246 in 2013. Gun violence is the main source of these homicides. The City has experienced a 24% increase in gun usage rates in homicides in 2020 when compared to 2019. During these same periods of time, overall crime rates in the city have fallen; and

WHEREAS, The need to investigate the source of guns that are used to carry out the slaying of Philadelphians, and also what role the criminal justice system has played in the shooters past, has never been more pressing. A study published by Jerry Ratcliffe from Temple University and George Kikuchi from the Delaware Valley Intelligence Center (DVIC), shows that just 1.5% of all known criminals are responsible for 80 percent of all detected gun crimes in Philadelphia. Also, as for the sheer number of guns in our city, in 2019 alone, the ATF recovered 4,462 guns used in Philadelphia crimes.

WHEREAS, This past Labor Day weekend, Philadelphia was struck by another wave of gun violence, where a barrage of bullets rang through Southwest Philadelphia, injuring three, while a 17 year-old was shot twice in Kensington, among other shootings; and

WHEREAS, To quell the concerning increase of both incidents of gun violence and homicides in Philadelphia, we must see continued collaboration from the District Attorney's

Office, The Philadelphia Police Department, The Philadelphia Adult Probation and Parole Department, The Defender Association of Philadelphia, community stakeholders and the First Judicial District of Pennsylvania; now, therefore, be it

RESOLVED, That the Council of the City of Philadelphia, Authorizes the Committee on Public Safety and the Special Committee on Gun Violence Prevention to hold hearings to review and examine the perpetrators of the last 100 acts of shooting in Philadelphia, as well exploring the source of the guns used to commit violent crimes and the role of the criminal justice system in the offenders life.

Curtis Jones, Jr.
Councilman, 4th District

Darrell Clarke
City Council President

Kenyatta Johnson
Councilmember-2nd District

Jamie Gauthier
Councilmember-3rd District

September 10, 2020

# Appendix 2: Resolution #210703

**RESOLUTION**

Authorizing the City Council Committee on Public Safety to hold public hearings on an interim report issued by the 100 Shooting Review Committee.

WHEREAS, On September 20, 2020, Philadelphia City Council passed Resolution No. 200436, authorizing the City Council Committee on Public Safety and the Special Committee on Gun Violence Prevention to hold hearings to review and examine the perpetrators of the last 100 shootings in Philadelphia, as well exploring the source of the guns used to commit violent crimes and the role of the criminal justice system in the offender's life; and

WHEREAS, After the passage of Resolution No. 200436, a 100 Shooting Review Committee was formed. The Committee is made up of leadership from the Philadelphia Police Department, Philadelphia District Attorney's Office, Defender Association of Philadelphia, Department of Public Health, City Controller's Office, the First Judicial District of Pennsylvania, Adult Probation and Parole, Councilmember Curtis Jones, Jr. and Councilmember Kenyatta Johnson. The Committee held its first meeting on September 30, 2020; and

WHEREAS, The original goal of the 100 Shooting Review Committee was to examine the past 100 shootings at the time of the resolution's passage to determine any trends that could be useful in curbing future gun violence, specifically focusing on identifying motivating factors for the shootings, compiling profiles and backgrounds of the shooters and an analysis of the firearms used to commit these crimes; and

WHEREAS, After an initial assessment, the group expanded its data to focus on a larger subset of over 2,000 shootings that have occurred in Philadelphia, with an expanded goal of determining how to improve gun case outcomes, shooting incident clearance rates and witness appearance rates, as well as evaluating bail trends in shooting cases; and

WHEREAS, The 100 Shooting Review Committee has convened numerous times over the course of a year to present and share data, discuss and analyze trends, and collaborate on potential solutions for reducing shootings in Philadelphia; and

WHEREAS, The 100 Shooting Review Committee will move forward with compiling its data into a report for presentation to the public. Such report should be presented before and evaluated by the City Council Committee on Public Safety; now, therefore, be it

RESOLVED, BY THE COUNCIL OF THE CITY OF PHILADELPHIA, That it hereby authorizes the City Council Committee on Public Safety to hold public hearings on an interim report issued by the 100 Shooting Review Committee.

Curtis Jones, Jr.
Councilmember, 4th District

Katherine Gilmore Richardson
Councilmember, at-large

Cherelle Parker
Councilmember, 9th District

Helen Gym
Councilmember, at-large

Jamie Gauthier
Councilmember, 3rd District

Mark Squilla
Councilmember, 1st District

Isaiah Thomas
Councilmember, at-large

Kenyatta Johnson
Councilmember, 2nd District

September 17, 2020

# Appendix 3: Committee Meeting Agendas

## Wednesday, September 30th, 2020 – 1pm – 3pm

I. Introductions
   A. Philadelphia City Council
   B. Philadelphia Police Department
   C. Philadelphia District Attorney's Office
   D. Defender Association of Philadelphia
   E. Office of Criminal Justice and Public Safety
   F. Pennsylvania Attorney General's Office

II. Primary Area of Focus
   A. Compile data from participating agencies concerning the past 100 arrests for shootings in Philadelphia:
      1. Identify Motivating Factors for the Shootings
      2. Profiles and Backgrounds of the Shooters
         a) Previous contacts with the system?
         b) Outcome of previous contacts?
         c) Descriptive profile of the last 100 arrests for shootings, above and beyond arrest/charging history.
      3. Analysis of Firearms Utilized
         a) Legal firearm vs. illegal firearm?
         b) How did the offender come into possession of the firearm?
         c) Include analysis of firearms utilized in non-fatal shootings.
      4. What trends are present within this data?
         a) Which, if any, attributes of a shooting incident make it more or less likely to be cleared by police?
         b) What is the trend of shooting, violent felony, VUFA, and PWID case disposition?
         c) How have changes in the functioning of the criminal justice system, in particular with gun crimes, correlated with changing shooting trends?

III. Additional Areas of Focus
   A. How can we work collectively to improve investigations and clearance rates?
   B. How can we work collectively to prevent shootings?
   C. How can we work collectively to stop the illegal possession of guns?

IV. Next Steps
   A. Incorporation of local universities to assist in future reports.

B. Scheduling of next meeting.

## Tuesday, October 28, 2020 – 11am – 12:30pm

I. Introductions of New Participants
   A. City Controller Rebecca Rhyhart
   B. Chief Darlene Miller from Adult Probation and Parole
   C. Dr. Ruth Abaya from the Health Department
   D. Rich McSorely from the First Judicial District
   E. Judge Tucker

II. Review of Last Meeting (Wednesday, September 30th)

III. Updated Areas of Focus
   A. Compile data from participating agencies concerning the past 100 arrests for shootings in Philadelphia:
      1. Identify Motivating Factors for the Shootings
      2. Profiles and Backgrounds of the Shooters
         a) Previous contacts with the system?
         b) Outcome of previous contacts?
         c) Descriptive profile of the last 100 arrests for shootings, above and beyond arrest/charging history.
      3. Analysis of Firearms Utilized
         a) Legal firearm vs. illegal firearm?
         b) How did the offender come into possession of the firearm?
         c) Include analysis of firearms utilized in non-fatal shootings.
      4. What trends are present within this data?
         a) Which, if any, attributes of a shooting incident make it more or less likely to be cleared by police?
         b) What is the trend of shooting, violent felony, VUFA, and PWID case disposition?
         c) How have changes in the functioning of the criminal justice system, in particular with gun crimes, correlated with changing shooting trends?

IV. Presentation Order
   A. Attorney General's Office
   B. District Attorney's Office
   C. Department of Public Health

## Thursday, January 21, 2021 – 2pm – 4pm

I. Updates on Progress
   A. Initial Findings from Expansion of Data Set - George from the PPD
   B. CARES Update - *Dr. Ruth Abaya - Department of Public Health*

II. Future Research Agenda
   A. Joint Presentation – *Research Teams from PPD, DA's Office, & Department of Public Health*

III. Academic Partnership Subcommittee
   A. Discussion on Current Academic Partnerships - *Dr. Ruth Abaya - Department of Public Health*
   B. Introduction of Dr. Jeffrey Butts - *Research Professor and Director, Research and Evaluation Center – John Jay College of Criminal Justice*
   C. Recent report – Reducing Violence without Police

## Tuesday, April 6, 2021 1pm – 3pm

I. Presentations
   A. City Controller's Office - *The City Controller will present an overview of an analysis of gun-involved crimes from 2015 to 2019 that used a combination of police and court data. The analysis, which began prior to the City Controller's inclusion in the working group, identifies similar trends to those discussed previously for conviction and clearance rates and includes findings on prior criminal history, bail usage, and diversion.*

II. Review of Revised Goals
   A. *How can the group collectively work to improve the following?*
      1. Gun Case Outcomes
      2. Shooting Incident Clearance Rates
      3. Witness Appearance Rates

III. Discussion Regarding Future Public Hearings

## Thursday, September 23, 2021 – 2pm – 4pm

I. Review of Last Meeting –
   A. Revised Goals: Reducing shootings through deterrence of illegal firearm possession, Improving Gun Case Outcomes, Improving Shooting Incident Clearance Rates and Witness Appearance Rates
   B. Questions Related to Bail Trends:

1. Verifying and understanding the causes for the trends related to bail for lead VUFA charges:
    a) Increasing use of unsecured bail as a final bail type
    b) Decreasing median bail amounts
    c) Increasing percent of defendants with bail posted
2. Have these trends continued in 2020/2021 as VUFA arrests have increased significantly?
3. What is the re-arrest rate for defendants out on bail for lead VUFA arrests and how has that changed over time?

II. Bail and Recidivism Presentation - *Philadelphia Police Department*

III. Discussion of Future Report and Public Hearing

# Appendix 4: Original Questions posed by the Committee

- A descriptive statistics on 100 shooter, with particular focus on
    - Motivating Factors for the Shootings
    - Profiles and Backgrounds of the Shooters
    - Analysis of Firearms Utilized
        - Legal firearm vs. illegal firearm?
        - How did the offender come into possession of the firearm?
        - Include analysis of firearms utilized in non-fatal shootings.
- Factors affecting the likelihood of shooting clearances
    - Which, if any, attributes of a shooting incident make it more or less likely to be cleared by police?
- The trend of case disposition with particular focus on
    - What is the trend of shooting, violent felony, VUFA, and PWID case disposition?
    - How have changes in the functioning of the criminal justice system, in particular with gun crimes, correlated with changing in shooting trends?
    - Verifying and understanding the causes for the trends related to bail for lead VUFA charges:
        - Increasing use of unsecured bail as a final bail type; Decreasing median bail amounts; Increasing percent of defendants with bail posted
        - Have these trends continued in 2020/2021 as VUFA arrests have increased significantly?
        - What is the re-arrest rate for defendants out on bail for lead VUFA arrests and how has that changed over time?

# Appendix 5: PPD Presentation Slides

## PPD Presentation on 09/30/2020

**Preliminary Analysis of 100 Arrests of the Most Recent Shooting Victims**

**Special Committee on Gun Violence**

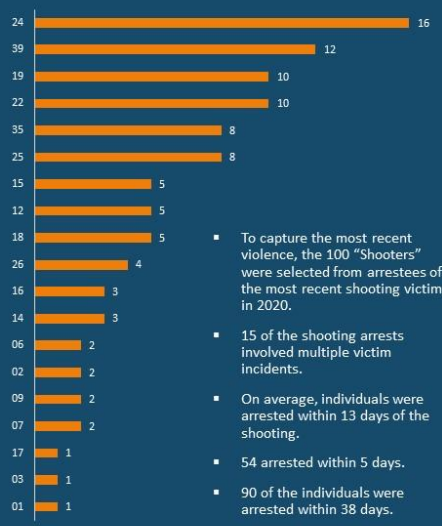
**Philadelphia Police Department**

**September 30, 2020**

The Philadelphia Roadmap to Safer Communities

## Arrest Population Description

Shooting Arrests by District




- To capture the most recent violence, the 100 "Shooters" were selected from arrestees of the most recent shooting victims in 2020.
- 15 of the shooting arrests involved multiple victim incidents.
- On average, individuals were arrested within 13 days of the shooting.
- 54 arrested within 5 days.
- 90 of the individuals were arrested within 38 days.

Month Shootings Occurred

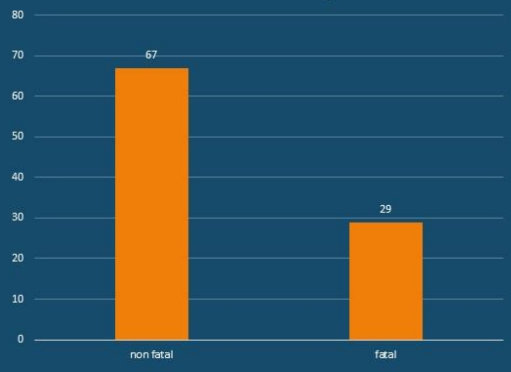



**Notable Analytical Assumptions and Limitations**

- Shooting arrests do not assume the "guilt" of the individual.
- At this time, this considers only preliminary data from arrest and shooting victim history, and not a firearm analysis or factors leading up to criminal behavior. The next version will include a more complete analysis including the source of firearms, and other factors leading up to criminal behavior.
- During the period of time these 100 arrests, 5/16 to 9/19, over 948 fatal and non-fatal shootings occurred in the City of Philadelphia.
- The statistics regarding "speed" of these sample arrests may be skewed since the sample is only the most recent arrests made.
- A larger sample size may yield different results, and focusing only on shootings with arrests may not describe the overall characteristics of all shootings, solved or unsolved. (e.g. criminal group-related shootings have low solvability factors).

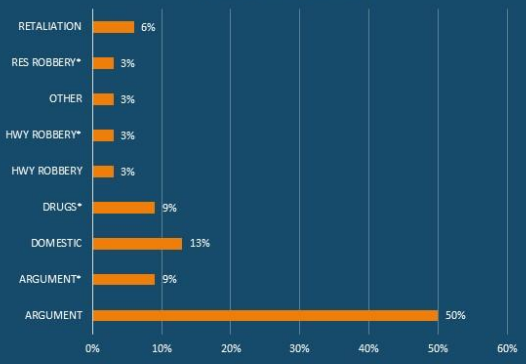
# Shooting Population Description (From Arrests Only)

Fatal vs Non-Fatal Shooting Victims




- The 100 arrests span 93 shooting occurrences, with 96 shooting victims in total.
- 29 of the 96 shooting arrests (27%) were homicides.
  - NOTE: The high number of homicides in the 100-arrest sample is likely over weighted due the increased clearance rate of firearm homicides in comparison to non-fatal shootings.

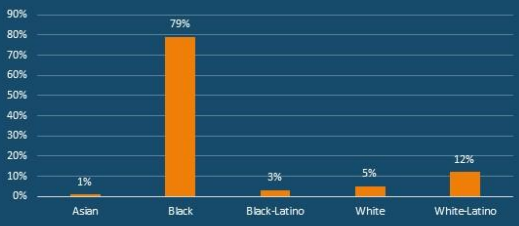
Fatal Shooting Motive



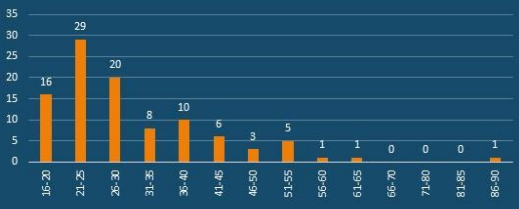

- Outside an in-depth case review, motive data is only available in homicide data
- An asterisk (*) indicates a secondary drug-related motive.
- 59% of the homicides were due to "Argument".
- 24% of the homicides were "drug related" or listed "drug related as a secondary motive.
- 13% of the homicides were "domestic".

# Demographics & Group Membership of Arrestees

Race & Ethnicity




Age




7 arrests under 18 years of age

- 94% of arrestees were male, 95% of the offenders were people of color (74% Black Male), and the peak age is in late adolescence and young adulthood (18-30 years old).

Criminal Group Membership




***NOTE:*** *Group-related shootings have lower solvability factors, often due to lack of victim participation. A City-wide group-related shooting audit is underway, with current estimates indicating that 25-35% or higher of all fatal and non-fatal shootings are "group violence" related.*

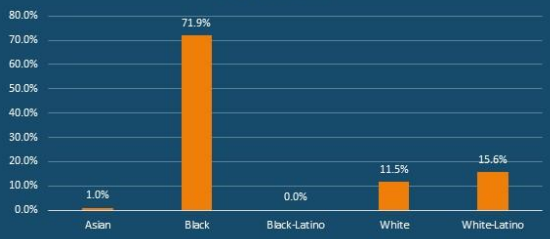
| Shooting Arrests | Male | Female | Total |
|---|---|---|---|
| Asian | 0% | 1% | 1% |
| Black | 74% | 5% | 79% |
| Black-Latino | 3% | 0% | 3% |
| White | 5% | 0% | 5% |
| White-Latino | 12% | 0% | 12% |
| **Total** | **94%** | **6%** | **100%** |

**Of the 100 Shooting Arrestees:**

- 11 have been shooting victims
- 7 were shot prior to the shooting they were arrested for
- 3 were shot previously this year
- 1 was previously shot more than once

# Demographics & Group Membership of Victims

Race & Ethnicity



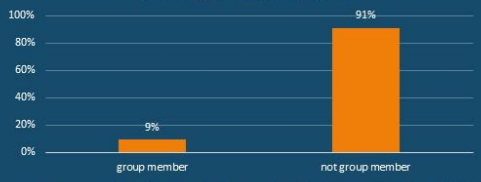

Age




4 victims under 18 years of age

- A total of 96 individuals were shot by the 100 shooting arrestees
- 86.5% of victims were male, 88.5% of the victims were people of color (61.5% Black Male), and the peak age is in young adulthood to mid-thirties (21-35 years old).

Criminal Group Membership



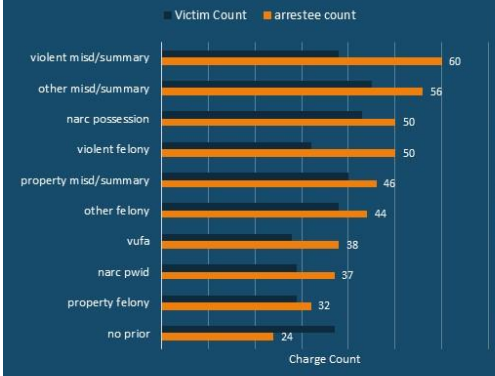

***NOTE:*** *Group-related shootings have lower solvability factors, often due to lack of victim participation. A City-wide group-related shooting audit is underway, with current estimates indicating that 25-35% or higher of all fatal and non-fatal shootings are "group violence" related.*

| Shooting Victims | Male | Female | Total |
|---|---|---|---|
| Asian | 1.0% | 0.0% | 1.0% |
| Black | 61.5% | 10.4% | 71.9% |
| Black-Latino | 0.0% | 0.0% | 0.0% |
| White | 9.4% | 2.1% | 11.5% |
| White-Latino | 14.6% | 1.0% | 15.6% |
| Total | 86.5% | 13.5% | 100.0% |

**Of the 96 Shooting Victims**

- 5 had been shot previously
- 1 was shot twice in the past, with their third and final shooting represented here, resulting in his death

# Arrest Charging History of Last 100 Shooting Arrestees & Victims




| Arrest Background (Historical Charge Counts) | Arrestees who have previous charge | Avg # of charges per person | Shooting Victims who have previous charge | Avg # of charges per person |
|---|---|---|---|---|
| Violent misdemeanor/summary | 60 | 3.3 | 38 | 2.5 |
| Other misdemeanor/summary | 56 | 1.5 | 45 | 1.4 |
| Violent felony | 50 | 1.6 | 32 | 1.1 |
| Narcotics possession | 50 | 1.9 | 43 | 1.7 |
| Property misdemeanor/summary | 46 | 1.6 | 40 | 1.7 |
| Other felony | 44 | 1.1 | 38 | 0.8 |
| **VUFA** | **38** | **1.6** | **28** | **1.4** |
| **Narcotics PWID** | **37** | **0.9** | **29** | **0.6** |
| **Property crime felony** | **32** | **1.4** | **29** | **1.4** |
| No prior | 24 | NA | 37 | NA |
| | | | | |
| **VUFA / Violent felony** | **57** | **3.2** | **40** | **2.5** |
| **VUFA / Violent felony / PWID** | **68** | **4.1** | **44** | **3.2** |

Note: charges were used; DA declined charges were excluded; arrest history limited to year 2000 and onward

- 50% of the arrestees had a Violent Felony charge in their criminal history, as did 33% of the shooting victims
- 38% of the arrestees had a "Violation of Uniform Firearms Act" (VUFA) charge, as did 29% of the shooting victims
- 37% of the arrestees had a "Narcotics Possession with Intent to Distribute" (PWID) charge, as did 30% of the shooting victims
- 57% of the arrestees had either VUFA or Violent Felony charges in their criminal history, as did 42% of the shooting victims
- 68% of the arrestees had either VUFA, PWID or Violent Felony charges, as did 42% of the shooting victims

## What will the analysis of the last 100 shooters tell us?

- Characteristics of recent violence that has resulted in arrests
- Small sample size helps conducting in-depth qualitative analysis (e.g., case review)

## What will this analysis not tell us?

- The last 100 shooter sample likely is a biased sample representing "easier-to-solve" cases
  - e.g., this sample may miss retaliatory shootings between criminal groups where parties involved are not cooperating
- Any characteristics identified need a comparison for interpretations
  - e.g., comparing over time or against the citywide trend will help identify what is "unusual"

## Collaborative Data Analysis Group to Expand Research Scope

- Data analysts from the Philadelphia Police, District Attorney's Office, Dept. of Public Health, and Managing Director's Office have established a data analysis working group to explore such questions as:
  - Include analysis of firearms utilized in fatal and non-fatal shootings, including type, "time to crime", and sourcing.
  - What is the descriptive profile of the last 100 arrests for shootings, above and beyond arrest/charging history?
  - Which, if any, attributes of a shooting incident make it more or less likely to be cleared by the police?
  - What is the trend of shooting, violent felony, VUFA and PWID case disposition (e.g. guilty/not guilty/dismissed, withdrawn, etc)?
  - How have changes in functioning of the criminal justice system, in particular with gun crimes, correlated with changes in shooting trends?
- *When possible, a larger sample size will be used for quantitative analysis with appropriate comparisons for contextualization.*

PPD Presentation on 10/28/2020

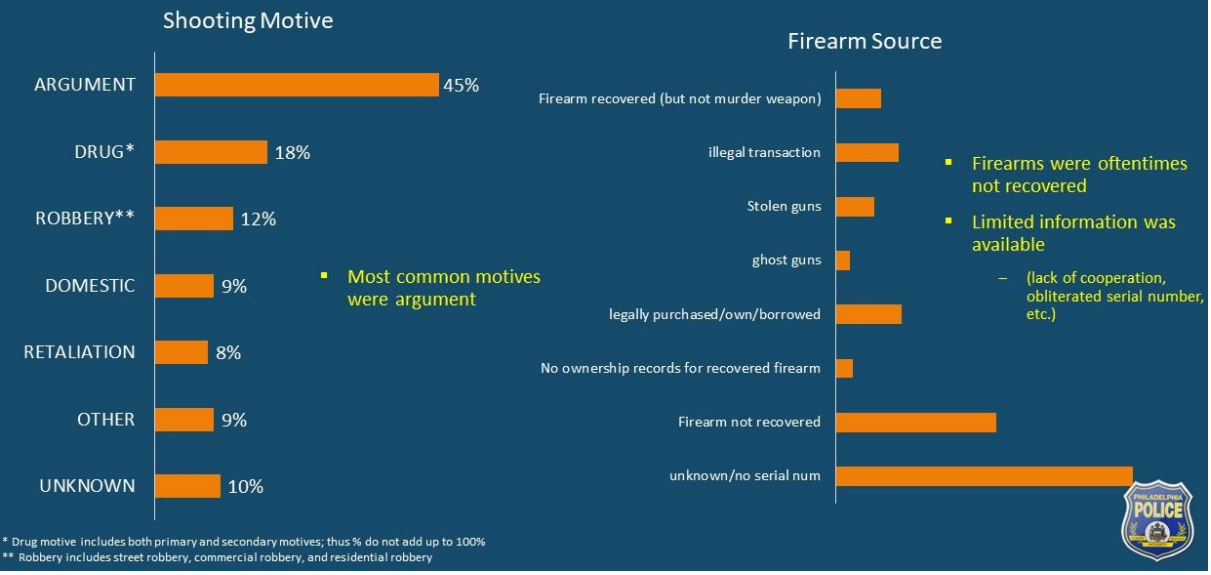
# Motive and Firearm Source on a 200 Shooter Sample

**Special Committee on Gun Violence**
**Philadelphia Police Department**
**October 28, 2020**

The Philadelphia Roadmap to Safer Communities

## Motive and Firearm Source

**(200 Shooter Sample (last 100 and random 100 between 2015-2020)**




Note: * Drug motive includes both primary and secondary motives; thus % do not add up to 100%
Note: ** Robbery includes street robbery, commercial robbery, and residential robbery

# Appendix: Motive and Firearm Source

## (200 Shooter Sample comparison)

| Motive | count | | | % | | |
|---|---|---|---|---|---|---|
| | last 100 | random 100 | total | last 100 | random 100 | total |
| ARGUMENT | 50 | 41 | 91 | 50% | 41% | 45% |
| DRUG* | 18 | 18 | 36 | 18% | 18% | 18% |
| ROBBERY** | 8 | 17 | 25 | 8% | 17% | 12% |
| DOMESTIC | 15 | 4 | 19 | 15% | 4% | 9% |
| RETALIATION | 8 | 9 | 17 | 8% | 9% | 8% |
| OTHER | 8 | 11 | 19 | 8% | 11% | 9% |
| UNKNOWN | 7 | 14 | 21 | 7% | 14% | 10% |
| total | 101 | 100 | 201 | 100% | 100% | 100% |

Note: * Drug motive includes both primary and secondary motives; thus % do not add up to 100%
Note: ** Robbery includes street robbery, commercial robbery, and residential robbery

| gun source | count | | | % | | |
|---|---|---|---|---|---|---|
| | last 100 | random 100 | total | last 100 | random 100 | total |
| Firearm recovered (but not murder weapon) | 10 | 3 | 13 | 10% | 3% | 6% |
| illegal transaction | 8 | 10 | 18 | 8% | 10% | 9% |
| Stolen guns | 7 | 4 | 11 | 7% | 4% | 5% |
| ghost guns | 3 | 1 | 4 | 3% | 1% | 2% |
| legally purchased / own / borrowed | 12 | 7 | 19 | 12% | 7% | 9% |
| No ownership records for recovered firearm | 2 | 3 | 5 | 2% | 3% | 2% |
| Firearm not recovered | 31 | 15 | 46 | 31% | 15% | 23% |
| unknown/no serial num | 28 | 57 | 85 | 28% | 57% | 42% |
| **Grand Total** | **101** | 100 | 201 | 100% | 100% | 100% |

# What is the trend in number of crime guns recovered?




- Crime Guns recovered each year has been steadily increasing.
- Between 2015 and 2019, Crime Gun recoveries have increased 33%.
- Simultaneously, Pedestrian Stops have decreased drastically since 2015 (-74%)
- Vehicle stops remained steady, but drastically declined during 2020 while continuing to recover crime guns

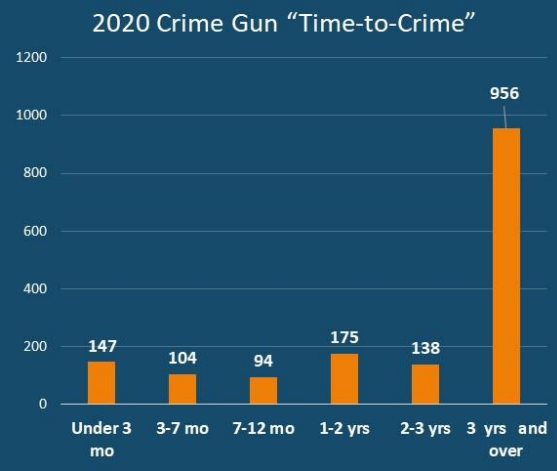
Sources: PPD Office of Forensic Science Firearms System

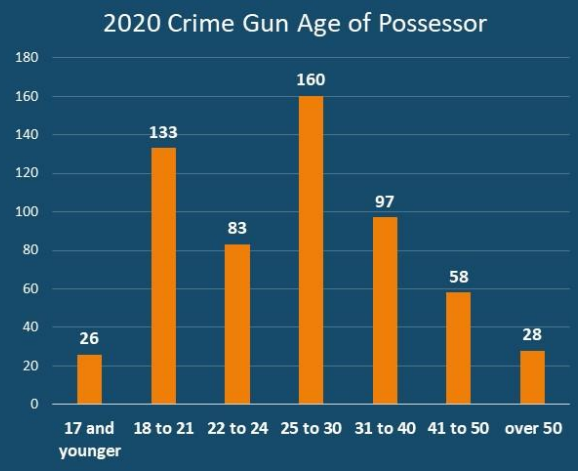
**DEFINITION OF "CRIME GUN"**

- ANY gun recovered by the police as part of a criminal investigation
- **Does not include guns from buybacks, turn ins, etc.** ***Guns surrendered to PPD for safe keeping are not crime guns.***



# Crime guns recovered: Traced Crime Guns




Firearms "Tracing" is a process by which a law enforcement agency discovers a firearm at a crime scene and seeks to learn the origin or background of that firearm in order to develop investigative leads.

