Gun Violence in Durham, NC, 2017-2021:

Investigation and Court Processing of Fatal and Nonfatal Shootings

Philip J. Cook, PhD
Sanford School of Public Policy,
Duke University, pcook@duke.edu

sanford.duke.edu

Audrey Vila, BA
Wilson Center for Science and Justice,
Law School, Duke University

wcsj.law.duke.edu

Table of Contents

1. Overview

In 2020, there were 66% more shooting victims in Durham than in the previous year, an unprecedented increase.   While high rates of gun violence are a chronic problem in Durham, this surge in 2020 made the search for solutions more urgent than ever. Effective law enforcement is a key to gun violence prevention. The Durham Police Department (DPD) is on the front line of the city's response to gun violence, and in particular is responsible for investigating criminal shootings, arresting suspected perpetrators, and providing the Durham District Attorney's Office with evidence required for a successful prosecution of the defendants. Its success in accomplishing these tasks has a direct influence on gun violence rates.

In December 2021, the new Police Chief, Patrice V. Andrews, invited Professor Cook to conduct an analysis of the DPD's recent performance in investigating shootings, both fatal and nonfatal. This report is the result of that analysis. [1] It utilizes data from DPD records for all criminal shootings occurring during the 5-year span 2017-2021. Data were also obtained from the Durham courts to determine what happened following arrest in these shooting investigations.

One specific purpose of this report has been to document the disparities between fatal and nonfatal shooting incidents with respect to how they are investigated by the police and processed in court. Nonfatal shootings are sometimes called "almoscides" to highlight the fact that whether the victim lives or dies in a criminal shooting is largely a matter of chance. The mixes of circumstances, motives, and characteristics of victims and shooters are similar. For that reason, it is reasonable to claim that solving nonfatal shooting cases is as important for prevention purposes as solving fatal shooting cases. The goal is to prevent shootings, period. Yet despite this logic, Durham, like other jurisdictions, is much more likely to solve fatal than nonfatal shootings, and that is true despite the fact that nonfatal shootings generally have a key witness (the victim) who is lacking from fatal cases. Much of the explanation for this disparity appears to be with respect to the greater priority and resources devoted to the investigation of fatal shootings. This report may be helpful in making the case for increasing the priority for investigations and prosecutions of nonfatal shootings.

During the 5-year period under consideration, there were 1188 shooting victims in Durham (of which 160 died) in 1011 distinct incidents – about 200 incidents per year on average. As a result of DPD investigations, 46% of the fatal-shooting incidents resulted in at least one arrest, compared with just a 16% arrest rate for incidents in which the victim(s) survived. The arrestees were processed in the Durham courts (although a handful of cases were transferred to federal court). While most defendants were prosecuted, some had all charges dismissed for various reasons. The remaining cases -- those that have been prosecuted – represent 42% of the fatal shooting incidents and just 11% of the nonfatal shooting incidents. For all 1011 shooting incidents combined, there have been 74 with a conviction in the Durham courts, 6 that were federally indicted, and 10 that were processed as juveniles (so that we lacked access to court

records). Another 62 cases were still pending as of July 2022. If we assume that all of the federal