Sources: PPD Office of Forensic Science Firearms System

# Crime guns recovered: NIBIN Entries & Leads (Hits)

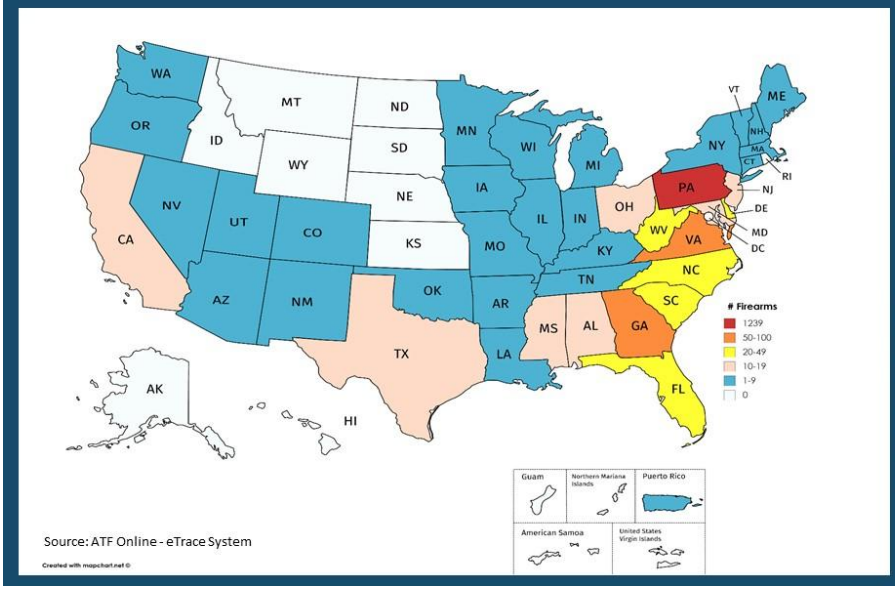



The National Integrated Ballistic Information Network (NIBIN) is a national database from the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) containing digital images of spent bullets and cartridge cases that were found at crime scenes.

- NIBIN Entry: a recovered fired cartridge case or a test-fired cartridge case that has been entered into NIBIN
- NIBIN Lead/hit: - an association between fired cartridge cases from different locations with each other or to a test-fired cartridge case from a known firearm that indicates the same firearm was used at each of the related scenes.
- Due to the NIBIN lead program, a joint operation with the US Attorney's Office, ATF, and PPD resulted in the arrest of a violent member of a notable street gang in North Philadelphia. Through the ballistics matching, the crime gun was identified to be affiliated with on-going gang-related retaliatory shootings, and responsible for two homicides and two non-fatal shootings. The arrest resulted in collection of the 9mm Glock that was previously reported stolen. The individual is currently being detained on 1 million dollars bail on state firearms charges and probation violations.

Sources: PPD Office of Forensic Science Firearms System

## What is the geographic distribution of recovered crime guns' point of origin?



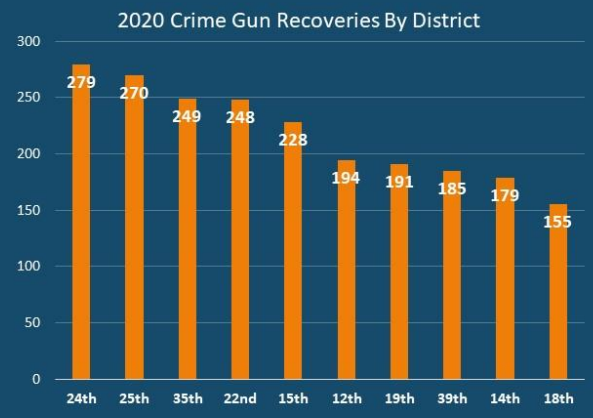

1700 Traced firearms (2020 Year-to-Date) had information on source.

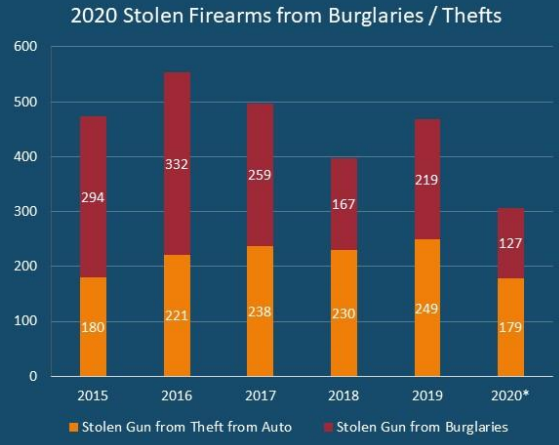
Majority of crime guns are traced to original purchases within Pennsylvania (1239/1700): 73%

- Philadelphia (633/1700): 37%
- Other PA (609/1700): 36%

The most common non-PA source states include Virginia (65), Georgia (55), South Carolina (39), North Carolina (35), Delaware (29), Florida (27), and West Virginia (21) – combined (271/1700): 16%

## Crime Gun geographic distribution: Recovery By Police District (Top Ten)



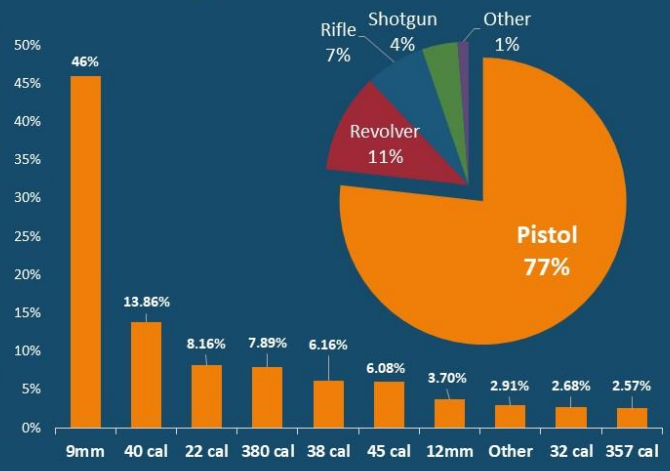




- The most violent districts across the City produce the greatest amount of gun recoveries.
- Each year hundreds of firearms are reported stolen from burglaries and thefts in Philadelphia and redistributed into the illegal gun market.

Sources: PPD Office of Forensic Science Firearms System

# What is the trend in type of crime guns recovered?









- Semi-automatic, 9mm pistols continue to be the vast majority of crime guns traced year after year
- **In 2020, 77% of crime guns recovered were pistols, and 46% of crime guns were 9mm**

Sources: PPD Office of Forensic Science Firearms System

## Crime Gun Trends by Type (continued)

- Semi-automatic rifles make up only 7% of crime guns recovered.
- Fully automatic rifles, or "machine guns" make up only 0.1% of crime guns recovered (3 so far this year)
- Data on extended magazines is not captured in any system, however FIU notes that extended magazines are submitted in a large number of cases. They are a *common* submission.



### FAS Analysis Report (8/31/2020)

**Trace Requests: Firearm Types For 1/1/2020 - 8/31/2020**

Total Trace Count: 2884

**Top Firearm Types**

| | Type | Count | Percentage |
|---|---|---|---|
| 1 | PISTOL | 2214 | 76.77 |
| 2 | REVOLVER | 322 | 11.17 |
| 3 | RIFLE | 196 | 6.8 |
| 4 | SHOTGUN | 116 | 4.02 |
| 5 | RECEIVER/FRAME | 11 | 0.38 |
| 6 | UNKNOWN TYPE | 9 | 0.31 |
| 7 | DERRINGER | 6 | 0.21 |
| 8 | ANY OTHER WEAPON | 5 | 0.17 |
| 9 | MACHINE GUN | 3 | 0.1 |
| 10 | COMBINATION GUN | 2 | 0.07 |
| | Total | 2884 | 100 |

**Top 10 Manufacturers**

| | Manufacturer | Count | Percentage |
|---|---|---|---|
| 1 | SMITH & WESSON (SW) | 422 | 14.63 |
| 2 | GLOCK INC. (GLD) | 406 | 14.08 |
| 3 | TAURUS INTERNATIONAL (TAS) | 236 | 8.18 |
| 4 | RUGER (SR) | 226 | 7.84 |
| 5 | UNKNOWN MANUFACTURER (ZZZ) | 156 | 5.41 |
| 6 | TAURUS (TAS) | 149 | 5.17 |
| 7 | SPRINGFIELD ARMORY,GENESEO,IL (SGD) | 93 | 3.22 |
| 8 | GLOCK GMBH (GLC) | 65 | 2.25 |
| 9 | BERETTA USA CORP (FII) | 61 | 2.12 |
| 10 | SIG SAUER (SIG-ARMS) (SIG) | 56 | 1.94 |
| | Total | 1870 | 64.84 |

**Top 10 Models**

| | Model | Count | Percentage |
|---|---|---|---|
| 1 | UNKNOWN | 556 | 19.28 |
| 2 | 19 | 85 | 2.95 |
| 3 | PT24/7 G2 C | 64 | 2.22 |
| 4 | PT111 G2 | 63 | 2.18 |
| 5 | 17 | 46 | 1.6 |
| 6 | 22 | 40 | 1.39 |
| 7 | 23 | 40 | 1.39 |
| 8 | SD9VE | 38 | 1.32 |
| 9 | 43 | 36 | 1.25 |
| 10 | PT111 MILLENNIUM G2 | 34 | 1.18 |
| | Total | 1002 | 34.74 |

**Top 10 Importers**

| | Importer | Count | Percentage |
|---|---|---|---|

Sources: PPD Office of Forensic Science Firearms System

## What is the trend in number and proportion of crime guns that are either "ghost guns" or 3-D printed?





- "Ghost Guns" are unserialized, unregulated, and untraceable firearms that are assembled by the consumer.
  - Polymer-80: example of "ghost gun" sold 80% complete
- PPD Stats "ghost guns" recovered (Oct 15)
  - 2019: 95
  - 2020 YTD: 122
- No 3-D printed firearms have been recovered

Sources: PPD Office of Forensic Science Firearms System

PPD Presentation on 12/14/2020

PHILADELPHIA POLICE

## Violent Crime Update to the City Council Special Committee on Gun Violence

**Philadelphia Police Department**

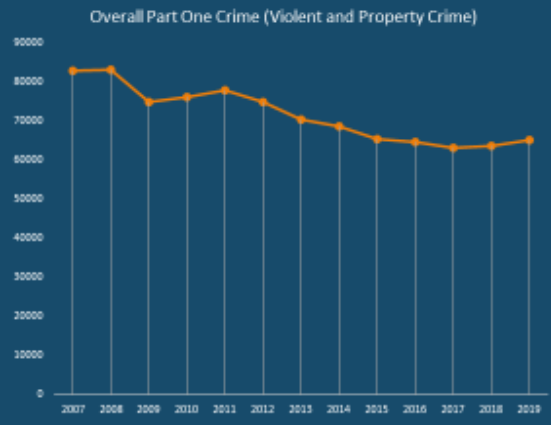
December 14, 2020

The Philadelphia Roadmap to Safer Communities

# Current State of Gun Violence




- Since 2014, Homicides and Shooting Victims have continued to increase.
- Currently in 2020, homicides and shooting victims are **up** 39% and 53% respectively.




- Since 2017, overall Part One crime has been increasing, following a 30-year downward trend since 1989.
- Currently in 2020, Part One crimes are **down** 2%.

# What is the trend in number of crime guns recovered?




- Crime Guns recovered each year has been steadily increasing.
- Between 2015 and 2019, Crime Gun recoveries have increased 33%.
- Simultaneously, Pedestrian Stops have decreased drastically since 2015 (-65%)
- Vehicle stops remained steady, but drastically declined during 2020 while continuing to recover crime guns

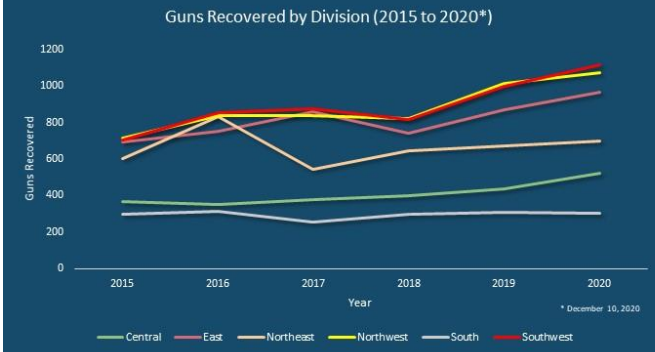
Sources: PPD Office of Forensic Science Firearms System

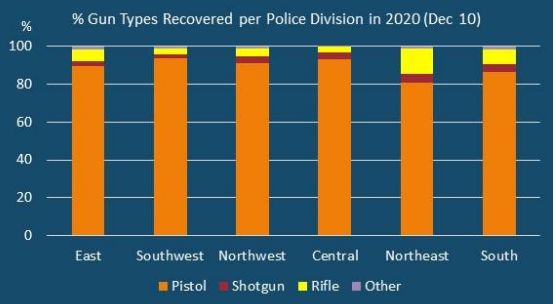
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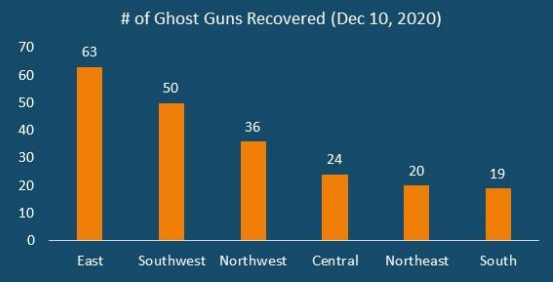
# What is the trend in number of crime guns recovered?



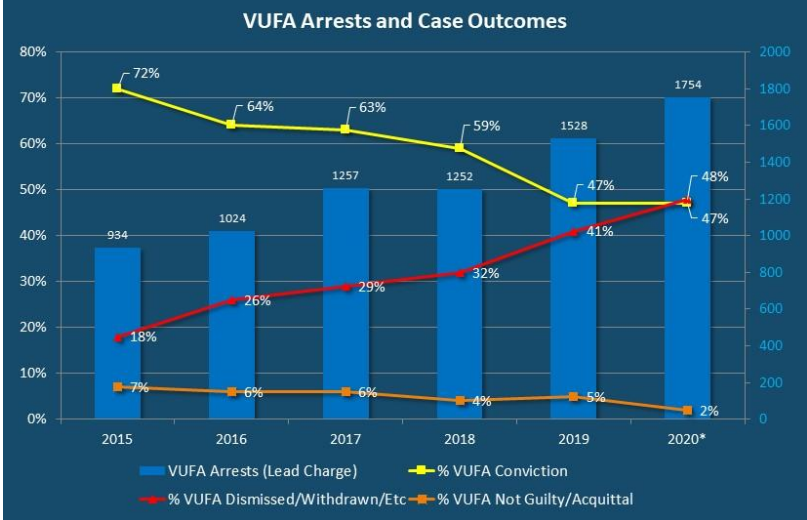




- **Significant increases in gun seizures in Northwest, Southwest and East Divisions.**
- **2020 YTD has already reached the 5-year record high number in many divisions**
- **About 90% guns recovered are pistols/revolvers/handguns**
- **120% increase in ghost gun seizures so far**
  - **(95 in 2019 full-year vs. 212 in 2020 as of Dec 10)**
- Data on extended magazines is **not** captured in any system, however **FIU notes that extended magazines are submitted in a large number of cases.** They are a *common* submission.

Note: 2020 data as of Dec 10th




# What is the trend in proportion of VUFA arrests that result in a conviction?




- Note: Conviction Information comes from the District Attorney's Office Open Data Dashboard.
- While VUFA Arrest (Lead Charge) has been increasing, % VUFA convictions have been steadily **decreasing** from 73% in 2015 to 47% in 2020. Simultaneously, % VUFA cases withdrawn/dismissed steadily increasing from 18% in 2015 to 48% in 2020.*
- Through enhanced data sharing with the District Attorney's Office (DAO), the PPD and DAO expect to balance fairness and the need to deter the carrying of the crime guns driving gun violence.

Sources: PPD Police GIS System for shooting incident, homicide, shooting victim and arrests.
DAO Open Data Lab Dashboard for VUFA case outcomes.
2020 as of Dec 9th

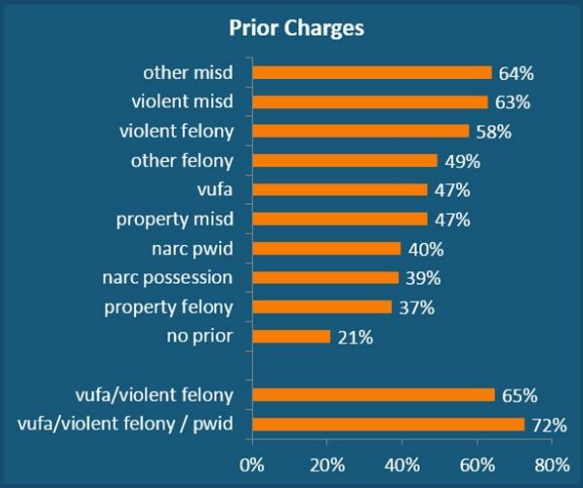
## Overview of Agenda for "100 Shooter" Research

Managing Director's Office

Department Of Public Health

- Extend the original review to all arrestees for shooting incidents from 2015 to the present
- Analyze shooting victim clearance
- Analyze gun case outcomes
- Analyze witness appearance rates
- Interview community-based violence prevention advocates
- Interviews/study of recent gun violence perpetrators
- Summarize current research; make policy recommendations based on particulars of Philadelphia
- To be presented by the collaborative research team

## Preview: Shooting Arrestees from 2015 to present




- Criminal justice involvement shows similar characteristics as a 100 shooter sample
- Misdemeanor charges are most common
- 47% with at least one VUFA (weapon offense) prior charge
- 21% without prior arrests

- Note: % was calculated as whether or not a shooter had at least one prior arrest for given charge type (repeat offending was not taken into account); prior charges were queried using PARS that covers year 2000 and later

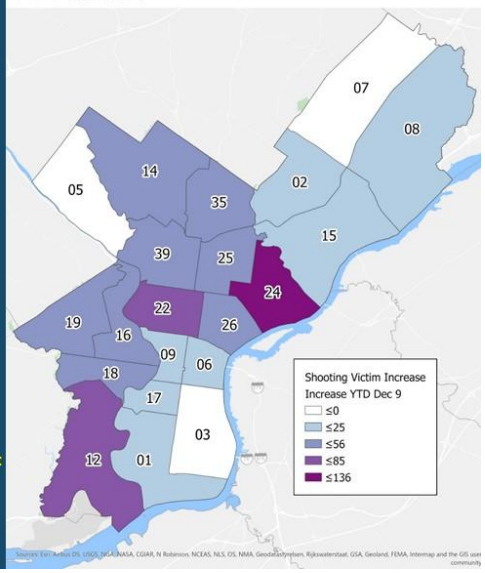
## Monthly 2020 Homicide and Shooting Victim Trends




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov |
|---|---|---|---|---|---|---|---|---|---|---|---|
| homicide | 39 | 22 | 36 | 29 | 35 | 43 | 51 | 49 | 46 | 64 | 37 |
| shooting victim | 113 | 88 | 142 | 132 | 183 | 204 | 215 | 281 | 228 | 256 | 220 |

- With the exception of October, **homicides and shooting victims are trending down since July/August, dropping 42% and 14% between October and November.**
- Comparing the beginning of November and December thus far, shooting victims dropped 34%.
- Almost all Districts show increases in homicides and shooting victims. By count, **the 24th District ranks highest in shooting increases (111%), followed by 12th District (68%) and 22nd District (59%)**

2020 vs 2019 Shooting Victim Increases per Police District
YTD December 9



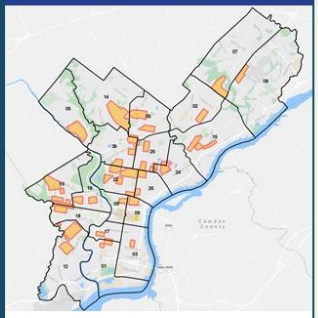

## Operation Pinpoint

**Operation Pinpoint** provides the long-term, place-based, operational framework to enable PPD and our partners to focus resources and create a **"unity of effort" in neighborhoods** within the City that have been significantly impacted by gun violence.

- Integrates all policing models (community policing, hotspot, offender-focused, and problem solving) into a planning framework that includes law enforcement and non-law enforcement partners.
- Incorporates by nationally proven, data-driven evidence-based strategies inside targeted areas.
- **Goals 1 and 2 of the PPD Crime Prevention & Violence Prevention Action Plan regarding the "operating model" for future violence reduction have been accomplished.**

### Crime Prevention & Violence Reduction Action Plan

Philadelphia Police Department






**Goal 1.** ✓

Accomplish a new operating model that incorporates Daily District Priorities, District Weekly Priorities, Weekly Shooting Reviews, Bi-Weekly Compstat, and Quarterly District Strategies by the end of 2020

**Goal 2.** ✓

Realign Operation Pinpoint to address the most violent hotspots in the City, expanding to 40 or more by the end of 2020

**Goal 3.**

Reduce Homicides in Operation Pinpoint Areas 25% by the end of 2021

**Goal 4.**

Reduce the number of Shooting Victims in Operation Pinpoint Areas 25% by the end of 2021

**Goal 5.**

Increase the homicide clearance rate to 65% by the end of 2021

**Goal 6.**

Increase non-fatal shooting victim clearance rate to 30% by the end of 2021

**Goal 7.** ✓

Establish a high-risk individual referral notification from PPD to the PRSC Tactical Team, and increase the monthly referral count to 75 per month (50% increase)

By addressing our most violent hotspots and high-risk individuals, we will exceed the Mayor's second term priority for Citywide Homicide and Shooting Victim reduction.

## PPD/DAO Gun Case Working Group Collaboration

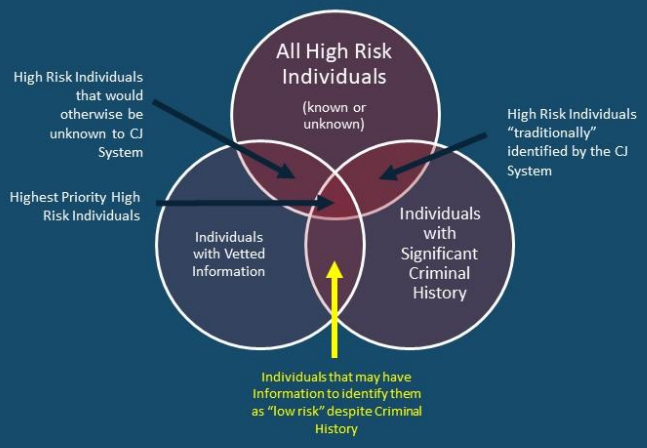
- Started on 12/7, the PPD/DAO Gun Case Working Group is a weekly collaboration to examine Non-Fatal-Shooting (NFS) arrests and all Felon in Possession of a gun (VUFA 6105) cases from the previous week.
- Goal is to review and enhance criminal proceedings moving forward, with the purpose of identifying any issues that may interfere with successful prosecution at an early stage. Topics include:
  - **constructive possession issues (e.g. expediting DNA analysis)**
  - **issues that may result in evidence suppression BEFORE they occur**
  - **follow up on investigative gaps, such as cell phone analysis, video recovery;**
  - **Intelligence & crime analysis support**
  - **social media inquires that may improve cases**





## Additional PPD/DAO Collaboration

- Beginning in August, PPD Intel Analysts and DAO have collaborated over **enhanced "high bail requests"** for high risk individuals arrested in the community.
- Goal is for **PPD's analysts provide critical, timely analysis to DAO of individuals who present 1) a high-risk to the community, and 2) potential flight risk** PRIOR to arraignment.
- Early results are positive, frequently resulting in higher bail and Nebbia hearing to disclose sources of bail funds.
- May also be used to identify individuals who may be "low risk" despite criminal history.



## East Division Narcotics Enforcement Strategy (NES)

- Particularly in East Division, there is a direct connection between the illegal drug market and gun violence.
  - 24th District leads the city increase, with 136 additional shooting victims in 2020 (111% from 2019) and 31 additional homicides (124%).

**The NES Strategy for East Division includes:**

- A hand-selected, enhanced Narcotics Field Unit (investigatory) Squad (East 4K)
  - 1 lieutenant
  - 2 sergeants
  - 2 corporals (Need to be transferred / detailed in [No street supervisory duties] to work the Operations Room)
  - 20 police officers (6 NFU officers and 14 officers detailed in from EPD)

**Creation of new Kensington District to focus all federal, state and local resources:**

- Coordinate Patrol Resources to HOLD areas after investigative "take-downs", and coordinate city resources.
  - Neighborhood Services
  - City-wide Vice
  - Police-Assisted Diversion Program
  - Licenses & Inspection
  - Streets Department
  - Community Life Improvement Project (CLIP)
  - And many more

## Intel-Driven Taskforce Operations

**THE MISSION**

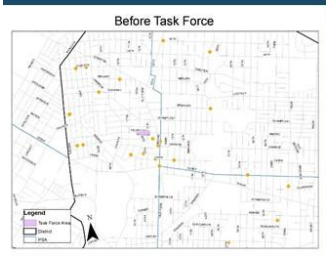
- Use Intelligence-Led Policing to develop a "plan of action" to reduce violence in selected targeted areas.
- Identify which organizations are driving the violence.
- Identify which members/associates are the most prolific offenders.

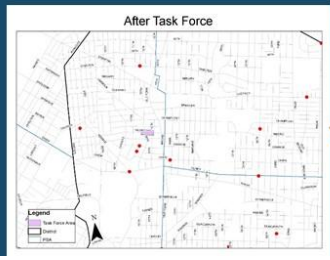
**South Taskforce:** 12/2/2019 (operational 10/22/19) to Present

- **Total Overall Arrests = 179**
- Firearms recovered = 65, and 1 imitation firearm
- Marijuana (2735 Grams = $25,716)
- Cocaine including Crack (908 Grams = $155,373)
- Heroin (231 Grams = $74,981) and Barbiturates (pills) (66 Grams = $1901)
- $47,538 US Currency, $2300 counterfeit currency seized

**Southwest Taskforce:** 12/2/2019 (operational 10/22/19) to Present

- **Total Overall Arrests = 22**
- Firearms recovered =25
- Crack Cocaine: 60.55 grams (Worth: $6,055)
- Pills: 62g Xanax (Alprazolam) (Worth: $310)
- Marijuana: 2238.3 grams (Worth: $2,223)
- Methamphetamine: 1.08 lbs. (Worth: $13,000/approx)
- $10,400 US Currency




**Evaluation of Previous Northwest Division Taskforce**

- 40% reduction in shooting victims in the 35th District during the Task Force operation

# The Office of Violence Prevention Joint Warrant Initiative

**Comprised of:**

- VPP Probation Dept
- JET Probation
- Adult Probation
- Sheriff's Office
- Gun Violence Task Force
- AG's Office as well as uniformed officers from the police districts

**Warrant services completion:**

- 24th District
- 25th District
- 22nd District
- 39th District
- Southwest Division

# Challenges

**Numerous examples of individuals with numerous open cases shot, killed, or assaulted others**

- **Shooting victim 3/6/2019** Arrested 1/23/2020 for VUFA while his **case was still open he was arrested 3/3/2020 for Narcotics 3/16/2020 for probation violation and 6/8/2020 for Aggravated Assault**
- Arrested 1/25/2020 for robbery handgun - **killed 12/1/2020**
- Arrested 2/20/2020 for VUFA - **Shooting Victim 6/30/2020** while his **case was still open he was arrested 7/21/2020 for VUFA**
- Arrested 4/9/2020 for VUFA - **Shooting Victim 11/24/2020**
- Arrested 4/19/2019 for VUFA **Arrested 3/10/2020 for Homicide**
- Arrested 4/20/2020 for VUFA - **Killed 10/24/2020**
- Arrested 5/24/2019 for VUFA while his **case was still open he was arrested 8/19/2019 for VUFA** - **Shooting Victim 9/8/2020**

**Numerous examples of individuals with multiple open gun cases**

- Arrested 1/5/2020 for VUFA while his **case was still open he was arrested 9/11/2020 for VUFA**
- Arrest 3/28/2017 for VUFA. **Arrested again on 11/7/2019 for VUFA**, while his **case was still open he was arrested 5/8/2020 for VUFA**
- Arrested 4/19/2019 for VUFA while his **case was still open he was arrested 5/10/2019 for VUFA**
- Shooting Victim on 4/27/2020, Arrested 6/9/2020 for VUFA while his **case was still open he was arrested 10/27/2020 for Burglary and Stolen Auto**
- Arrested 6/19/19 for VUFA; **arrested again 9/27/2019 for VUFA and again 12/1/2020 for VUFA while the case was open**
- Arrested 10/13/2015 for VUFA and **was arrested again on 2/3/2017 for VUFA. While on probation was arrested 9/14/2020 for VUFA**

## Challenges

- Achieving the "Unity of Effort" with Operation Pinpoint with non-law enforcement agencies and services they provide (as seen in 2019) due to COVID restrictions.
- COVID Court Closure – Impacts all Strategies
  - Lack of In-Person Engagement by Probation
  - Trial Delays
- Impact of Future Civil Unrest on Police Resources
- Resource Availability for Critical Partner Agencies

PPD Presentation on 09/22/2021

## Bail/Recidivism Analysis on VUFA Cases

## Update to the City Council Special Committee on Gun Violence

**Philadelphia Police Department**
**September 22, 2021**

The Philadelphia Roadmap to Safer Communities

# Homicides, Shooting Victims, and VUFA Arrests – 2007 to Present

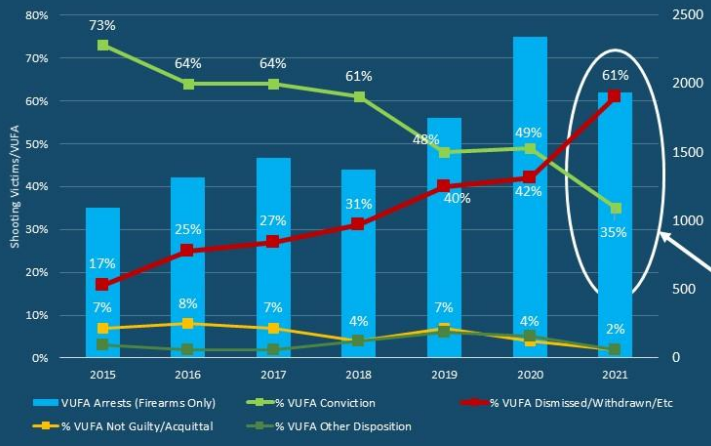






- Since 2014, Homicides and Shooting Victims have continued to increase.
- As of the end of 2020, homicides and shooting victims were **up** 39% and 53% respectively when compared to 2019.
- YTD 2021, this trend is continuing, as homicides are **up** 16% and shooting victims are up 10%.
- Firearm possession arrests track alongside our homicides and shooting victims, leading us to believe guns on the street mean more victims.

# What is the trend in proportion of VUFA arrests that result in a conviction?




- Note: Conviction Information comes from the District Attorney's Office Open Data Dashboard.
- While VUFA Arrest (Lead Charge) has been increasing, % VUFA convictions have been steadily **decreasing** from 73% in 2015 to 49% in 2020. Simultaneously, % VUFA cases withdrawn/dismissed steadily increasing from 17% in 2015 to 42% in 2020.

Note: The current 2021 figures indicate a continuance of this trend.

Sources: PPD Police GIS System for shooting incident, homicide, shooting victim and arrests.
DAO Open Data Lab Dashboard for VUFA case outcomes.

## Outline

- Background
- Key Findings
- Detailed findings
  - Case disposition
  - Bail
  - Sentence
  - Recidivism
- Policy Implications

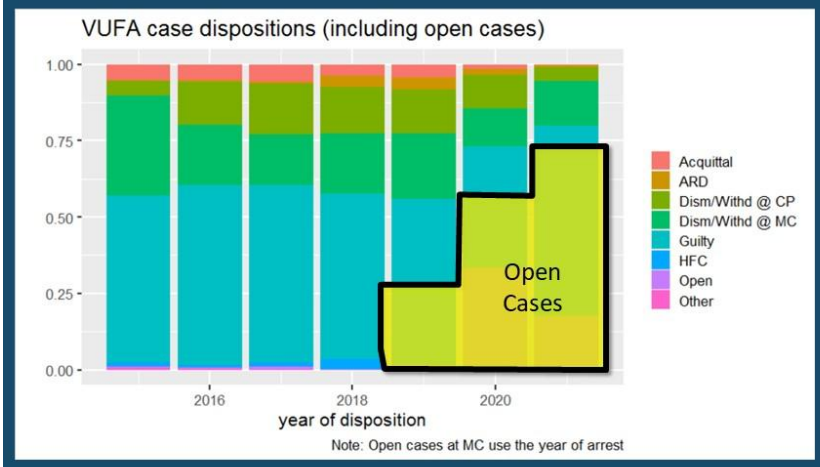
## Backgrounds and Contexts

- Data provided by the DAO
  - Arrests with VUFA as the lead charge between 2015 and Aug 2021
    - 6105 Firearm prohibition (prior conviction)
    - 6106 Carrying firearms without licenses
    - 6108 Carrying firearms in the City of Philadelphia
  - Data included offender information, bail and case outcomes
- Analysis / Interpretation led by the PPD
  - Focus is on the depiction of trends
  - The pandemic certainly has created special circumstances; however, some trends/changes predate the pandemic
- All stakeholders including the DAO may not agree with the interpretations

## Key Findings

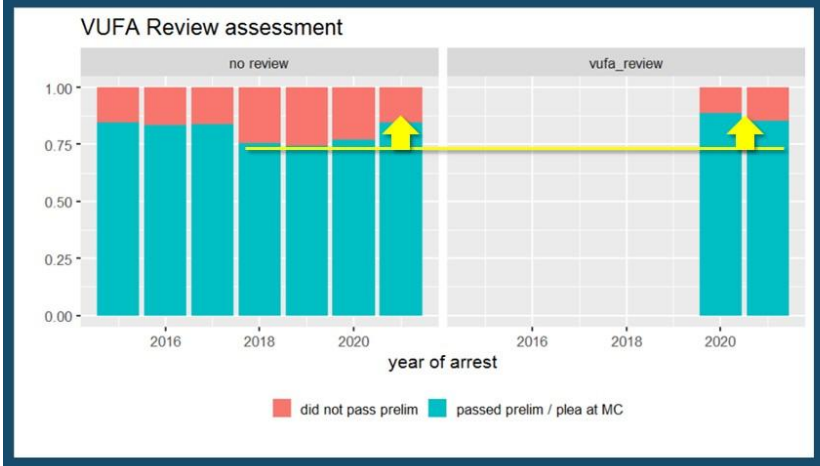
- Shootings, Homicides and VUFA arrests continue to go up
- VUFA cases dismissed/withdrawn went up, while guilty convictions went down
  - Special circumstances around the pandemic
  - Positive outlook with recent initiatives
- Bail amount went down between 2015 and 2019; it increased in 2020/2021
  - reduction in bail amount was more evident among those with prior gun arrests
- % posting bail went up
- Sentence became shorter for 6105 (firearm prohibition))
- Incarceration became less frequent for 6106 (without license) than earlier years
- Reoffending rate for another gun offense during VUFA open case was about 8% in 2015/16; it slightly went up to 11 % in 2019

## Special circumstances during the pandemic



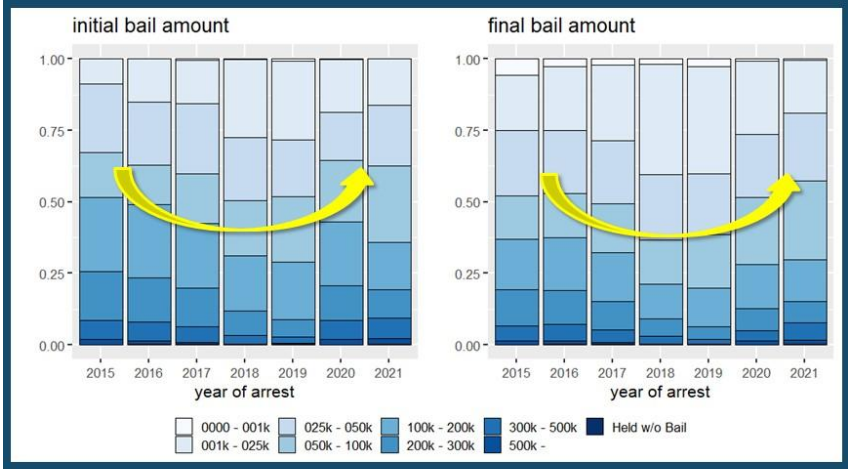

- The pandemic certainly created special circumstances in the way cases are processed
- Many cases continue to remain open (more than 3,000 cases), while those that are dismissed may represent "weak" cases
- A different picture may emerge for the case dismissal rate if we include open cases

## Positive Outlook through PPD-DAO Collaboration



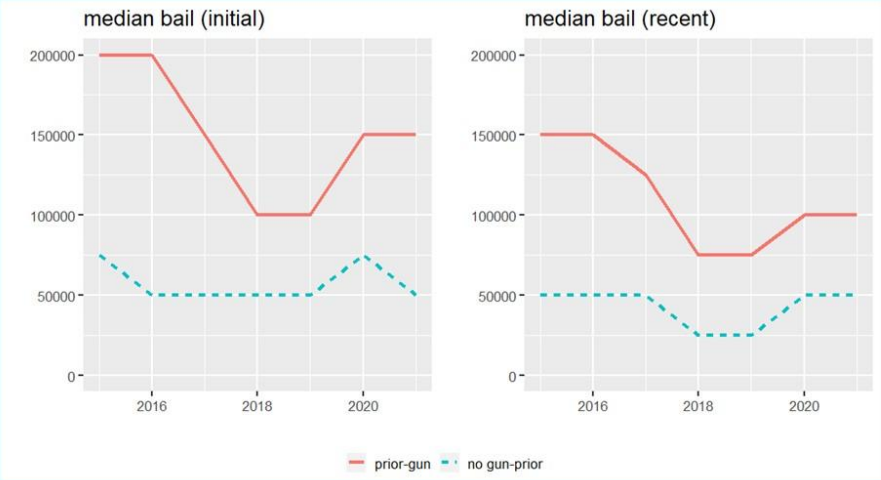

- Weekly review of gun cases with the DAO supervisors and PPD command staff
- Addressing investigative shortcomings
- Reviewed cases show an improved likelihood of passing preliminary hearings
- Even those cases that did not go through the review show a higher % of passing preliminary hearings than previous years ("diffusion of benefits") where issues identified through the reviews may be improving the overall investigative practice

## Bail amount



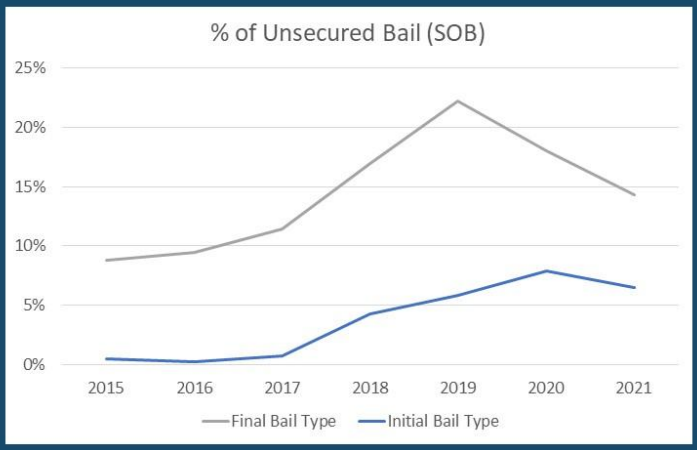

- The lighter color represents the share of a lower bail amount, and the darker color reflects a higher bail mount.
- Bail amount went down between 2015 and 2019; subsequently it went up in 2020 and later.

## Bail amount



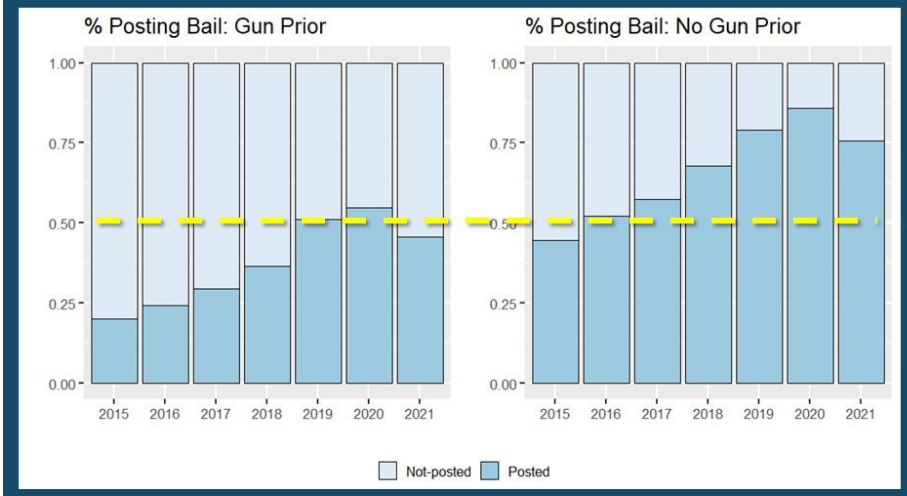

- The reduction in the median bail amount from 2015 to 2019 were more evident for those individuals with prior arrest(s) for gun offenses (including both VUFA and violent gun crimes).

## Bail type




- The use of unsecured bail increased

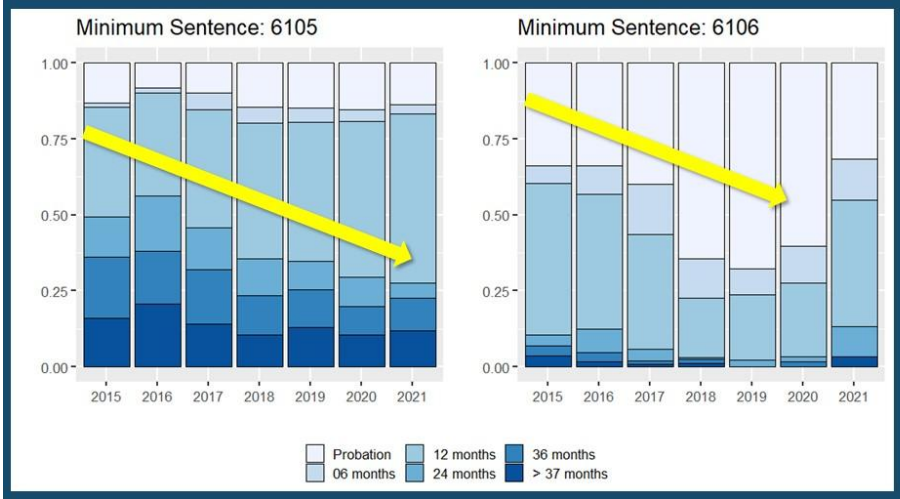
## Bail posting




50%

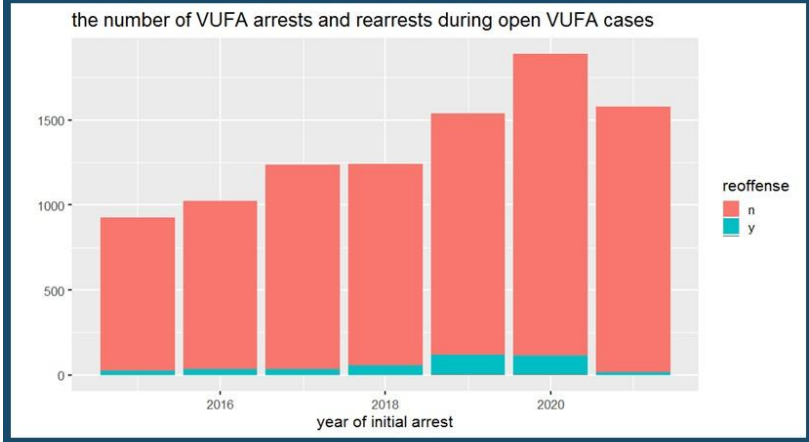
- The proportion of defendants who posted bail went up substantially over time.
- Increasing trend of bail posting was present for both those with and without gun priors

## Sentencing



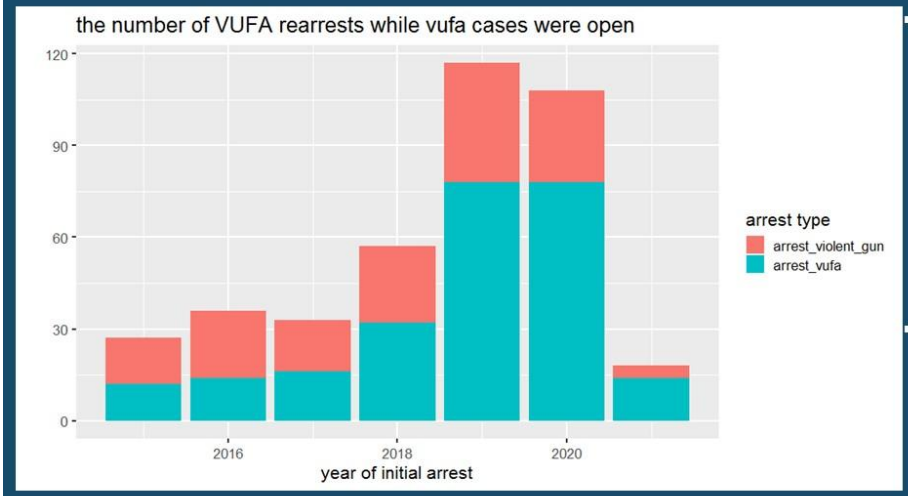

- The lighter color represents a shorter sentence
- Sentence became shorter for the 6105 cases (firearm prohibition); the rate of incarceration did not change
- For the 6106 cases (no license), the use of probation became more common

## Recidivism for gun offenses during VUFA open cases



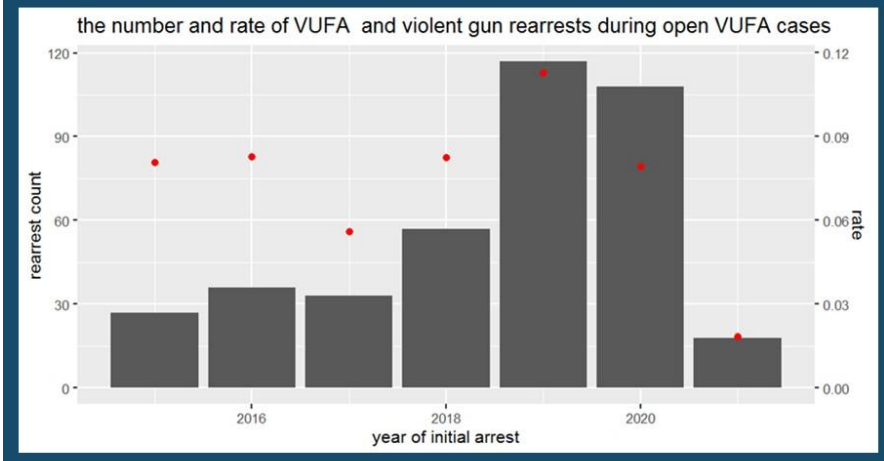

- Recidivism in this analysis was defined as re-arrest for gun crimes (including VUFA/violence) during a VUFA open case
- The number of reoffenders for another gun offense during VUFA open cases may be relatively small, compared to the overall number of cases

## Recidivism for gun offenses during VUFA open cases



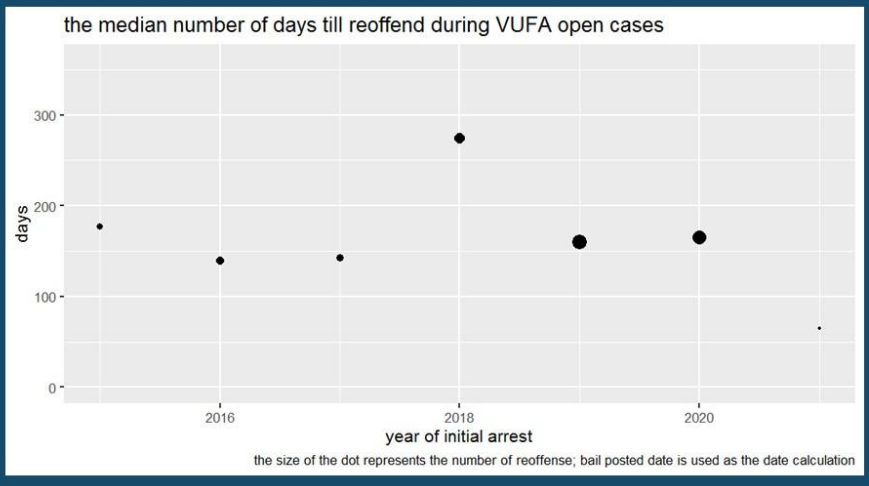

- Nonetheless, there was an increase in the # of reoffenders in 2019 and 2020
  - Less than 50 reoffenses in 2017 and earlier; the number went up to more than 100 in 2019/20
- Note that the low number for the 2021 cohort may simply be due to not having enough time to reoffend yet

## Recidivism for gun offenses during VUFA open cases




- The rate of reoffending out of those who posted bail shows that the reoffending rate was about 8% in 2015/2016 and it slightly went up to 11% in 2019
- Thus, the increasing number of reoffending count shown earlier is not the simple reflection of the overall increase in VUFA arrests
- Earlier analysis showed that 2019 was when the median bail was the lowest and the use of unsecured bail was the highest

## Recidivism for gun offenses during VUFA open cases




- The number of days till reoffending did not change
- The longer time for case processing (i.e., open cases during the pandemic) does not explain the increasing reoffending rate

## Key Findings (recap)

- Shootings, Homicides and VUFA arrests continue to go up
- VUFA cases dismissed / withdrawn went up, while guilty convictions went down
  - Special circumstances around the pandemic
  - Positive outlook with recent initiatives (case review)
- Bail amount went down between 2015 and 2019; it increased in 2020/2021
  - reduction in bail amount was more evident among those with prior gun arrests
- % posting bail went up
- Sentence became shorter for 6105 (firearm prohibition)
- Incarceration became less frequent for 6106 (without license) than earlier years
- Reoffending rate for another gun offense during VUFA open case was about 8% in 2015/16; it slightly went up to 11 % in 2019

# Appendix 6: PPD Discussion on Community Contacts with Police

## Summary

Frequent contact and positive interactions with community members at the street-level inside of crime hotspots is a crucial component to any proactive policing strategy. These individual community interactions can come in a variety of forms, most of which are not effectively tracked by police organizations. Traditionally tracked proactive policing activity include investigative or "Terry" stops, warrant attempts, curfew violations, truancy, and quality of life offense enforcement. Meanwhile, the more informal, "community policing" interactions remain largely untracked, including voluntary encounters (mere encounters), business checks, environmental reporting (311 requests by police), home visits, victim supports, community meetings, and others.

While hotspot policing through traditional (enforcement-based) proactive policing activity has been well researched for its crime deterrent effect, little is known about these other more "positive" community policing activities. In the past, Philadelphia has focused most exclusively on the former category, which has in fact, dropped approximately 69% since 2015, resulting in over 40,000 fewer of these enforcement-based interactions per year.

Additionally, despite the reduction in overall investigative stops and Quality of Life enforcement in Philadelphia, the hit rate for weapon recoveries has increased substantially in 2020/2021, and a sizable portion of illegal gun recoveries are a direct result of investigative stops. Investigative stops as a policing tool, however, need to be used thoughtfully and tracked carefully to ensure fairness and constitutionality. Additionally, because Police have not actively tracked voluntary, positive community encounters historically, these activities had never been systematized or encouraged.

The PPD has a proposal for an increased focus on encouraging and tracking officers' positive interactions or "community policing" with community members, while simultaneously adding an accountability mechanism (with an associated budget request) that takes the existing accountability model on investigative stops to the next level. This revised model can address both racial disparity and legal basis (i.e., 4th and 14th Amendment issues) in a data-driven manner, while not sacrificing, but in fact enhancing public safety. This will be accomplished by expanding the 14th District pilot that has been tracking "mere encounters" to systematize their use as an alternative to investigative stops and quality of life enforcement. If collectively, all of these types of community contacts with

police can increase in the right place and time, it is hypothesized that sustainable, short-term gun violence reduction can be achieved[133].

### Detailed discussion

While PPD proposes to expand more positive community encounters, investigative stops remain an integral and effective form of proactive policing. Several studies supported that, with the correct time, place and instruction, investigatory stops could lead to a significant reduction in violent crime (Koper, 1995; McGarrell et al., 2001; Koper, 2006, MacDonald et al., 2016). A review of multiple quality studies on proactive policing found the effectiveness of investigatory stops in high crime areas (The National Academies of Sciences Engineering Medicine, 2018). The result of this review found many studies to be in agreement as to how investigative stops should be successfully implemented. As a generalized citywide program, the efficacy of investigative stops was found to be of mixed result. However, in a combination with hotspots (proper place) and offender focus (proper instructions), investigative stops were found to be of benefit to crime reduction[134].

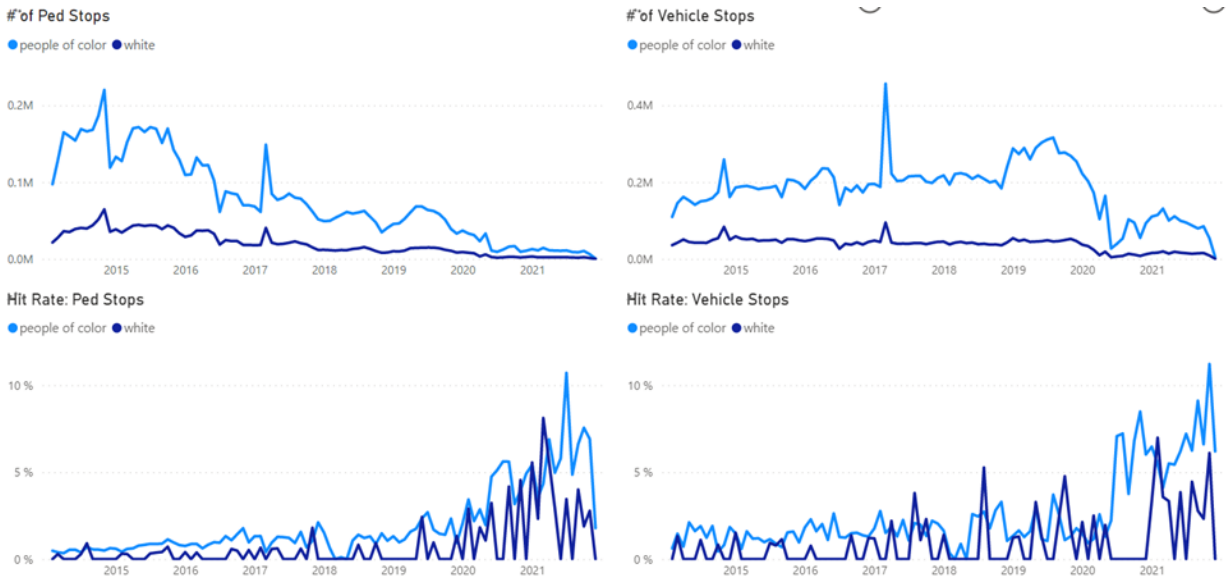
Internal studies conducted by the Philadelphia Police Department show that, on average, 29% of all illegal guns (roughly 1200 firearms) are seized as a direct result of an investigatory stop. This number has been as high as 36% in recent years. A great portion of stops with illegal guns (62%) were those of a vehicle stop. These confiscations are thousands of illegal firearms that would otherwise be utilized by a criminal element to victimize the community.

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[133] Due to lack of data, there has been little research on the crime reduction effectiveness of mere encounters and other positive community encounters. With academic partners, PPD intends to evaluate the expansion of the pilot program to discover if any crime reduction benefit can be measured.

[134] One such study found that localized foot patrols, many of which included a heavy element of police stops in combination with other forms of proactive policing, reduced violent crime by 23% (Ratcliffe, 2011). Subsequent studies showed more beneficial results when police were given specialized tasks and performed stops to accomplish said tasks. Offender focus, which involves identifying specific violent offenders and focusing extra police attention towards them, showed the greatest promise in a 2015 study with a 50 percent reduction in violent felonies. (Groff, 2015) Similarly, a program known as DDACTS (Data Driven Approaches to Crime and Traffic Safety), which entails enforcing specific traffic laws in areas with high crime and high traffic accidents using extremely visible car stops, reduced robberies by 70% and vehicle collisions by 24% (Bryant, 2014). These studies reinforce the idea that stops are highly effective not when conducted haphazardly, but when performed in the proper place and time for specific crimes and offenders.

As can be seen in the chart below, the number of investigative stops has gone down in Philadelphia, while the hit rate of recovering weapons has increased significantly in 2020 and 2021. Such a pattern is true for both pedestrian investigations (left) and vehicle investigation stops (right). Given that not all investigative stops are conducted for weapon violations and that not all of them involve frisking subjects for officer safety reasons, the hit rate for guns should be calculated as the number of investigative stops with gun recoveries divided by the number of investigative stops with frisks. It is notable that such a hit rate for weapons increased and exceeded 5% in 2021. While this may be the result of the PPD's intelligence-led, surgical policing efforts, it may also be the simple reflection of an increased number of illegal guns on the street. Perhaps, the reduction in investigative stops along with perceived leniency in the criminal justice system (e.g., lowered bail, increased use of unsecured bail, and lighter sentences) all increased bad actors' willingness to carry firearms illegally.




It may be worth clearing some misconceptions around investigative stops:

- The PPD has never had a stop and frisk policy
    - Investigative stops are conducted by officers, as legally allowed to do so, with an articulable reasonable suspicion
- The PPD has implemented a rigorous accountability process around investigative stops since 2011, where the Bailey agreement plaintiffs also review investigative stop data independently
    - Officers who fail to articulate and record their stops face the possibility of progressive disciplinary action

- Not all stops result in frisks
    - In fact, less than 10% of investigative stops involved frisks in 2021
- The vast majority of stops have legal basis that is articulated
    - The rate of investigative stops with proper legal justifications is currently over 90%, based on quarterly audits; in the past, the rate was lower, but the PPD has improved it via training and discipline when appropriate. It is notable that the PPD's audits for legal basis for the most part are in line with the Bailey plaintiff's independent assessment.

It is also important to highlight a new pilot program on this topic in the 14th District, where the department has been tracking "mere encounters" to systematize their use as an alternative to investigative stops and Quality of Life enforcement. By utilizing "mere encounters", the goal is not only to reduce formal criminal justice involvement for these types of crimes but also to increase positive interactions between community members and police. Furthermore, the pilot also includes a systematic review of body-worn camera footage during these community encounters. The program started in summer 2021, and its data are currently being analyzed to assess its impact.

There is a proposed accountability approach that will strengthen the existing process further through data analytics and rigorous statistical models to detect possible bias at both the individual and organizational levels. Data analytics will be supported by a dashboard of investigative stop patterns across numerous dimensions (districts, PSA, organizational units, time periods, legal basis, etc.). In addition to making the dashboard available for command staff and supervisors, the approach will accompany a data scientist and analyst to conduct a deeper analysis. Furthermore, the statistical model that the PPD will employ has been tested and implemented in various departments, including the Cincinnati PD. Such a comprehensive strategy can address both racial/ethnic disparities and the legality of investigative stops (i.e., both 4 and 14th Amendment issues) without risking public safety.

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Byrant, K. Collins, G, Villa, J. (2014, February) *An Evaluation of Data-Driven Approaches to Crime and Traffic Safety in Shawnee, Kansas: 2010-2013.* https://www.smart-policing.com/sites/default/files/Shawnee%20KS%20PD%20SPI%20Final%20Report%20DDACTS.pdf

Groff, E.R., Ratcliffe, J.H., Haberman, C.P., Sorg, E.T., Joyce, N. and Taylor, R.B. (2015) Does what police do at hot spots matter? The Philadelphia Policing Tactics Experiment, *Criminology*, 53(1): 23-53. doi: 10.1111/1745-9125.12055

Koper, C. S. (1995). Just enough police presence: Reducing crime and disorderly behavior by optimizing patrol time in crime hot spots. *Justice Quarterly* 12(4), 649-672.

Koper, C.S., & Mayo-Wilson, E. (2006) Police Crackdowns on Illegal Gun Carrying: A Systematic Review of Their Impact on Gun Crime. *Journal of Experimental Criminology,* 2:227-261. DOI: 10.1007/s11292-006-9005-x

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MacDOnald, J., Fagan, J., Geller, A. (2006) The Effects of Local Police Surges on Crime and Arrests in New York City. *PLoS ONE* 11(6): e0157223. doi:10.1371/journal.pone.0157223

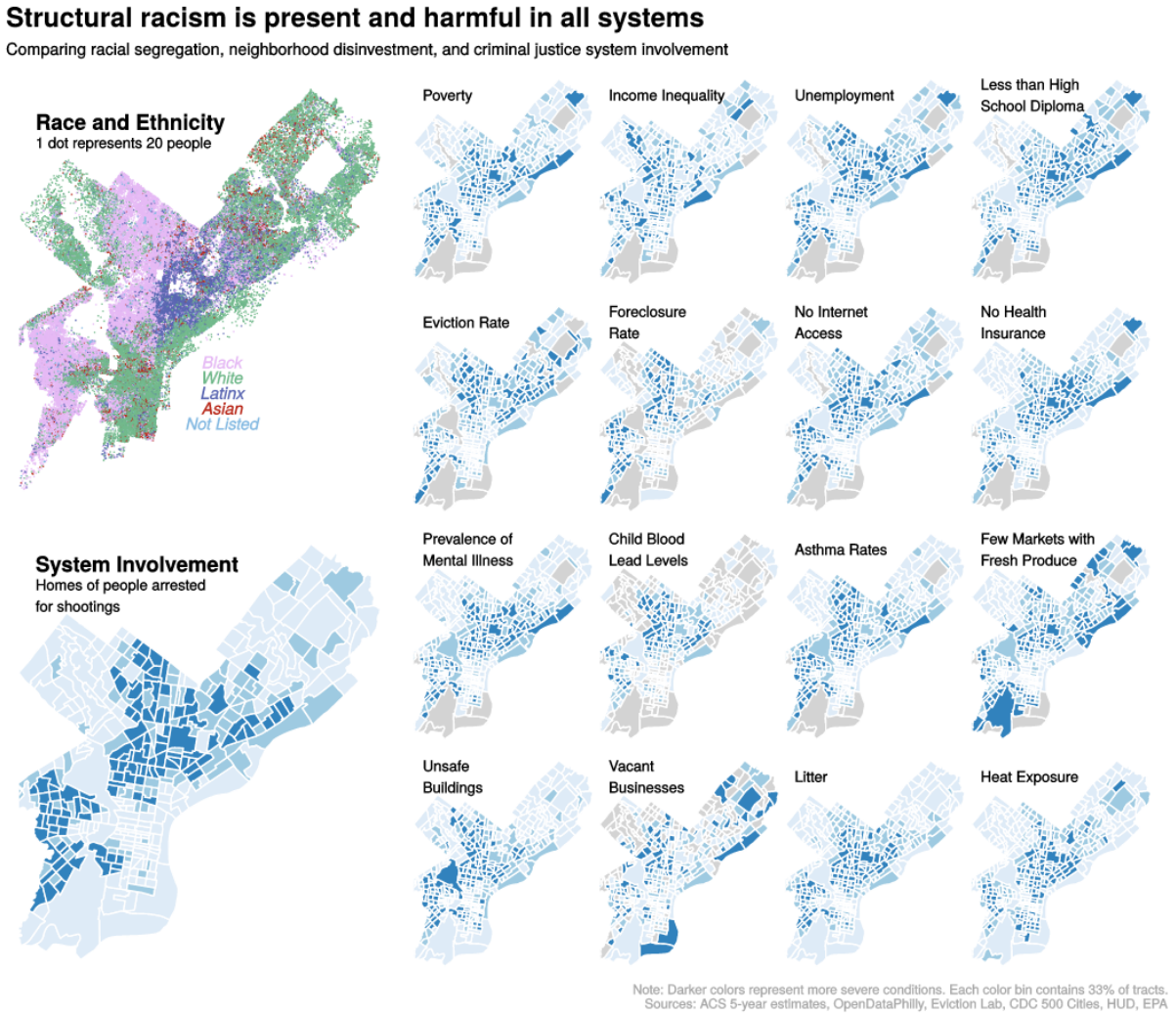
McGarrell, E.F., Chermak, S., Weiss, A., Wilson, J. (2001) Reducing Firearms Violence through Directed Police Patrol. *Criminology & Public Policy*, 1(1), 119-148

Ratcliffe, J.H., Taniguchi, T., Groff, E.R. & Wood, J.D. (2011) The Philadelphia Foot Patrol Experiment: A randomized controlled trial of police patrol effectiveness in violent crime hotspots, *Criminology*, 49(3): 795-831. doi: 10.1111/j.1745-9125.2011.00240.x

# Appendix 7: DAO Supplemental Materials

## DAO 1. Maps of Structural Racism in Philadelphia

As the maps below demonstrate, shootings are far more associated with systemic racism and the disinvestment and poverty that it has caused in Philadelphia than they are any particular criminal profile of a person. Each of the smaller maps towards the right illuminates the concentration of different measures of disinvestment and poverty in Philadelphia. This is compared to broad racial segregation in Philadelphia (top left) and the homes of people arrested for shootings (bottom left). What is striking about these maps is how similar they look: structural racism has caused disinvestment and poverty, which has, in turn, created the conditions in which shootings happen. Positive investment in the communities harmed by structural racism is the best long-term solution to ending gun violence.



## DAO 2. Data Sharing and Data Limitations

### Data Sharing

Much of the analyses contained herein were only possible due to data sharing among agencies. In particular, the PPD and courts have always been good data partners. The PPD and DAO have increasingly been sharing data and information to support research and analytics, both in the context of the "100 Shooter Review" that led to the creation of the Philadelphia Interagency Research and Public Safety Collaborative (PIRPSC), and more broadly.

In contrast to the PPD and courts, the Philadelphia Department of Prisons (PDP), Pennsylvania Department of Corrections (DOC), and Philadelphia Adult Probation and Parole Department (APPD) have not been as willing to share data. In particular, we have made numerous requests to both the PDP and DOC to receive daily rosters of all incarcerated individuals as well as historic information on the same topic. The PDP has outright denied us this data; the DOC has promised us data but has not given it to us. Because of this, we are unable to accurately account for who is incarcerated at any given time. Similarly, without regular access to APPD data, we do not have an easy data-driven way of knowing who is being supervised, their level of supervision, whether they violated their probation or parole, and whether and when they may have had a detainer issued to hold them in jail. We believe such data sharing could save lives, allowing the DATA Lab to do better analytical work and research while helping the DAO Intelligence Unit better monitor the incarceration status of those known to be involved in group violence who may be released to the community.[135] We hope to be able to incorporate such data soon.

### Data Limitations

Analyses are always limited by the data upon which they are based. The analyses below are no different. In general, there are two types of problems that our data may have:

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[135] When the COVID-19 pandemic first started in March 2020, the PDP was an excellent partner in providing a daily spreadsheet of people in custody to the DAO, which helped the DAO, Defender Association, and First Judicial District to implement an emergency review process to consider who could potentially be released from jail. That data sharing was a critical part of the process to help release over 1,300 people over 6 weeks, and very likely saved lives given the high risk of COVID-19 spreading in the jails. (Moselle, A. (May 20, 2020). "Fewer people being released from Philly ails as pool of eligible cases shrinks." *WHYY PBS NPR*, https://whyy.org/articles/fewer-people-being-released-from-philly-jails-as-pool-of-eligible-cases-shrinks/)

- **Data accuracy.** Not all data is recorded accurately. On one end of the spectrum, typos or poor record keeping can create inaccurate records. An example of this would be a court clerk incorrectly recording the disposition of a case. On the other end of the spectrum, data collection practices can systematically create inaccurate data. An example of this is that the race of individuals in police and court data is determined by police and court personnel, not self-reported by the individual. This can be seen in our data in that the same individual is frequently reported to have one race by the police and a different race by the court. Other individuals rearrested by the police on multiple occasions have different races assigned to them.

- **Data completeness**. We know that data is rarely complete. For example, only about one in five shootings results in an arrest and not all of those cases result in a conviction. That means that as a city, we have data about fewer than 20% of individuals who have shot someone in Philadelphia since 2015. This sample is not only incomplete, but it is biased: there are likely certain characteristics that made it easier for the police to arrest these 20% of individuals, which means that any analysis of associated data will outweigh those characteristics. For example, the police may be better at solving shootings involving individuals with prior arrest histories, because the police already have a lot of information about this particular group. Any analysis of people arrested for shootings, then, will make it appear that most shooters have a prior arrest history. The 80% of people who have not been arrested, however, may have no arrest history or different system contacts, which could help explain why their shooting was not solved. Those who are arrested for shootings may have different characteristics and practices than those who are not, meaning the available data may do little to help identify people who are better able to avoid being arrested for their involvement in shootings.[136]

  Similarly, any data about the criminal justice system in general is incomplete and systematically biased. “Crime data” measures how the police choose to enforce the laws rather than who is actually violating the law (Kitsuse and Cirourel, 1963; 132).[137] This is not to say that crime data does not reflect crime that is occurring, rather that it systematically excludes some criminal behavior (e.g., drug use, possession, and

[136] Even if arrest rates were high, trying to predict who may shoot someone in the future based on government data about Philadelphians is ethically fraught and technologically difficult. Models that do forecast future behavior often reflect, reinforce, and exacerbate systemic bias because they are based on administrative data that tends to track poor people and communities of color. Robinson, D., & Koepke, L. (2016). Stuck in a pattern: Early evidence on ‘predictive policing’ and civil rights. Upturn. https://www.upturn.org/static/reports/2016/stuck-in-a-pattern/files/Upturn_-_Stuck_In_a_Pattern_v.1.01.pdf

[137] Kitsuse, J.I., & Cicourel, A.V. (1963). A note on the use of official statistics. *Social Problems, 11(*2), 131-9.

sales by students and faculty on college and university campuses, where there is little to no enforcement) (Gur, 2015)[138] and over-includes other behavior (e.g., drug possession by Black drivers, who the police systematically stop and search more frequently than other drivers) (Davis, Whyde, Langton, 2018).[139] This means that any use of past criminal history in an analysis will reflect the problems caused by lack of completeness. Similar to the problem of drawing conclusions about 100% of shooters from a biased sample of the 20% arrested, we need to be equally careful about our use of prior criminal history to draw conclusions about the population at large.

Finally, our data is limited. In general, we have data about the criminal legal system in Philadelphia. We lack other data that would be useful in any larger scale analysis: data about poverty, employment, schooling, past victimization and co-victimization, prior trauma, and physical and mental health are not accessible to the District Attorney's Office. Because of this, our analysis provides a small window into the lives of people already involved in the criminal legal system.

We are able to conduct valid data analysis using the data at our disposal, but need to be thoughtful and careful about the conclusions that we draw and the actions that we take based on that data. In particular, looking at a limited set of data about a limited number of shooting arrestees means that we cannot make a meaningful "profile" of shooters that could be used to identify future shooters. Such a profile, which would use biased data to further penalize people, would double down on past systematic bias. On the other hand, we could use the conclusions from that same data to uplift people and communities in need could help to heal past harms that have disproportionately impacted Philadelphians of color, which would in turn reduce shootings.

Several specific limitations also appear in our data:

- We are only able to identify shooting incidents from January 1, 2015, forward. The police make this data available on OpenDataPhilly; they do not identify incidents before then.
- We categorize an arrest as a "shooting" arrest and a case as a "shooting case" if:

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[138] Gur, O.M. (2015). Degrees of separation: Drug use by graduate and professional school students. *Dissertation*, University of Illinois at Chicago. https://indigo.uic.edu/articles/thesis/Degrees_of_Separation_Drug_Use_by_Graduate_and_Professional_School_Students/10784270

[139] Davis, E., & Whyde, A. (2018). Contacts between police and the public, 2015. US. Dept. of Justice Bureau of Justice Statistics. https://bjs.ojp.gov/content/pub/pdf/cpp15.pdf

    - the arrestee/defendant was arrested in an incident with a DC Number that matches one of shooting incidents in the Philadelphia Police Department's OpenDataPhilly shooting victims dataset,
    - and that person was charged with—or in the case of arrests, that the police recommended that they be charged with—either a homicide, an aggravated assault, or a robbery.
- Any information relating to arrests only relates to arrests from 1/1/2008 forward. Any information relating to cases charged only relates to cases charged since 1/1/2010.
- All arrest and case information are for Philadelphia only, unless indicated otherwise.
- We are unable to accurately account for incarceration (either pre- or post-trial) because we do not receive regularly data updates from the PDP or DOC. Where relevant, we account for pre-trial incarceration by evaluating when a person may have posted bail; we account for post-trial incarceration by evaluating court sentences and making assumptions about when parole may start. Both methods are reasonable proxies, but are not always correct.

## DAO 3. Arrest Rates in Shooting Cases

Arrest rates in shooting cases are low, particularly in non-fatal shootings. As the tables below show, since 2015, Philly's arrest rate for fatal shootings *peaked* in 2019 at 38%; the current arrest rate for 2021 fatal shootings is 26% as of December 6, 2021. The trend in non-fatal shootings is similar: the arrest rate peaked in 2017 at 22%; the current arrest rate for 2021 non-fatal shootings is just 14% as of December 6, 2021.

**Annual Fatal Shooting Arrest Rate and Shooting Trends**

| | Fatal Shootings | | Arrest Rate | |
|---|---|---|---|---|
| Year | # Shootings^^^ | % Change from 2015 Shootings | Arrest Rate[1] | % Change from 2015 |
| 2015 | **233** | - | **37%** | - |
| 2016 | 249 | 7% | 33% | -12% |
| 2017 | 229 | -2% | 34% | -8% |
| 2018 | 281 | 21% | 30% | -20% |
| 2019 | 285 | 22% | 38% | 1% |
| 2020 | 414 | 78% | 31% | -18% |
| 2021 | 446 | 91% | 26% | -29% |

^^^Yellow cells indicate baseline values.
A shooting is considered cleared if at least one arrest occurred related to the shooting incident.
A shooting is considered to have an arrest if at least one arrest occurred related to the shooting incident. This table includes shootings from January 1, 2015 through September 07, 2021 but includes arrests through December 06, 2021.

**Annual Non-Fatal Shooting Arrest Rate and Shooting Trends**

| | Non-Fatal Shootings | | Arrest Rate | |
|---|---|---|---|---|
| Year | # Shootings^^^ | % Change from 2015 Shootings | Arrest Rate[1] | % Change from 2015 |
| 2015 | **1047** | - | **21%** | - |
| 2016 | 1074 | 3% | 20% | -1% |
| 2017 | 1028 | -2% | 22% | 5% |
| 2018 | 1161 | 11% | 19% | -8% |
| 2019 | 1178 | 13% | 21% | 3% |
| 2020 | 1831 | 75% | 17% | -19% |
| 2021 | 1693 | 62% | 14% | -30% |

^^^Yellow cells indicate baseline values.

A shooting is considered cleared if at least one arrest occurred related to the shooting incident.

A shooting is considered to have an arrest if at least one arrest occurred related to the shooting incident. This table includes shootings from January 1, 2015 through September 07, 2021 but includes arrests through December 06, 2021.

## DAO 4. Review of 100 People Most Recently Arrested for Shootings and All Shooting Arrestees Since 2015

The first goal set out by City Council was to systematically review the criminal histories of the 100 most recently arrested shooters at that time (September 2020). We reviewed those arrestees as well as all shooting arrestees since 2015 and found that the groups were very similar. The table below summarizes "Basic Attributes of Shooting Arrestees," including demographic and criminal legal information. To avoid double counting, we have removed duplicate defendants, keeping only the most recent incident they were arrested for.

**Basic Attributes of Shooting Arrestees**

Arrests from 1/1/2015 - 12/04/2021

| Attribute | Individuals |
|---|---|
| Total Arrestees | 2,249 (100%) |
| Male | 2,102 (93%) |
| Under 30 | 1,569 (70%) |
| Any Past Arrests | 1,706 (76%) |
| 3+ Past Arrests | 1,146 (51%) |
| Prior Felony Charge | 1,178 (52%) |
| Prior Felony Conviction | 903 (40%) |
| 3+ Prior Felony Convictions | 307 (14%) |
| Pending Court Cases at Arrest | 460 (20%) |
| Pending Misdemeanor Cases at Arrest | 150 (7%) |
| Pending Felony Cases at Arrest | 364 (16%) |

Shootings include all Philadelphia shooting cases from January 1, 2015 through December 4, 2021 where there was an arrest and a case charged. Data on shooting cases can be found at OpenDataPhilly https://www.opendataphilly.org/dataset/shooting-victims. For an arrest or case to be considered a shooting arrest/case, the individual must have been charged with (or police suggested a charge of) homicide, assault, or robbery associated with a shooting incident. Prior case information includes all cases that were started or adjudicated since 2010.

The next table summarizes the Philadelphia-based criminal histories of individuals arrested for shootings. The charges below are among those most commonly charged in Philadelphia, so this table largely reflects charging patterns in Philadelphia more generally:

**All Shooting Arrestees: Detailed Past Charging Info**

Arrests from 1/1/2015 - 12/04/2021

| Attribute | Individuals |
|---|---|
| Drug Sales | 683 (30%) |
| Drug Possession | 667 (30%) |
| Aggravated Assault | 436 (19%) |
| Other Assaults | 312 (14%) |
| Theft | 241 (11%) |
| Auto Theft | 227 (10%) |
| Robbery | 227 (10%) |
| Uncategorized Offenses | 225 (10%) |
| Firearm Possession without a License | 221 (10%) |
| Robbery with a Deadly Weapon | 192 (9%) |

Shootings include all Philadelphia shooting cases from January 1, 2015 through present where there was an arrest and a case charged. Data on shooting cases can be found at OpenDataPhilly https://www.opendataphilly.org/dataset/shooting-victims. For an arrest or case to be considered a shooting arrest/case, the individual must have been charged with (or police suggested a charge of) homicide, assault, or robbery associated with a shooting incident. Prior case information includes all cases that were started or adjudicated since 2010.

We also identified the most recent charge the shooting arrestee had on their record, to understand whether there was a strong connection between an arrest for one event and then a later arrest for a shooting. Overall, we found that there is no single charge that is commonly the most recent charge among people arrested for shootings. We also found that the most recent criminal offense prior to the shooting arrest tends to have happened several years prior to the shooting, with important implications for incapacitation further investigated in the next section:

**All Shooting Arrestees: Most Recent Charge Information**

Arrests from 1/1/2015 - 12/04/2021

| Charge | Individuals | Median Months Between Prior Charge and Shooting Arrest |
|---|---|---|
| Any Prior Charge | 1,632 (73%) | 22 |
| Drug Sales | 370 (16%) | 16 |
| Drug Possession | 220 (10%) | 25 |
| Aggravated Assault | 142 (6%) | 30 |
| Firearm Possession without a License | 92 (4%) | 16 |
| Firearm Possession by a Prohibited Person | 80 (4%) | 29 |
| Auto Theft | 74 (3%) | 14 |
| Robbery with a Deadly Weapon | 70 (3%) | 33 |
| DUI | 66 (3%) | 21 |
| Other Assaults | 64 (3%) | 25 |
| Theft | 61 (3%) | 25 |

Shootings include all Philadelphia shooting cases from January 1, 2015 through present where there was an arrest and a case charged. Data on shooting cases can be found at OpenDataPhilly https://www.opendataphilly.org/dataset/shooting-victims. For an arrest or case to be considered a shooting arrest/case, the individual must have been charged with (or police suggested a charge of) homicide, assault, or robbery associated with a shooting incident. Prior case information includes all cases that were started or adjudicated since 2010.

## DAO 5. The (un)Predictive Nature of Prior Arrests and Demographics on Future Shootings

The District Attorney's Office does not believe that prior arrest patterns can be used to predict future shootings. If such predictions were possible, we could prevent future shootings by matching new arrestees to a profile, incapacitating those who are certain to commit a shooting by holding them in jail. The grave moral and constitutional danger of this path is that we would jail large numbers of people who would never engage in a shooting in an effort to stop a small number of people who may engage in a shooting. This is anathema to both our constitution and our values as an office. Based on the data we analyzed, focusing on prior arrest histories to predict who will commit future shootings is not a solution to gun violence.

The table below shows why it is not possible to create a "predictive" model which captures a reasonable proportion of future perpetrators of gun violence but that also does not unnecessarily incapacitate innocent people. The first two columns of table 4 shows a series of attributes that are common among people arrested for shootings and the proportion of shooting arrestees who had that attribute. For example, 37% (839) of shooting arrestees since 2015 were male, under 30, and had at least one past felony charge on their record. The idea in a predictive model is that one could apply that model to any new arrestees (for any offense) to hopefully predict which ones would later engage in a shooting and then intervene in their lives. In the criminal legal system, we tend to have one tool (especially when we are talking about serious crime): incarceration.

The third column shows what would happen if we had applied the "model" from the first column to arrestees in 2017: of 31,416 arrestees, we would have identified 5,078 who were male, under 30, and had at least one prior felony charge. If we used our model to assume that these people *might* engage in a shooting in the future, we would have to use the tools of the legal system to incarcerate them. By doing so, we *may* have prevented 138 shootings over the next 4 years (2018-21), but we would have also incarcerated 4,940 people who would likely never have engaged in a shooting. Stated another way, 97% of the people we incarcerated to prevent a shooting were incarcerated unnecessarily. This analysis also assumes that incarcerating 4,940 people unnecessarily would create more distrust of the legal system and potentially spawn more shootings because of our legal system's perceived lack of legitimacy.

We can create a model that identifies fewer people: male, under 30, at least one prior felony charge, at least three past arrests, a prior drug sales arrest, and a conviction in their most recent case (which is necessary for incarceration). This identifies only 1,383

people from 2017, 38 of whom would have later been arrested for a shooting. But the tradeoff is unfathomable: in order to incapacitate these 38 people, we still unnecessarily incarcerate 1,345 people. As well, this model only matches about one in five people arrested for a shooting (who are in turn about one in five people who perpetrate shootings). Unnecessarily incapacitating 1,345 young men in order to *attempt* to prevent 38 shootings over 4 years would cause immense harm to those individuals, their families, and communities.

Of 31,416 individuals charged in Philadelphia in 2017, since then, 31,101 (99.0%) have not been arrested in a shooting and 315 have (1.0%); those 315 arrests comprise 14% of all shooting arrests in Philadelphia since 2015. Identifying that 1.0% before they commit a shooting is challenging, and our chances might improve with a more focused approach.

**A Comparison of Attributes of Shooting Arrestees to their Prevalence Among All Arrestees in 2017**

| Attribute(s) | Shooting Arrestees Since 2015 | Individuals Charged in 2017 | Number Later Arrested in a Shooting | Number Never Arrested in a Shooting |
|---|---|---|---|---|
| **All** | 2,249 (100%) | 31,416 (100%) | 315 (1.0%) | 31101 (99.0%) |
| **Male** | 2,102 (93%) | 25,040 (80%) | 305 (1.2%) | 24735 (98.8%) |
| **Male, Under 30 at Arrest** | 1,482 (66%) | 11,900 (38%) | 260 (2.2%) | 11640 (97.8%) |
| **Male, Under 30 at Arrest, 1+ past felony charge** | 839 (37%) | 5,078 (16%) | 138 (2.7%) | 4940 (97.3%) |
| **Male, Under 30 at Arrest, 1+ past felony charge, 3+ past arrests** | 720 (32%) | 3,948 (13%) | 115 (2.9%) | 3833 (97.1%) |
| **Male, Under 30 at Arrest, 1+ past felony charge, 3+ past arrests, Prior Drug Sales Arrest** | 474 (21%) | 2,591 (8%) | 84 (3.2%) | 2507 (96.8%) |
| **Male, Under 30 at Arrest, 1+ past felony charge, 3+ past arrests, Prior Drug Sales Arrest, Convicted in 2017 Case** | 474 (21%) | 1,383 (4%) | 38 (2.7%) | 1345 (97.3%) |

Shootings include all Philadelphia shooting cases from January 1, 2015 through present where there was an arrest and a case charged. Data on shooting cases can be found at OpenDataPhilly https://www.opendataphilly.org/dataset/shooting-victims. For an arrest or case to be considered a shooting arrest/case, the individual must have been charged with (or police suggested a charge of) homicide, assault, or robbery associated with a shooting incident. Prior case information includes all cases that were started or adjudicated since 2010.

# DAO 6. Analysis of Factors Influencing Fatal and Non-Fatal Shooting Clearance Rates

## Methods

- Modeled binary outcomes (cleared/not cleared) for shooting incidents that occurred from January 2015 to February 2020 using logistic regression. Independent variables included:
    - Victim characteristics: race, sex, age, previous arrests
    - Motive (fatal shootings only): commercial robbery, domestic, drugs, highway robbery, residential robbery, retaliation, other, unknown
    - Characteristics of incident: occurring indoors/outdoors, day of week, time of day (and light/dark), month-year
    - Police characteristics (non-fatal shootings only):
        - Capacity: number of shootings in the previous 30 (and 3) days, detective capacity of unit, squad type (line detectives vs Special Investigations Unit)
        - Experience level: squad type (line detectives vs Special Investigations Unit), number of violent crime arrests detective had prior to incident, length of time employed by PPD
    - Non-fatal shootings and fatal shootings were modeled separately. This separation was due to differences in data availability and the fact that fatal shootings are investigated by the homicide unit while non-fatal shootings are investigated by detectives in each police division

## Findings

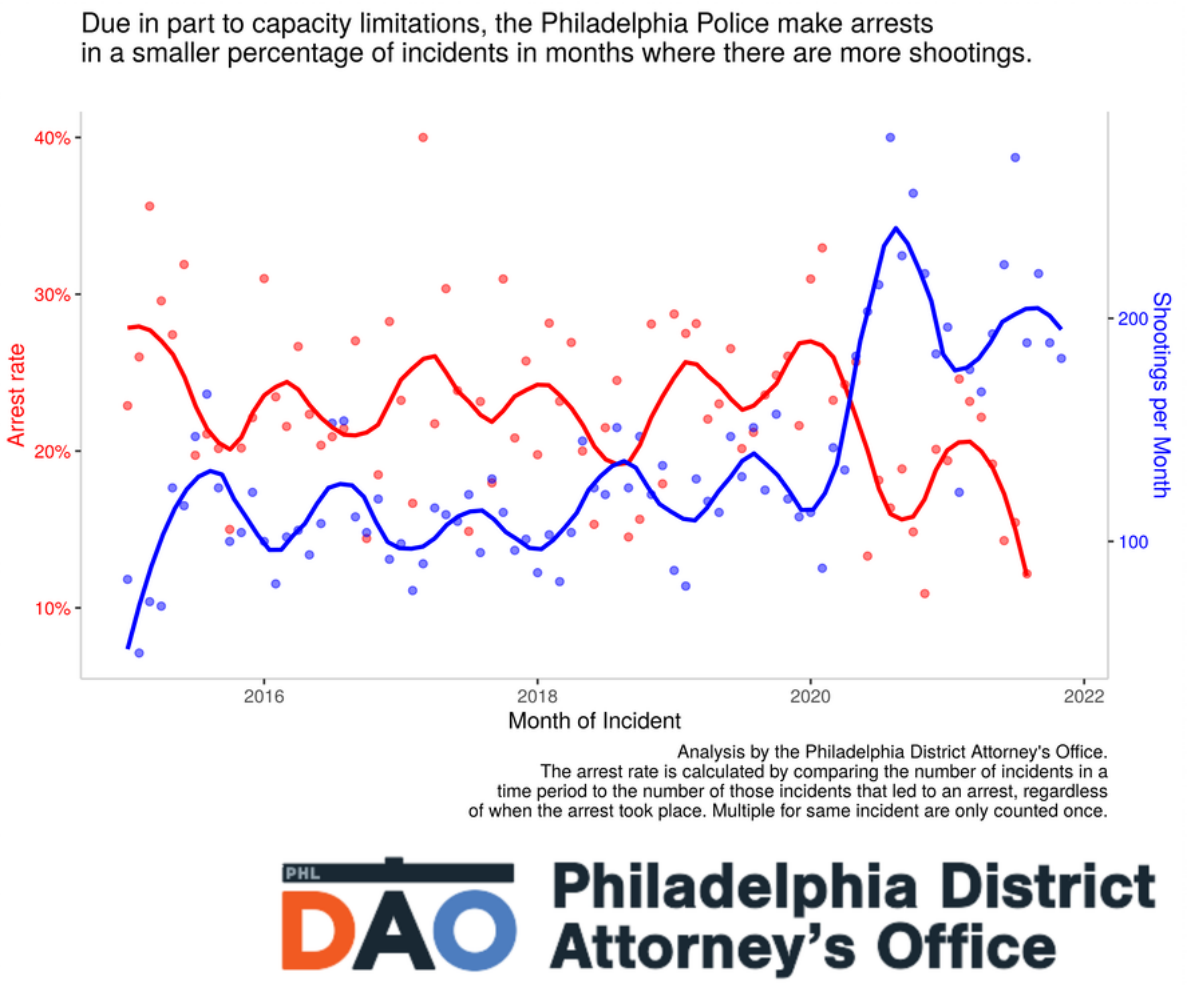
Below are statistically significant ($\alpha = 0.05$) factors that our models found relevant to shooting clearance rates. The variables are ordered from most influential to clearance to least influential to clearance: Neither the fatal shooting logistic regression nor the non-fatal shooting logistic regression predicted clearance particularly well. The McFadden pseudo-$R^2$ was 0.32 for the fatal shooting model and 0.14 for the non-fatal shooting model.

- Non-Fatal Shootings:
    - Indoor/outdoor shootings: Shootings that occurred indoors were more likely to be cleared
    - Police squad type: Shootings where the Special Investigations Unit (SIU) responded were more likely to be cleared than shootings where line detectives responded

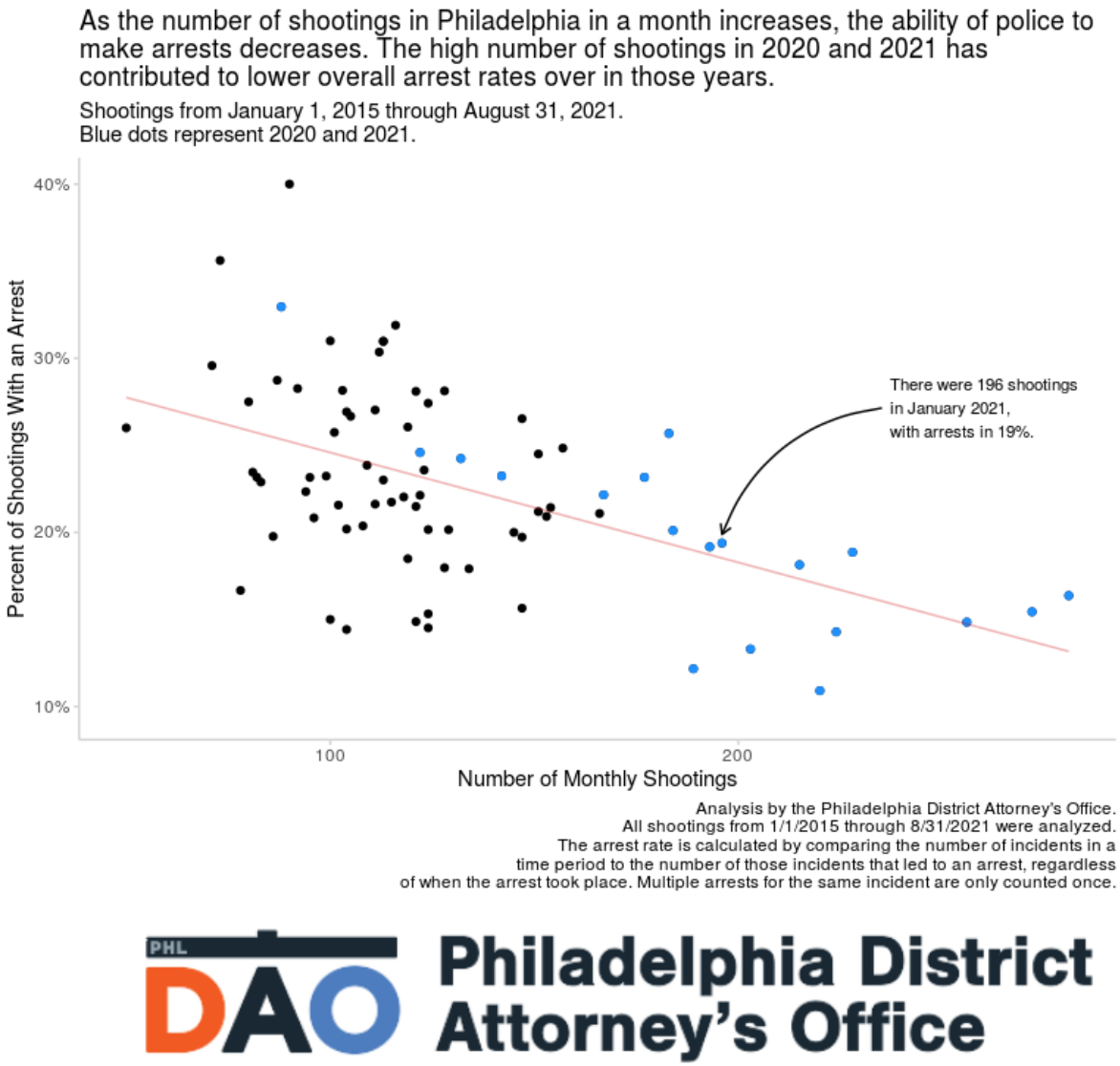
    - Victim sex: Shootings with female victims were more likely to be cleared than shootings with male victims.
    - Light/dark outside: Shootings that occurred when it was light outside were more likely to be cleared than shootings that occurred when it was dark outside (this is related to police squad type, as squad schedules are night/day dependent)
    - Day of week: Shootings that occurred on Mondays were more likely to be cleared than shootings that occurred on other days
    - Number of detectives: When units with more detectives investigated shootings, they were more likely to be cleared than shootings when units with fewer detectives investigated.
- Fatal Shootings:
    - Race: Shootings with white victims were more likely to be cleared than shootings with Black or Latinx victims.
    - Motive: Shootings with unknown motive were much less likely to be cleared than shootings with known motive. Shootings with drugs, retaliation, and "other" as suspected motives were less likely to be cleared, and shootings with "domestic" as the suspected motive were more likely to be cleared than shootings with "argument" as the motive.
    - Victim age: Shootings with child victims (13 or younger) were more likely to be cleared than shootings with older victims.
    - Light/dark outside: Shootings that occurred when it was light outside were more likely to be cleared than shootings that occurred when it was dark outside.
- Additionally, we used a subset of data (cleared cases only) to explore how the same factors might influence "time-to-arrest." The only statistically significant variable was "number of shootings in a police division during the past 30 days," which was negatively correlated with time-to-arrest.
- Most of the findings from our analysis are in line with trends seen in the literature, e.g.:
    - Clearing Up Homicide Clearance Rates: Wellford and Cronin, 2000
    - Why do gun murders have a higher clearance rate than gunshot assaults? Cook et al. 2019
    - An Analysis of Variables Affecting the Clearance of Homicides: A Multistate Study, 1999

## DAO 7. Arrest Rates and Shootings Per Month

One trend that we noticed was that the arrest rate tends to increase as shootings decrease; as shootings increase, the arrest rate decreases. This suggests that the police have observable resource constraints that prevent them from solving more shootings as more shootings occur. The below graphic overlays the number of shootings per month since 2015 (blue) and the percent of those shootings that led to an arrest (red). A potential solution to this problem is for the police to focus resources on shooting cases rather than other, less important cases. There may also be other ways that the police can improve arrest rates, including better training and improved availability of modern forensic tools.

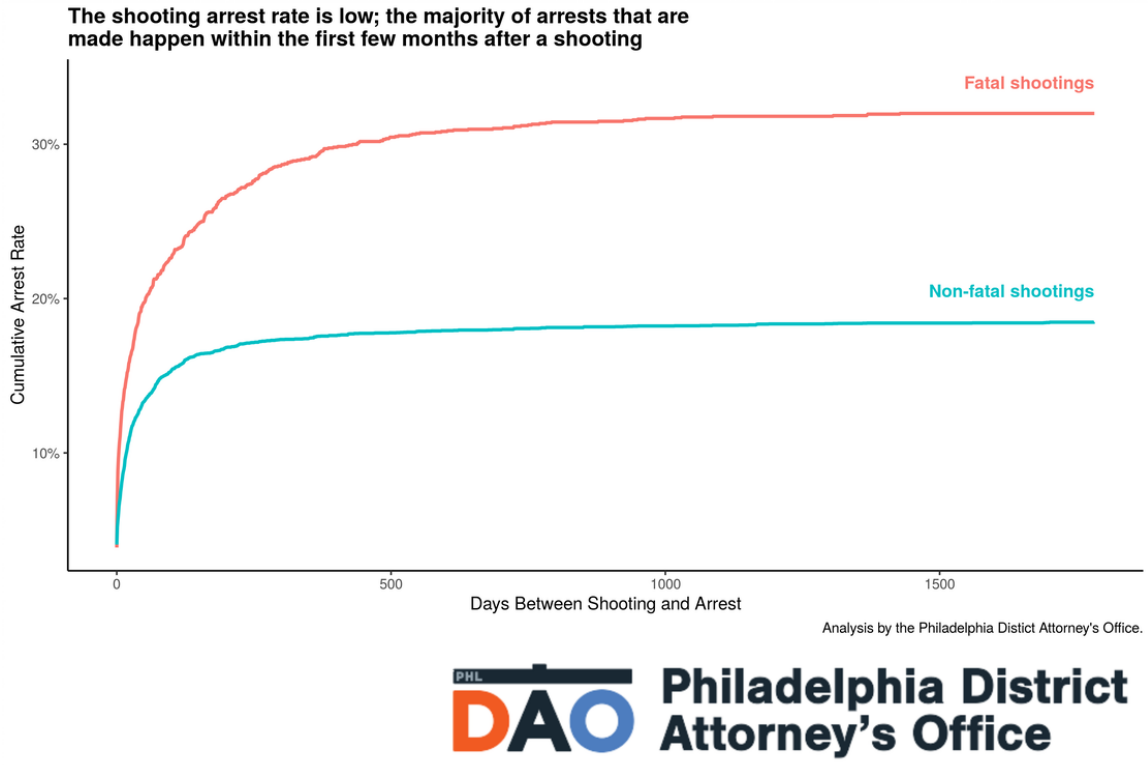


The next figure is similar to the previous graphic above, but instead of showing each month on a timeline, it compares arrest rates to the number of shootings in a month. Seeing the data in this way shows two things very clearly: 1. that the police's ability to make arrests in shootings is directly related to the number of shootings that occur in a month; and 2. Almost every month in 2020 and 2021 has had more shootings than any month between 2015 and 2019.

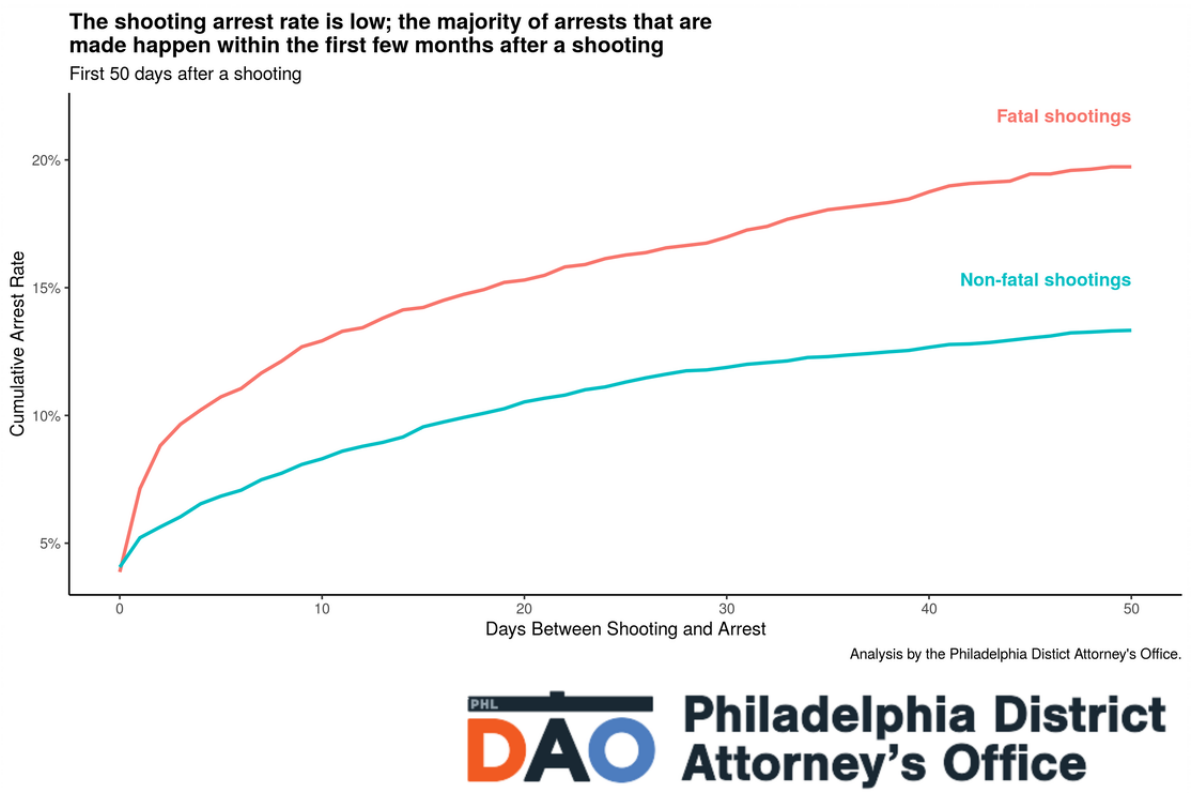


## DAO 8. Time-to-Arrest in Cleared Fatal and Non-Fatal Shootings and Replication of Cook et al. (2019)

Looking at the time to make an arrest, we can see that more fatal shootings are solved quickly, as compared to non-fatal shootings, and that fatal shootings continue to be solved over a long period of time. In contrast, non-fatal shootings tend to be solved quickly or not at all, as illustrated in these supplemental materials. Of particular note is how quickly most fatal and non-fatal shootings are solved: within the first two months, most shooting arrests that will take place have already taken place. For non-fatal shootings, 75% of arrests occur within 61 days. After that time, few additional arrests are made in non-fatal shootings, while a small but noticeable percentage of fatal shootings continue to be solved for several years. Still, for fatal shootings, 75% of arrests occur within 125 days.

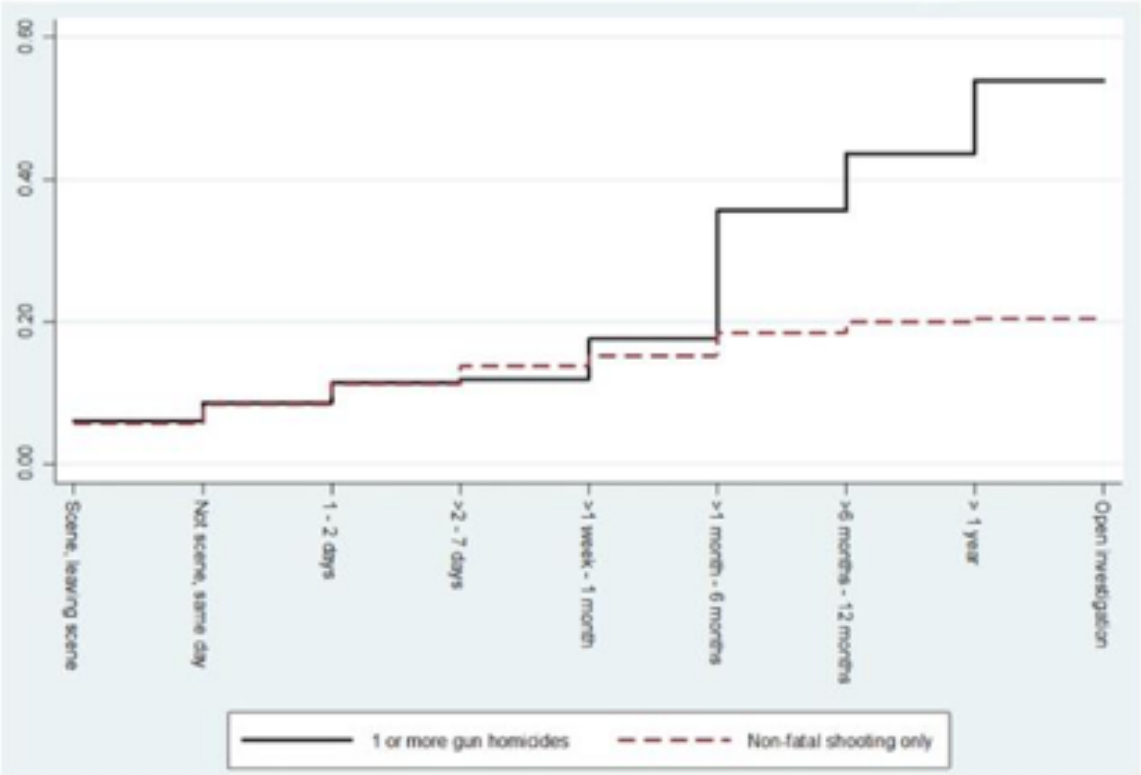


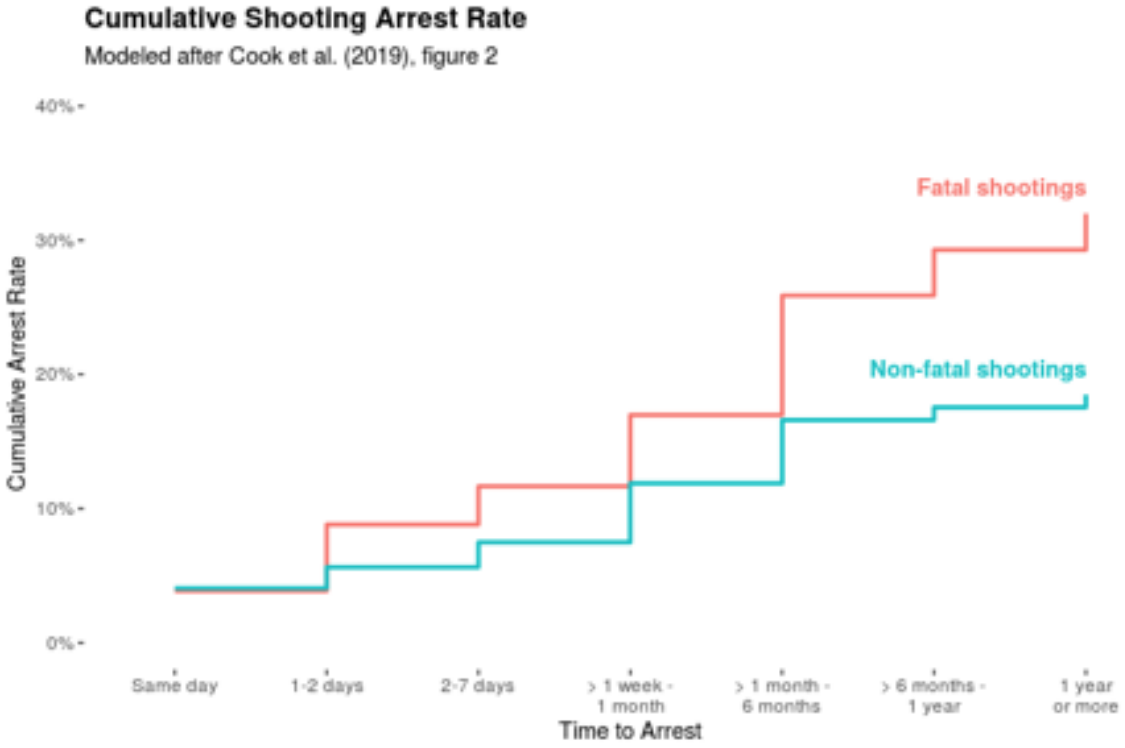

Zooming in on the first 50 days after a shooting, it is more apparent how quickly the arrest rate for non-fatal shootings level offs as compared to fatal shootings:




The next graphic is Figure 2 from Cook et al. (2019), which used data from Boston, which is followed by a graphic that uses Philadelphia data to replicate the methods used by Cook et al. (2019). Compared to Boston, the non-fatal shooting clearance rate in Philadelphia is lower than the fatal shooting clearance rate at each step.

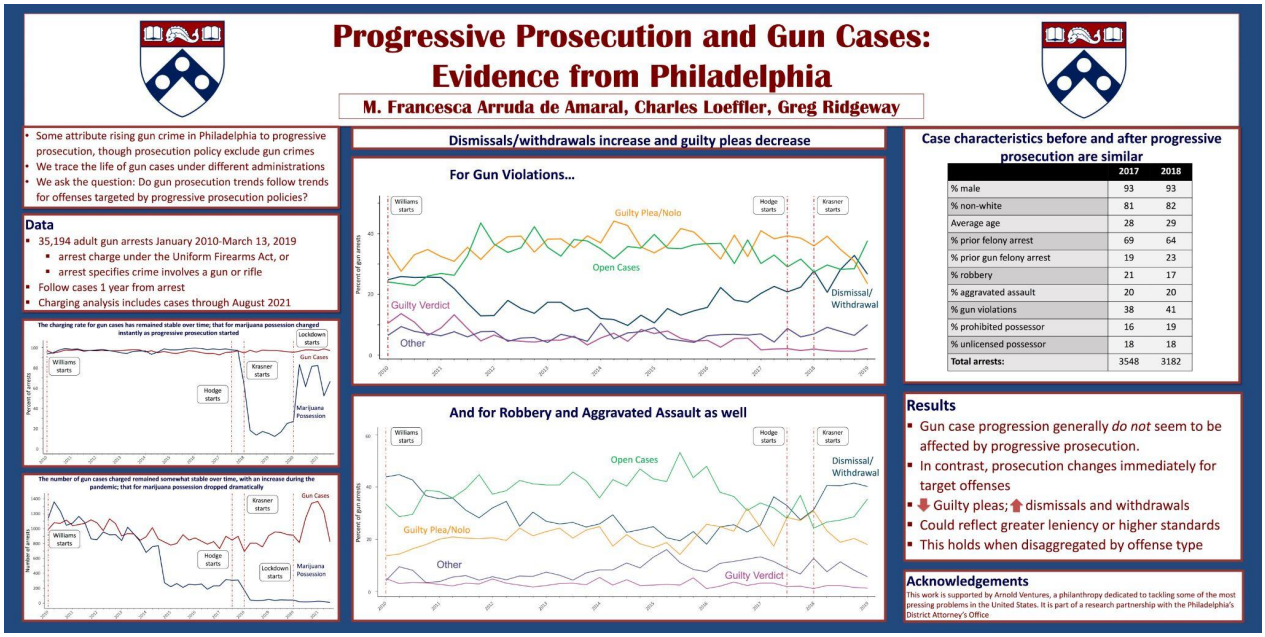
Figure 2 from Cook et al. (2019) (top) and replication using Philadelphia data (bottom).



# DAO 9. Poster on Gun Cases by Amaral, Loeffler, Ridgeway (2021)

This poster was presented at the 2021 American Society of Criminology Conference.



# DAO 10. DAO Analysis of 388 Dismissed or Withdrawn Illegal Gun Possession Cases

## Methods

- This study attempts to understand the reasons gun cases were dismissed or withdrawn, by reviewing physical case files. ADA reviewers considered only cases that were dismissed or withdrawn in municipal court (MC), either before or at a preliminary hearing.
- **"Gun cases"** are cases with a lead charge of illegal possession (18 PaCS 6106, 6016, or 6108), robbery (3701) plus illegal possession, or aggravated assault (2702) plus illegal possession. This does not include homicide cases.
- Extracting data from physical case files added details that our administrative data lacks. This includes facts such as who observed the defendant with the gun and opinions such as why an experienced ADA believes the case to have been dismissed or withdrawn.
- Senior ADAs reviewed 388 case files using a form developed by the DATA Lab created in consultation with experienced ADAs. It consisted of multi-choice questions and also freeform questions that allowed the ADAs to describe all relevant details of the case.

## Findings

- People not appearing in court, especially victims and witnesses, are the cause of approximately half of all gun possession cases dismissed or withdrawn in Municipal Court.
    - Failure to appear (FTA) is the most common reason for a case being dismissed or withdrawn, with 52% of all analyzed cases dismissed or withdrawn due to FTA.
    - The high frequency of FTA's among dismissals and withdrawals suggests that improving FTA rates has the greatest potential to impact the overall dismissal and withdrawal rate.
- People not appearing in court is not the only reason for the rise in proportion of cases that were dismissed or withdrawn from 2016-17 to 2018-19.
    - Although FTAs are important, the rate at which cases with FTAs and without FTA were dismissed or withdrawn increased by about the same amount from 2016-17 to Era 2018-19.

    - This means there is something else going on that is also driving the increase in dismissed and withdrawn cases.
- Findings indicate that higher rates of constructive possession cases can partially explain the increase in dismissals and withdrawals.
    - These are cases that rely on a witness to link the defendant to the gun rather than other forms of evidence like DNA or camera footage.
    - These types of cases are generally harder to hold for court than others.
    - In 2016-17, the defendant was not seen with a gun in 28% of dismissals and withdrawals. In 2018-19 that rate was 35%.
- The rise in constructive possession cases could be driven by an increase in PPD vehicle stops.
    - There has been a documented several year increase in PPD vehicle stops (see next section, Appendix 7: DAO 11).
    - Constructive possession cases are more common in cases where a gun is recovered from a vehicle, since it is difficult to argue possession when the gun is found in a spot in the vehicle that is neutral to the occupants.
    - In 2016-17, the gun was recovered from a vehicle in 55% of dismissals and withdrawals. In 2018-19 that rate was 67%.

## DAO 11. Police Vehicle and Pedestrian Stops

Since 2014, the Philadelphia Police have kept and reported data on the number of stops that they have made, both of pedestrians and vehicles. Since they started reporting, the police have shifted from an equal number of stops of each type to heavy reliance on vehicle stops. In 2019, the last full year before the pandemic, the police recorded their most stops ever: almost half a million stops.

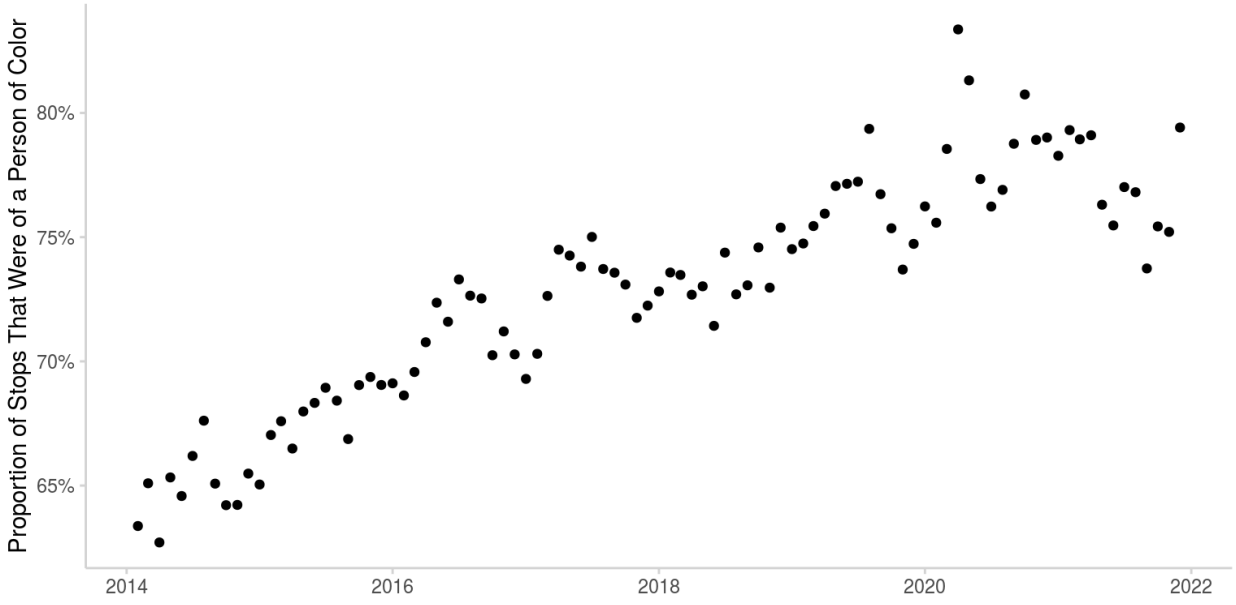
**Annual Stops by the Philadelphia Police**

| Year | Pedestrian | Vehicle | Total Stops |
|---|---|---|---|
| 2014 | 180,414 | 195,409 | 375,823 |
| 2015 | 203,421 | 251,823 | 455,244 |
| 2016 | 138,659 | 277,595 | 416,254 |
| 2017 | 102,826 | 293,895 | 396,721 |
| 2018 | 70,942 | 282,539 | 353,481 |
| 2019 | 77,368 | 394,756 | 472,124 |
| 2020 | 27,607 | 148,760 | 176,367 |
| 2021 | 12,521 | 121,440 | 133,961 |

Source: OpenDataPhilly. Data current as of December 21, 2021.

People of color have become a higher proportion of those stopped by the PPD. While the source of this trend is unclear, it is worth considering the implications of this increasing disparity.

The proportion of PPD vehicle stops where a person of color was driving has increased sharply over the past 8 years.




Source: DAO analysis of police stop data posted on OpenDataPhilly. Produced 12/21/2021.

PHL DAO Philadelphia District Attorney's Office

## DAO 12. Conviction Rates and Open Shooting, Non-Fatal Shooting, and Illegal Gun Possession Cases During COVID-19

Conviction rates in fatal and non-fatal shooting cases have dropped in recent years. Although they were increasing at the end of 2019 and in early 2020, the COVID-19 pandemic has created factors that have distorted case outcomes. A similar trend can be seen in non-fatal shootings. In particular, the courts shut down completely and then reopened very slowly during the pandemic. During this time, hearings that required non-police witnesses were halted, as were jury trials. The outcome of this was two-fold: first, only cases that could be resolved quickly and without need for witnesses were resolved—this led to an unusually high number of dismissals as compared to convictions. Second, few cases have been resolved overall. Whereas at the end of 2018, there were 112 pending fatal shooting cases open in the courts, there were 460 open cases as of December 8, 2021.

**Philadelphia Fatal Shooting Case Outcomes**

By Year of Case Disposition

| Disposition | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Dismissed/Withdrawn/Etc At or Prior to Preliminary Hearing | 1% (1) | 1% (1) | 1% (2) | 4% (9) | 0% (1) | 3% (18) |
| Dismissed/Withdrawn/Etc After Preliminary Hearing | 0% (0) | 1% (1) | 0% (1) | 2% (6) | 1% (2) | 1% (4) |
| Not Guilty/Acquittal | 0% (0) | 0% (0) | 5% (11) | 2% (6) | 2% (5) | 1% (8) |
| Guilty/Guilty Plea | 18% (25) | 37% (72) | 38% (77) | 20% (52) | 11% (36) | 12% (67) |
| Open at end of Period | 82% (116) | 62% (122) | 55% (112) | 71% (182) | 86% (271) | 83% (460) |

Shootings include all Philadelphia shooting cases from January 1, 2015 through present where there was an arrest and a case charged. Data on shooting cases can be found at OpenDataPhilly https://www.opendataphilly.org/dataset/shooting-victims. For a case to be considered, the defendant must have been charged with a homicide, assault, or robbery associated with the incident. The year column is the year of the disposition, not the year of shooting or arrest. There are fewer cases from 2016 because the data only includes shootings since 2015, of which only some were resolved in 2016.

**Philadelphia Outcomes of Non-Fatal Shootings**

By Year of Case Disposition

| Disposition | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Dismissed/Withdrawn/Etc at or Prior to Preliminary Hearing | 5% (20) | 6% (29) | 9% (41) | 9% (43) | 3% (13) | 8% (73) |
| Dismissed/Withdrawn/Etc After Preliminary Hearing | 1% (4) | 5% (22) | 6% (27) | 3% (15) | 2% (8) | 2% (20) |
| Not Guilty/Acquittal | 2% (6) | 2% (10) | 3% (15) | 8% (36) | 1% (6) | 1% (6) |
| Guilty/Guilty Plea | 26% (98) | 33% (155) | 30% (137) | 23% (109) | 12% (51) | 15% (129) |
| Open at end of Period | 66% (248) | 54% (251) | 52% (239) | 56% (261) | 82% (357) | 74% (650) |

Shootings include all Philadelphia shooting cases from January 1, 2015 through present where there was an arrest and a case charged. Data on shooting cases can be found at OpenDataPhilly https://www.opendataphilly.org/dataset/shooting-victims. For a case to be considered, the defendant must have been charged with a homicide, assault, or robbery associated with the incident. The year column is the year of the disposition, not the year of shooting or arrest. There are fewer cases from 2016 because the data only includes shootings since 2015, of which only some were resolved in 2016.

A similar trend can be seen in illegal gun possession cases. In cases of gun possession by a prohibited person, in December 2021 there were 1,177 cases pending, whereas there were fewer than half that amount, 504, at the end of 2018. This reflects a more modest increase in the number of new 6106 cases that were started in that time period, relative to the more than quadrupling of pending 6106 cases from 2018 (466) to 2021 (2,284); in fact, the number of open 6106 cases doubled from 2020 to 2021. More than 2,000 people currently have open cases for possessing a firearm without a license.

**Philadelphia Firearm Possession by a Prohibited Person (6105) Case Outcomes**

By Year of Case Disposition

| Disposition | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|
| Dismissed/Withdrawn/Etc At or Prior to Preliminary Hearing | 6% (55) | 7% (70) | 8% (82) | 12% (147) | 14% (171) | 7% (78) | 15% (283) |
| Dismissed/Withdrawn/Etc After Preliminary Hearing | 7% (65) | 7% (71) | 10% (105) | 9% (113) | 10% (122) | 7% (78) | 9% (177) |
| Not Guilty/Acquittal | 3% (24) | 4% (37) | 4% (41) | 2% (30) | 4% (46) | 1% (12) | 1% (18) |
| Guilty/Guilty Plea/Diversion | 31% (291) | 31% (296) | 27% (291) | 35% (428) | 24% (305) | 13% (136) | 14% (266) |
| Exonerated/Won on Appeal | 0% (1) | 0% (2) | 0% (2) | 0% (2) | 0% (1) | 0% (3) | 0% (3) |
| Open at end of Period | 54% (508) | 51% (493) | 52% (566) | 41% (504) | 49% (615) | 71% (752) | 61% (1177) |

The year column is the year of the disposition, not the year of arrest.

**Philadelphia Firearm Possession Without a License (6106) Case Outcomes**

By Year of Case Disposition

| Disposition | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|
| Dismissed/Withdrawn/Etc At or Prior to Preliminary Hearing | 7% (73) | 8% (85) | 8% (97) | 11% (133) | 14% (176) | 6% (74) | 13% (395) |
| Dismissed/Withdrawn/Etc After Preliminary Hearing | 8% (88) | 10% (116) | 8% (99) | 11% (129) | 12% (146) | 6% (77) | 5% (162) |
| Not Guilty/Acquittal | 4% (45) | 3% (35) | 3% (32) | 2% (24) | 2% (25) | 1% (9) | 0% (14) |
| Guilty/Guilty Plea/Diversion | 32% (361) | 30% (335) | 32% (381) | 36% (421) | 23% (289) | 9% (123) | 9% (270) |
| Exonerated/Won on Appeal | 1% (6) | 0% (5) | 0% (1) | 0% (1) | 0% (4) | 0% (2) | 0% (2) |
| Open at end of Period | 49% (546) | 48% (540) | 49% (581) | 40% (466) | 49% (627) | 78% (1019) | 73% (2284) |

The year column is the year of the disposition, not the year of arrest.

# DAO 13. Preliminary Hearing and Case Outcomes for Weekly VUFA/NFS Case Review

**Weekly VUFA/NFS Case Reviews**

from December 16, 2020 to December 1, 2021

| MC Level Disposition | Total | Percent of MC Disposition |
|---|---|---|
| Held for Court | 1302 | 81% |
| Transferred to Juvenile | 10 | 1% |
| Guilty Plea/Nolo | 4 | 0% |
| Not Guilty | 1 | 0% |
| Dismissed/Withdrawn/Etc | 298 | 18% |
| **Total (past prelim)** | **1615** | |
| Open Cases (awaiting Prelim) | 751 | |
| **Total Reviewed** | **2366** | |

**Outcomes of Cases Held for Court**

| Closure Type | Total | Percent of Closed Cases |
|---|---|---|
| Administrative Closure | 1 | 0% |
| Dismissed/Withdrawn/Etc | 74 | 30% |
| Guilty | 9 | 4% |
| Guilty Plea/Nolo | 164 | 66% |
| Not Guilty | 2 | 1% |
| **Total** | 250 | 100% |

**Status of Cases Held for Court**

| Case Status | Total | Percent of Cases in CP |
|---|---|---|
| Total Closed Cases | 250 | 17% |
| Transferred to Juvenile | 9 | 1% |
| Open Cases | 1,214 | 82% |
| **Total** | 1,473 | 100% |

## DAO 14. Examples of Recent Gun Violence Task Force (GVTF) Investigations

- In 2017, 9 people were arrested as a result of a Grand Jury Investigation into an on-going group conflict in South Philadelphia; 7 entered into guilty pleas on the lead charges, and 2 are awaiting trial for their role in a connected but separate homicide. All received $1,000,000 bail. Two of the arrestees had no prior record, one had a 2013 possession of marijuana arrest, another a misdemeanor theft, and four had juvenile system contact 3-4 years prior.
- Following a Grand Jury investigation in 2019, four individuals were arrested for nine shooting incidents in West/Southwest Philadelphia. The cases are currently open.
    - Defendant #1 prior record: 2012 Robbery (adjudicated delinquent), 2015 Theft
    - Defendant #2 prior record: No record
    - Defendant #3 prior record: 2016 Aggravated Assault (adjudicated delinquent)
    - Defendant #4 prior record: 2013 Robbery (adjudicated delinquent), 2016 Fleeing (adjudicated delinquent).
- A 2020 Grand Jury investigation into shootings in South Philadelphia led to the arrests of 15 individuals, including 11 for shootings and homicides, for 19 separate shootings, including 2 homicides. Of the 15 people arrested, all appeared either on social media or in music videos with the individuals arrested in the 2017 Grand Jury Investigation, and two were defendants in 2017 GJ cases. Two of the individuals arrested for shootings had no prior arrest records; some had been arrested as kids or adults for firearm possession up to 6 years prior.

## DAO 15. Gun Possession Arrests and Re-arrests for a Future Shooting

Despite the intuitive connection between gun possession and shootings (people who shoot people have guns), there is not strong evidence to suggest that arresting and detaining people for illegal gun possession will reduce shootings. As the tables below show, it is exceedingly uncommon for a person arrested for gun possession to be arrested for a shooting within two years of their arrest or an ultimate conviction. It is equally rare for a person charged with illegal gun possession to be arrested for a shooting while out on bail awaiting trial. This is true whether the person was charged with Possession Without a License (6106) or Possession by a Prohibited Person (6106).

**Frequency of Rearrest for a Shooting by Gun Possession by a Prohibited Person (6105) Arrestees**

Cases charged from 1/1/2015-12/31/2021

| | During the Pretrial Period | Within Two Years of Arrest | Within Two Years of Conviction |
|---|---|---|---|
| **Total** | 701 | 1,778 | 895 |
| **Not Arrested for Future Shooting** | 694 | 1,768 | 886 |
| **Arrested for Future Shooting** | 7 | 10 | 9 |
| **% Rearrested for a Shooting** | 1% | 0.6% | 1% |

The pretrial measure only counts people who were released from jail in the pretrial period. The disposition-based measures do not account for post-trial detention. Depending on the lead charge, post-trial detention will be more or less common. Incarceration is common for 18 PaCS 6105, but not for 18 PaCS 6106.

**Frequency of Rearrest for a Shooting by Gun Possession Without a License (6106) Arrestees**

Cases charged from 1/1/2015-12/31/2021

| | During the Pretrial Period | Within Two Years of Arrest | Within Two Years of Conviction |
|---|---|---|---|
| **Total** | 2,434 | 2,898 | 1,124 |
| **Not Arrested for Future Shooting** | 2,414 | 2,860 | 1,108 |
| **Arrested for Future Shooting** | 20 | 38 | 16 |
| **% Rearrested for a Shooting** | 0.8% | 1.3% | 1.4% |

The pretrial measure only counts people who were released from jail in the pretrial period. The disposition-based measures do not account for post-trial detention. Depending on the lead charge, post-trial detention will be more or less common. Incarceration is common for 18 Pa.C.S. 6105, but not for 18 Pa.C.S. 6106.

A common argument made to support arrests for gun possession is to get guns off the street. Unfortunately, there are so many guns legally bought and sold in this country—in addition to guns that are purchased illegally or "ghost guns" which are bought in pieces and assembled—that several thousand gun possession arrests per year hardly impacts the volume of available guns (see Appendix 7: DAO 16).

## DAO 16. Data on Gun Sales and "Crime Guns" Seized

Most of the data points presented below were generated using public data from data.philadao.com, OpenDataPhilly (via the Philadelphia Police Department), the Pennsylvania State Police (PSP), and the Office of the Pennsylvania Attorney General (OAG). These data were supplemented with local arrest and statewide court data, and analysis provided by Dr. David Johnson, Associate Professor of Economics, Central Missouri University.

- There were 12,948,979 guns legally sold or transferred in Pennsylvania over a 22-year period (1999-2020), an average of over 1,600 each day across the Commonwealth (Pennsylvania State Police, organized by Dr. David Johnson, personal correspondence).
- There were 165,717 guns seized by law enforcement statewide in Pennsylvania over a 21-year period (1999-2019), an average of fewer than 22 each day across the state (Attorney General's Office, n.d.). During this time period the Philadelphia Police Department reported seizing 97,905 "crime guns," an average of 12 each day (Attorney General's Office, n.d.)[140].
- While half the guns recovered in Philadelphia originated in Pennsylvania, more than a quarter originated outside of the Commonwealth (Attorney General's Office). Philadelphia is the primary county where guns legally sold in 13 Pennsylvania counties were recovered by law enforcement (Johnson, personal correspondence).
- Over the last 5 years (January 1, 2017-October 10, 2021), the Philadelphia Police Department conducted over 1,500,000 pedestrian and vehicle stops,[141] while recovering 21,178 "crime guns."[142]
    - Of the 1.5M stops, 19% were of pedestrians, 81% were of vehicles. Pedestrian stops had a hit rate of 4.6%, vehicle stops had a hit rate of 0.8%.
    - This equates to an average of over 700 vehicle stops, 166 pedestrian stops, and 12 guns recovered each day (Philadelphia Police Department PPT).

[140] Few agencies have been submitting data since 1999, and currently not all law enforcement agencies report gun seizure information (Attorney General's Office, n.d.).
[141] The Driving Equality Bill passed by Philadelphia City Council in October 2021 aims to reduce the use of pretextual car stops in Philadelphia; it will go into effect in early 2022 (https://phlcouncil.com/city-council-approves-councilmember-thomas-driving-equality-bills/).
[142] Not all crime guns are recovered from vehicle and pedestrian stops. For example, the Philadelphia Sheriff's Office removes guns from homes when a protection from abuse order is served.

- In spite of the 11,757 arrests for gun possession in Philadelphia over the last 8 years, people continue to carry guns. In spite of decades of such enforcement -- and an increase in arrests for gun possession starting in mid-2019, with massive increases during COVID -- evidence from Philadelphia and other large jurisdictions suggests that a higher proportion of arrests have been for offenses where weapons were recovered since the onset of COVID19 and protests for racial justice (Arthur and Asher, 2021; Ludwig, 2021).
- Despite the intuitive connection between gun possession and shootings (people who shoot people have guns), we do not find strong evidence to suggest that arresting and detaining people for illegal gun possession will reduce shootings (see Appendix 7: DAO 15). It is rare for a person charged with illegal gun possession to be arrested for a shooting while out on bail, awaiting trial; This is true whether the person was arrested for carrying a firearm while prohibited from doing so (1%) or carrying a firearm without a license (0.8%).
- There is not clear research suggesting that illegal firearm possession is a precursor to committing a future shooting; that is, many people carry guns and do not shoot other people. There is evidence people who carry guns in Philadelphia are more likely to be shot in an assault than those not in possession of guns (Branas et al., 2009).

The table below shows the number of guns legally sold and reported in Pennsylvania and the Philadelphia region (Philadelphia, Montgomery, Bucks, Chester, and Delaware counties) from 1999-2020. There were more guns sold in this period than there are residents of Pennsylvania.

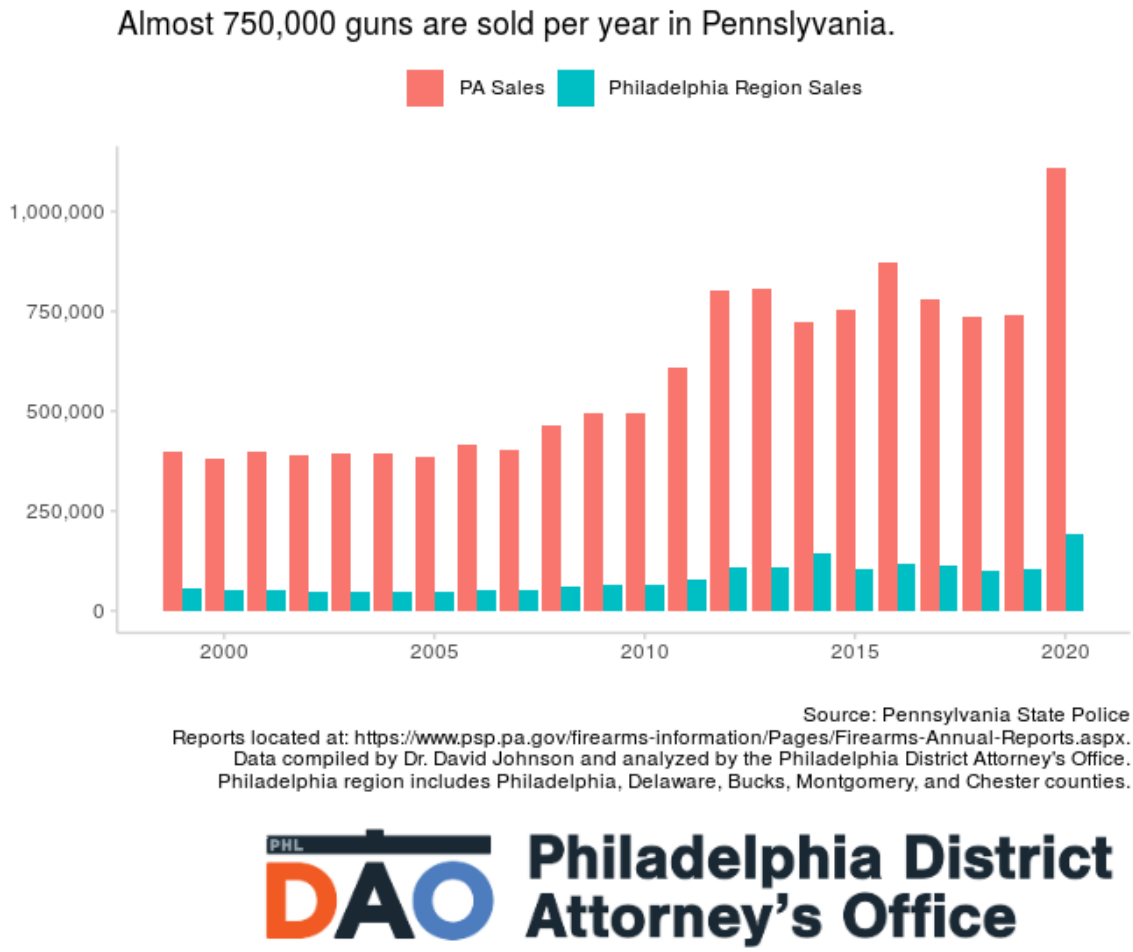
**Total Guns Legally Sold in Pennsylvania, 1999-2020**

| PA | Philadelphia Region |
|---|---|
| 12,948,979 | 1,824,614 (14%) |

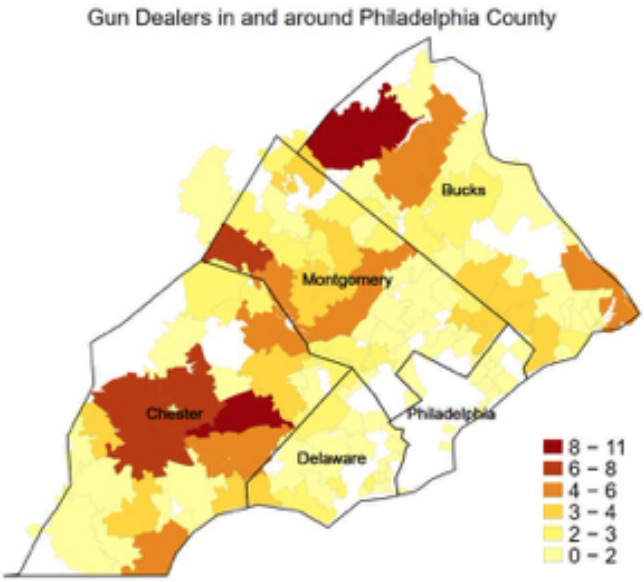
Source: Pennsylvania State Police
Reports located at:
https://www.psp.pa.gov/firearms-information/Pages/Firearms-Annual-Reports.aspx
Data compiled by Dr. David Johnson, University of Central Missouri,
and analyzed by the Philadelphia District Attorney's Office.

The next figure shows that the rate of gun sales has been increasing rapidly, with more than 1 million guns sold in Pennsylvania in 2020. There were 12,948,979 guns legally

sold or transferred in Pennsylvania over this 22-year period (1999-2020), an average of over 1,600 each day across the Commonwealth.



The map by Dr. David Johnson, Associate Professor, University of Central Missouri, shows the number of gun dealers in and around Philadelphia county, by ZIP code. Since 2003, there have been between 11 and 23 Federally licensed gun sellers operating in Philadelphia County. However, 310 were open across Bucks, Chester, Delaware, and Montgomery counties in 2019 (see map), with more in New Jersey and other proximate counties and states.




However, in spite of the relatively few gun dealers in Philadelphia county, several of them have legally sold guns later recovered by law enforcement. A preliminary analysis by David Johnson, PhD, Associate Professor of Economics at the University of Central Missouri, found that, since 2003, law enforcement across the Commonwealth have recovered:

- Over 2,500 guns sold at Philadelphia Archery and Gun Club Inc. (831 Ellsworth St, Philadelphia, PA 19147), making it the seller with the second-most guns recovered by law enforcement since 2003.
- Over 1,500 guns sold at Lock's Philadelphia Gun Exchange (6700 Rowland Ave, Philadelphia, PA 19149) were later recovered by law enforcement, the 4th-highest total statewide since 2003.
- Over 1,000 guns sold at Mike and Kates Sport Shoppe (7492 Oxford Ave, Philadelphia, PA 19111) were later recovered by law enforcement, the 9th-highest total statewide.
- Colosimo's Gun Center (933 Spring Garden St #35, Philadelphia, PA 19123) – which closed in 2009[143]– still ranks 10th in the state in producing guns recovered by law enforcement since 2003.

143

https://www.inquirer.com/philly/news/breaking/20090930_At_a_notorious_gun_shop__the_end_of_an_era.html

There has been broad community support for targeting negligent gun-sellers, including efforts to close Colosimo's.[144] Identifying gun dealers whose guns are later recovered by police can help inform targeted enforcement strategies to reduce straw purchases. A preliminary analysis of national data indicates that as the percent of gun dealers that are inspected increases, the number of gun dealers decreases (David Johnson, personal correspondence), suggesting that increasing inspections of dealers in Philadelphia and surrounding counties might reduce straw sales and purchases and the flow of guns into Philadelphia.

In contrast to the 12,948,979 guns legally sold or transferred in Pennsylvania from 1999-2020, only 85,071 "crime guns" were recovered in Philadelphia during this time period. Only half of those clearly originated through legal transactions in Pennsylvania; the rest were brought into Pennsylvania from other states or were unable to be traced to a legal sale. It is impossible to arrest our way out of illegal gun possession in Philadelphia: the supply and availability of guns are just too great.

**Reported Crime Guns Recovered in PA, 1999-2019**

**And the origin of the gun, by prior sale**

| | Total | PA Origin | Outside PA Origin | Origin Unknown |
|---|---|---|---|---|
| **Philadelphia** | 85,071 | 43,202(51%) | 23,819(28%) | 18,050(21%) |
| **PA** | 165,717 | 91,646(55%) | 47,085(28%) | 26,986(16%) |

Source: Pennsylvania Attorney General's Office
https://www.attorneygeneral.gov/gunviolence/pennsylvania-gun-tracing-analytics-platform/
Note that not all counties report gun recoveries.

144 https://nvdatabase.swarthmore.edu/content/faith-based-philadelphians-campaign-close-gun-shop-2009

In Philadelphia, only 1 in 4 “crime guns” recovered by the police were clearly last legally sold in Philadelphia. Most guns were imported from another county or another state

**Most crime guns recovered in Philadelphia were not purchased in Philadelphia.**

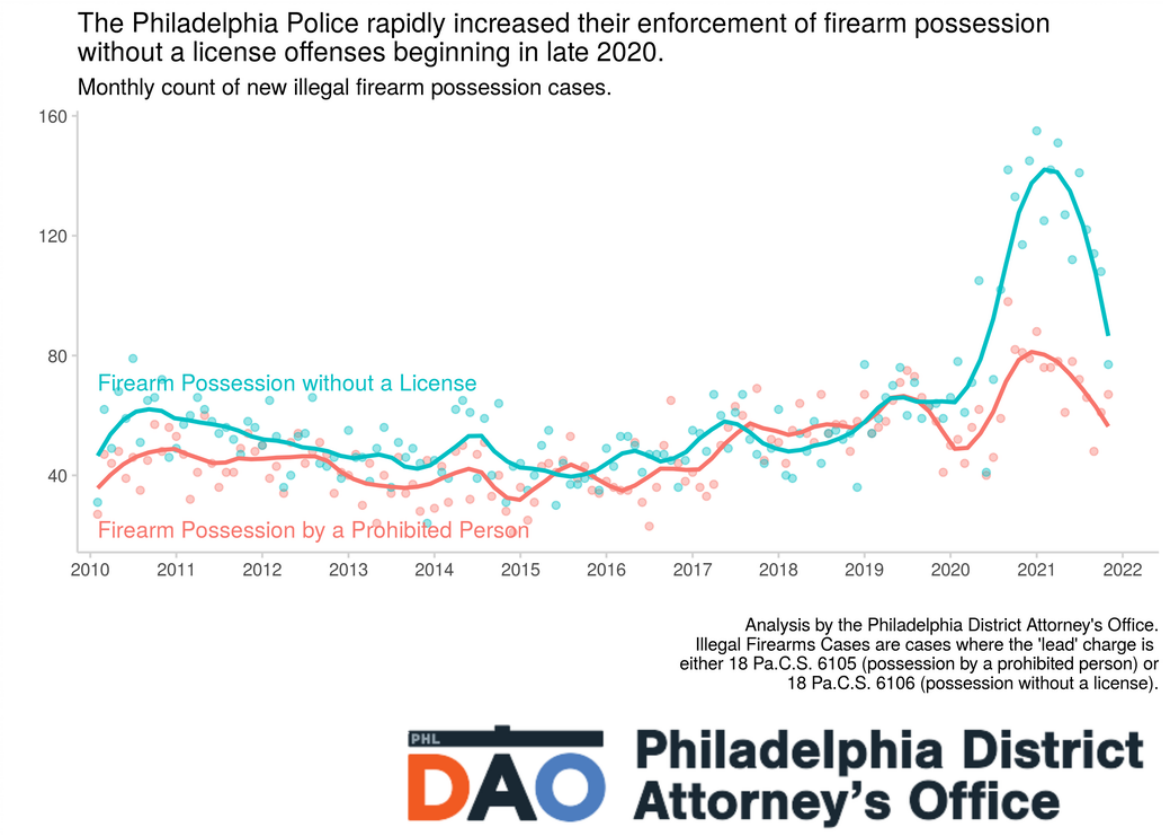
**Guns Recovered 2015-2020**

| Purchase Location | Crime Guns Recovered in Philly |
|---|---|
| Philadelphia County | 12,810 (25%) |
| Unknown Origin | 11,809 (23%) |
| Delaware County | 3,568 (7%) |
| Montgomery County | 2,695 (5%) |
| Bucks County | 2,181 (4%) |
| Massachusetts | 2,002 (4%) |
| Florida | 1,246 (2%) |
| Connecticut | 1,221 (2%) |
| Virginia | 1,143 (2%) |
| Georgia | 996 (2%) |
| North Carolina | 726 (1%) |
| South Carolina | 719 (1%) |
| New York | 614 (1%) |
| California | 555 (1%) |
| All other locations | 8,382 (17%) |

Source: Pennsylvania Attorney General's Office
https://www.attorneygeneral.gov/gunviolence/pennsylvania-gun-tracing-analytics-platform/

## DAO 17. Enforcement of Illegal Gun Possession

A primary police strategy to deal with gun violence has been to increase enforcement of gun possession laws. The number of "crime guns" seized is regularly reported. Although there has been an increase in arrests for gun possession for the past several years, enforcement of gun possession laws increased starting in mid-2019, with massive increases in 2020 and 2021. In particular, the police have increased enforcement of firearm possession without a license—an offense charged when a person is not legally prohibited from owning a firearm because of a past conviction, but the person does not have a license to carry a firearm.

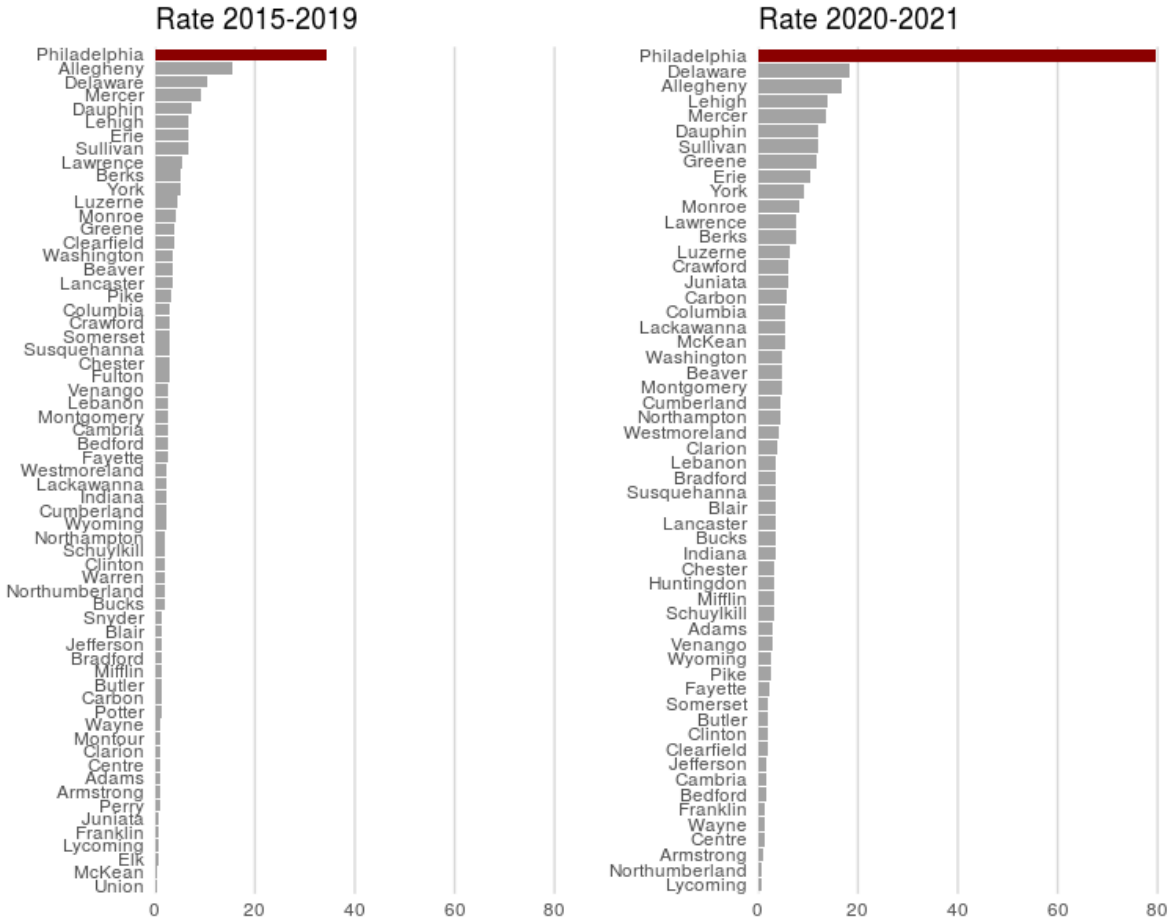



Enforcement of possession without a license is unique to Philadelphia as compared to the rest of the state, as is the massive increase in enforcement since the start of the pandemic. The chart on the next page shows the rate at which Firearm Possession Without a License cases have been brought in each county, annually, from 2015-2019 and then in 2020 and 2021, controlling for population size. Prior to the pandemic, Philadelphia already charged twice as many of these cases annually, per capita, than any other Pennsylvania county. During the pandemic, Philadelphia more than doubled its prior charging rate, and

now charges more than four times the number of Firearm Possession Without a License cases as other counties

**From 2015-2019, Philadelphia charged cases of Gun Possession Without a License at a rate more than double any other county in Pennsylvania.**

**In 2020-2021, it more than doubled its previous rate charging cases at a pace far beyond any other Pennsylvania county.**




Source: Philadelphia DAO analysis of statewide court data.
Gun Possession Without a License cases counted are those where the most serious charge brought against a person was 18 Pa.C.S. 6106 and no other felonies were charged at the same time.
Rate is the number of cases brought per 100,000 residents, per year, during the time period. Data through May 16, 2021.

PHL DAO Philadelphia District Attorney's Office

Enforcement of gun possession laws has not been equal across racial groups. Despite Philadelphia's population being only approximately 44% Black, almost 80% of arrestees for gun possession in Philadelphia were Black between 2007 and mid-2021.

**Race Breakdown of Individuals Arrested for Gun Possession Offenses, Philadelphia**

Cases charged between 01/01/2007 and 05/16/2021

| Case Type | Black | White | Other Non-White |
|---|---|---|---|
| **Possession by a Prohibited Person** | 80% | 17% | 3% |
| **Possession Without a License** | 77% | 16% | 7% |

Race is as reported by the courts based on police/court observation of each defendant. The courts only provide limited race information. They do not provide reliable Latinx information.

A similar disparity exists statewide. Despite a state population that is only 12% Black (including Philadelphia), 65% of those arrested for illegal firearm possession statewide were Black between 2007 and mid-2021.

**Race Breakdown of Individuals Arrested for Gun Possession Offenses, PA (excluding Philadelphia)**

Cases charged between 01/01/2007 and 05/16/2021

| Case Type | Black | White | Other Non-White |
|---|---|---|---|
| **Possession by a Prohibited Person** | 65% | 33% | 2% |
| **Possession Without a License** | 66% | 31% | 3% |

Race is as reported by the courts based on police/court observation of each defendant. The courts only provide limited race information. They do not provide reliable Latinx information.

# DAO 18. Poster on Court Actor Failures to Appear by Graef and Ouss (2021)

This poster was presented at the 2021 American Society of Criminology Conference.

## Court Actor Failures to Appear

Lindsay Graef and Aurélie Ouss
Department of Criminology, University of Pennsylvania

### Background

- Lots of attention on defendant failures to appear (FTAs)
- Less is known about the prevalence, causes, and consequences of FTAs by other court actors
- Failures to appear may shape case outcomes by influencing prosecutorial and judicial decisions to withdraw or dismiss a case

### Methods and Data

- Analysis of 618,778 hearings for 133,078 misdemeanor cases disposed in Philadelphia's Municipal Courts from 2010-2020
- Court Actor FTAs are identified using regular expressions to search docket entry notes entered by the court clerk / stenographer

**Impact of FTAs on Case Outcomes**

| | Withdrawn | Dismissed | Case Length Days | Speedy Trial Deadline |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| **Victim** | 0.15*** | 0.03*** | -9.05*** | 0.21*** |
| | (0.00) | (0.00) | (2.00) | (0.00) |
| **Witness** | 0.17*** | 0.05*** | 19.54*** | 0.34*** |
| | (0.00) | (0.00) | (1.63) | (0.00) |
| **Officer** | 0.03*** | 0.10*** | 67.90*** | 0.33*** |
| | (0.00) | (0.00) | (1.93) | (0.00) |
| **Defendant** | -0.06*** | -0.00* | 150.68*** | -0.01** |
| | (0.00) | (0.00) | (1.81) | (0.00) |
| **Defense Attorney** | -0.04*** | -0.01*** | 81.18*** | 0.20*** |
| | (0.00) | (0.00) | (2.37) | (0.00) |
| Mean Dep. Var. | 0.30 | 0.08 | 200.31 | 0.33 |
| $R^2$ | 0.20 | 0.04 | 0.15 | 0.32 |
| Num. obs. | 125122 | 125122 | 125122 | 125122 |

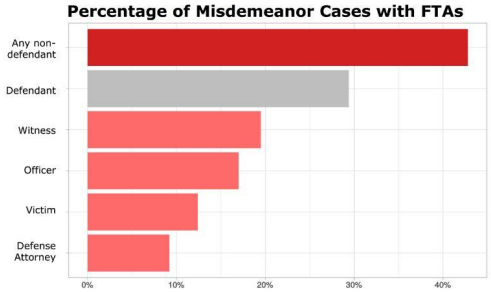
***p < 0.001; **p < 0.01; *p < 0.05. All models include year and charge fixed effects as well as controls for defendant socio-demographics, prior offenses, and whether a case has a domestic violence flag. Columns 1, 2, and 4 are linear probability models. Robust standard errors in parentheses.

**Acknowledgements:** This work is supported by Arnold Ventures, a philanthropy dedicated to tackling some of the most pressing problems in the United States. It is part of a research partnership with the Philadelphia District Attorney's Office.

### Key Findings

- **Non-defendant FTAs are very common for misdemeanors**
  - 42% of misdemeanor cases will have at least one FTA by a victim, witness, law enforcement officer, or attorney prior to disposition
- **These FTAs are correlated with case outcomes**
  - Increased likelihood of case dismissal and longer case length
- **FTA rates vary by case type and court actor**
  - More police FTAs for less serious cases
  - More victim and witness FTAs for more serious cases

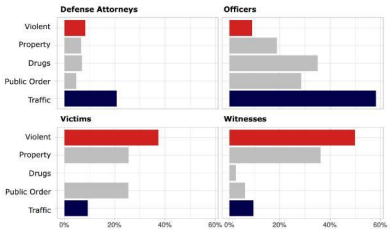
**Percentage of Misdemeanor Cases with FTAs**




Excludes diversion cases and cases continued to Common Pleas Court.
ADAs fail to appear for less than 1% of cases, so they are excluded from these figures.

### Additional Results

Officers and defense attorneys FTA more for less serious offenses, but victims and witnesses FTA more for more serious offenses



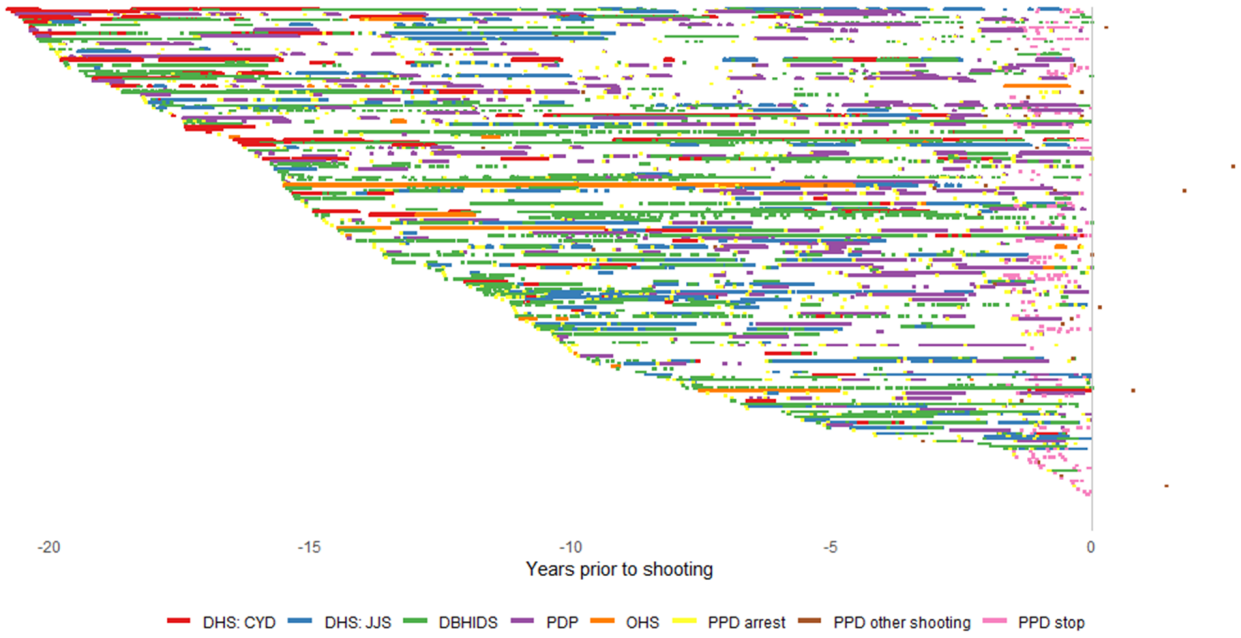

**Reasons Given for FTA by Law Enforcement Officers**

| | | | |
|---|---|---|---|
| Sick | 30% | Funeral | 2% |
| No Reason Given | 26% | Left / Released by Mistake | 2% |
| Injured on Duty | 12% | Appointment / Schedule Conflict | 1% |
| Vacation / Out of Town | 10% | Childcare / Family Obligation | 1% |
| Subpoena Issue | 8% | Military Leave | 1% |
| Training | 6% | | |

### Future Research

- We plan to explore the effects of prosecutors on FTAs and case outcomes
- Getting people to court may be a consequential yet underexplored role that prosecutors play
- Variation in prosecutor effectiveness could allow us to study the effect of pending cases on defendant outcomes

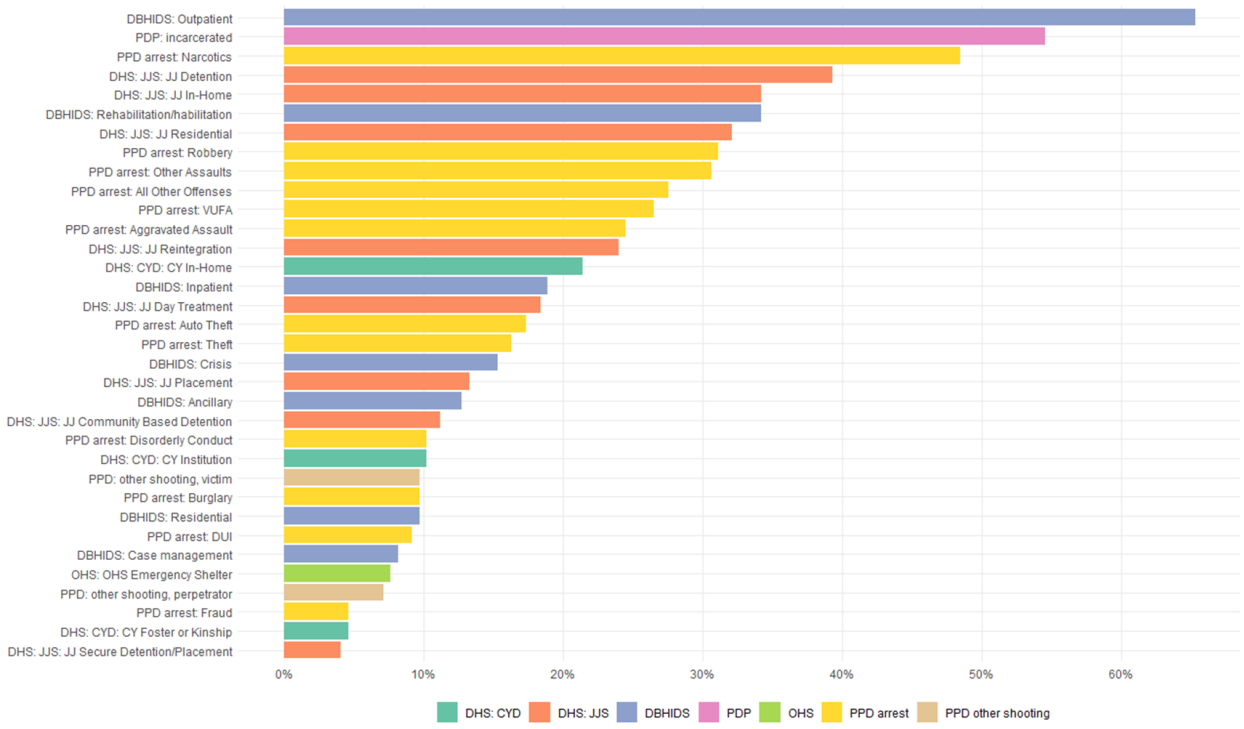
# Appendix 8: PDPH




This figure shows the shooting incident as time 0, on the right side of the image. Each horizontal line is one of the 196 people in the cohort. For each individual there is a black dot signifying when that person turned 18. For PPD stops, data is only available for stops in the two years prior to the shooting incident. What is apparent here is that the vast majority of individuals were seen in various city systems prior to the time of their shooting incident arrest. As noted previously, this is an underestimate of points of contact, given limitations in the data set for information that precedes the year 2000. In addition, various sectors do not have data represented in CARES. Some of these contacts occurred many years prior to the shooting arrest, and some contacts extended for years. Trauma-informed case management from all sectors, streamlined and facile referrals to and adequate follow up with violence prevention programs, peer mentorship, and behavioral health supports or referrals to behavioral health supports within all agencies is a critical point of exploration when considering a preventative public health approach to firearm violence.




This figure also demonstrates points of contact with city agencies for 196 individuals. The gray vertical line represents the age of 18. On each horizontal line, the black triangle is the shooting incident used in this analysis. It is important to recognize that for those born prior to the early 1980s, CARES has little data about their points of contact. Therefore, this is again an under-representation of points of contact. What this does depict is the number and nature of contacts when people are juveniles, within the noted limitations. What is apparent is that DHS and DBHIDS contacts are prominent in the years preceding 18 years of age, and PPD and PDP contacts become more prominent as individuals come of age. Future work assessing how these patterns might differ for individuals without this arrest history will help identify how this might outline areas where there is potential for prevention.




This figure demonstrates the most frequent contacts seen in our cohort. What is demonstrated here is that over 60% of those in this cohort had an outpatient DBHIDS contact, and over 50% were previously incarcerated. Further work in this area needs to be focused on better defining these data elements. In developing this data, PDPH met with representatives from all the agencies who contributed data to this report. Those conversations outlined the importance of understanding the nature of these contacts to better outline what opportunities they might provide. What is the duration of the contact, who is the individual making contact and to what degree is that interaction trauma-informed, what resources is that individual given access to so that necessary referrals can be made, and what additional data do individuals have about the life experiences of those they interact with–these are all critical questions if these are to be seen as opportunities for intervention.

# Appendix 9: Defender

**Annotated Footnotes: Ecology of Violence Model** (full citations at end of document)

**A. Factors Influencing Neighborhood-Level Perceived Risk and Safety**

1: *Exposure to gun violence*. Exposure to community violence is directly linked to perceived personal threat and increases motivation to carry a gun (Loughran et al, 2016). Direct and indirect exposure to gun violence contributes to increased fear and perceived risk (Mitchell et al., 2019).

2: *Availability and prevalence of firearms*. Increased neighborhood-level availability of illegal firearms predicts a higher frequency of shooting incidents (Yu et al., 2017). Also refer to footnote 1.

3: *Perceptions of law enforcement*. As one might expect, perceived effectiveness of law enforcement is lower in communities where frequent shootings occur (Payne & Gainey, 2007; Yu et al., 2017). Negative perceptions of law enforcement will also result in reduced cooperation with law enforcement, as shown by a significant reduction in 911 calls following a publicized incident in which a Black person was killed during an encounter with police (Desmond et al., 2016).

4: *Perceived threats to personal safety*. In summary, neighborhood exposure to gun violence is exacerbated by the high availability of illegal firearms. Where exposure to gun violence is high, residents fear for their personal safety even when there is a visible law enforcement presence. Negative perceptions of law enforcement contribute to reduced cooperation with law enforcement.

**B. Social Capital**

In simple terms, “social capital” may be defined as resources that are obtained through interpersonal networks – for example, whether a neighborhood resident can call upon a next-door neighbor to provide child care, whether residents monitor suspicious activity, or jointly contribute to the maintenance and improvement of their block. In this review, we equate “low social capital” with a very similar construct known as “social disorganization.” Both refer to variations in neighborhood-level social cohesion, a shared interest in and commitment to neighborhood improvement, and mutual support.

Criminologists have noted that, when comparing neighborhoods that are equally socio-economically disadvantaged, crime rates may differ markedly. They have found that "social disorganization" (or low social capital) is a predictor of criminal activity and helps explain why similar communities experience dissimilar levels of criminal activity. In the 1990s, advocates of "broken windows theory" noticed that quality of life offenses such as loitering and vandalism are associated with more serious crimes, and opted to prosecute these offenses more aggressively; an alternative explanation is that loitering and vandalism are indicators of social disorganization and may be ameliorated by strengthening social capital within these communities (Binik et al., 2019).

Tree-planting campaigns and related neighborhood improvement strategies are effective crime-reduction strategies insofar as they increase social capital. They may also have unintended deleterious effects if they result in rising property values. Rising property values may result in increased *residential turnover* as disadvantaged residents are pushed out (see footnote #5, below; also, Schwarz et al., 2015; Wachter & Wong, 2008).

Socio-economically disadvantaged communities receive large numbers of parolees returning from correctional institutions. Researchers sought to understand the impact on returning parolees on local increases in crime rates. They found that violent parolees do contribute to increased neighborhood-level crime. However, in communities exhibiting a high level of social capital, the impact of parolees on crime is significantly reduced (Hipp & Yates, 2009).

5: *Residential turnover*. It is a well-supported finding in criminological research that residential turnover is a contributing factor to social disorganization and neighborhood-level crime (Bellair & Browning, 2010). This may be most easily understood by considering neighborhoods where there is low turnover. Where there is low turnover, the following **protective factors** are often observed:

> *Familiarity*: Neighborhood residents easily recognize strangers on the block,
>
> *Neighboring*: Residents engage in mutual assistance and social interactions,
>
> *Participation*: Residents attend block activities and engage in crime prevention programs such as neighborhood crime watches,
>
> *Informal Surveillance*: Residents watch over one another's property.

6: *Lack of agency to impact community*. Referring to the previous footnote (#5), in neighborhoods where there is high residential turnover, residents cannot easily identify

strangers on the block, do not receive support from neighbors, and so on. These each contribute to feelings of powerlessness, social isolation, and mistrust (Booth et al., 2012).

7: *Limited and/or aversive interactions with neighbors*. Infrequent and/or aversive interactions with neighbors contributes to increased neighborhood dissatisfaction, fewer and weaker ties to neighbors, the desire to move out of a neighborhood, and lower involvement in activities aimed at improving the neighborhood (Booth et al., 2012; Sampson & Graif, 2009).

8: *Social Capital*. In summary, residential stability predictably fosters closer interpersonal ties among neighborhood residents. Where these ties are weak or absent, residents are more likely to feel powerless to improve neighborhood conditions.

**C. Racial and Socio-Economic Segregation and Disinvestment**

9: *Low access to legitimate employment*. An extensive body of research shows that long-term unemployment is directly associated with increased risk of criminal activity, and stable employment is associated with reduced recidivism among formerly incarcerated persons (Lageson & Uggen, 2013). Rather than review this large literature, a couple of key points will be made in connection with youth and the relationship between access to employment and neighborhood-level outcomes.

Summer Youth Employment Programs (SYEPs) have been shown to reduce justice-system involvement among youth. SYEPS provide employment opportunities for young people. It is theorized that structured employment provides youth with occupational skills, optimism regarding future employment, and serves as an alternative to the kinds of "unstructured activities," which, research has shown, may lead to criminal activity (Kessler et al, 2021).

Where there are few opportunities for legitimate employment, individuals may generate income by selling illegal drugs. On average, youth who sell illegal drugs earn an hourly wage that is no greater than the federal minimum wage. Research shows that even small increases in the availability of legitimate employment opportunities can produce a large reduction in drug-selling activity (Ihlanfeldt, 2007).

Where employment opportunities are very scarce, sellers who are incarcerated will be quickly replaced by other individuals; in this situation, the incarceration of a single individual predicts a subsequent *increase* in the number of first-time arrests for sales (Torres et al., 2020). Where a reduction in the number of visible drug transactions can be achieved, it will positively impact residents' level of satisfaction with both their neighborhood and the quality of local policing (MacDonald et al., 2007).

10: *Under-resourced public services*. A non-exhaustive list of public services related to neighborhood-level resilience includes churches, commercial resources, and needs-based government services. Each of these will be briefly discussed.

*Churches.* Local churches can contribute meaningfully to reductions in neighborhood-level crime. This is particularly true of churches which participate in building neighborhood-level social capital. The role of churches in crime reduction is most clearly evident in disadvantaged neighborhoods (Warner, 2019).

*Commercial resources*. Neighborhood availability of grocery stores, pharmacies, and fitness centers contribute to improved physical and mental health of residents. In high-crime, distressed neighborhoods, there are fewer of these resources. Increased fear of crime encourages residents to bypass local facilities and purchase these health-promoting goods and services in other neighborhoods (Tung, Boyd, Lindau, & Peek, 2018). In contrast, in neighborhoods with heavily-trafficked local shops and restaurants, social capital increases and crime is reduced (Cabrera & Najarian, 2013).

*Needs-based government services*. A geospatial analysis of Brooklyn reveals a very high degree of overlap, at the level of census blocks, between concentrations of formerly incarcerated persons and demand for TANF and public housing. These include so-called "million-dollar blocks," where amounts in excess of $1 million per year are spent incarcerating and returning residents to these blocks (Cadora, 2002). Thus, a greater unmet need for services is observed in high incarceration neighborhoods.

11: *Under-performing schools*. In a controlled study, at-risk high school students were randomly assigned to better-performing schools. Students who moved from lowest-ranking schools to average schools subsequently committed 50% fewer crimes than students who had not moved, and were involved in less severe crimes (Deming, 2011). As Deming points out, this finding is consistent with a large body of literature. Students are more likely to become disengaged from schooling if they attend under-performing schools (refer to footnote #20, below).

12: *Summary*. Based on converging empirical data cited above, it is theorized that low access to legitimate employment, under-resourced public services, and under-performing schools each uniquely contribute to neighborhood-level risk for gun violence and criminal activity.

**At Risk Youth**

13: *Family poverty*. Family poverty and community-level poverty each predict youth involvement in delinquent behavior. Where both are evident, the relationship to delinquency is even stronger (Hay, Forston, Hollist et al., 2007). Across the lifespan, poverty and mental illness exhibit a bi-directional relationship. Poverty contributes to symptoms of depression and anxiety; these mental illnesses contribute, in turn, to greater difficulty finding and maintaining legitimate employment (Ridley, Rao, Schilbach et al, 2020).

14: *Family insecurity / father absence*. In the 1990s, discourse surrounding absent fathers tended to stigmatize single-parent families (Haney, 2018); here, the focus is on incarceration-related, unplanned and involuntary separations of fathers from their children. After controlling for other sources of disadvantage, youth experiencing periods of father absence are at significantly greater lifetime risk of involvement with the criminal justice system (Chetty, 2018). Absence of a parent results in reduced parental monitoring of their children's behavior (Markowitz & Ryan, 2016). This sets the stage for delinquent peer affiliation (refer to footnote 16, below). As noted in the body of this report, paternal incarceration adversely impacts a family's financial resources and is a strong contributing factor to womens' risk of eviction.

15: *Trauma and victimization*. Researchers identified males who were both a witness to and a victim of violent crime, as documented in police reports. These youths were shown to be 49.2% more likely to become involved in violent incidents later in life (Ross & Arsenault, 2017). In a longitudinal sample of 1,829 juvenile justice-involved urban youth, over three-quarters had been threatened with a weapon before reaching age 18. Those who had been threatened by a weapon were 2.6 times more likely to obtain a gun later in life and were 3.1 times more likely to perpetrate a gun crime. Men who had received a gunshot injury before age 18 were 2.4 times more likely to be perpetrators of gun violence as adults (Teplin et al., 2021). Compared to the general population, people who receive a gunshot injury are 177 times more likely to be shot again (Bonne et al., 2020). Also, refer to footnote #16, below.

16: *Delinquent peer affiliation*. Youth who exhibit symptoms of trauma are, compared to other youth, more likely to socialize with delinquent peers. They are also more likely to exhibit externalizing symptoms (i.e., "acting out" emotionally in stressful situations) and bully other youth (Lee et al., 2019). Youth with a history of trauma learn from delinquent peers that aggressive behavior is an outlet for emotional distress (Maschi et al., 2008). Youth who routinely socialize with delinquent peers are more likely to engage in delinquent acts and are more likely to become victims of crime (Walters, 2020).

17: *Low trust in institutions*. Individuals who have been victimized by crime or report a heightened fear of crime are less likely to perceive the court system as fair, are less trusting of law enforcement, and distrust the criminal justice system as a whole (Singer et al., 2019). Other research shows that youth who are exposed to neighborhood crime, poverty, racism, and educational disadvantage report reduced trust in institutions (Twenge et al., 2014). This distrust extends to schools and is a factor in school disengagement (see footnote 20, below).

18: *Housing insecurity*. Housing insecurity is defined as an affirmative response to the following questions: ever having "missed a rent or mortgage payment due to inability to pay; moved in with others due to housing costs; been evicted; or spent at least one night in a shelter, on the streets, in a vehicle, or someplace else not meant for human habitation in the past year." Youth raised in insecure homes are significantly more likely to come into contact with the criminal justice system, more likely to interact with child welfare services, and are more likely to report symptoms of depression (Marçal & Maguire-Jack, 2021).

19: *Cognitive immaturity*. The frontal lobe of the human brain, which is associated with understanding the consequences of one's behavior and inhibiting impulses, is not fully mature until the mid to late 20s (Sowell et al., 1999). This is relevant to policies directed at youth in general but is particularly salient in connection with youth who socialize with delinquent peers (c.f. footnote 16). Among youth aged 12-14, consuming alcohol and cannabis slows the development of the frontal cortex (Infante et al., 2018). Precocious substance use is one of the defining elements of delinquency and a consequence of delinquent peer association (Hoeben et al, 2016). Early initiation of cannabis use contributes to poorer performance in school and increased risk of academic disengagement and drop-out (Lynskey & Hall, 2000). These are, in turn, risk factors for criminal involvement (c.f. footnote 20, below).

Legal scholars have grappled with the implications of brain development in terms of criminal culpability (Caulum, 2007). As a practical matter, cognitively immature individuals are less responsive than older adults to the threat of criminal justice sanctions. Interventions aimed at reducing youth involvement with guns and gun violence will be more effective if these cognitive limitations are considered.

20: *School disengagement*. A trajectory leading from school disengagement to criminal justice system involvement, known as the "school-to-prison pipeline," has received increasing attention in recent years. School suspension is a robust predictor of later

incarceration and has been identified as a key “negative turning point” in terms of lifespan development (Hemez et al., 2020).

School disengagement is more likely when students must adapt to difficult transitions between schools. Matthew Steinberg of the *Philadelphia Education Research Consortium* found that high school students who change schools are twice as likely to later drop out. In Philadelphia neighborhoods experiencing high rates of poverty, segregation, and incarceration, high school students are far less likely than students in other neighborhoods to remain in the same school until graduation. This creates a challenging environment for teachers, and contributes to high teacher turnover. In disadvantaged neighborhoods, only half of Philadelphia high school students remain in the same school for 4 years, and one quarter of all students make two separate transitions between schools. Of these "mobile" students, 70% are Black (Hangley, 2019).

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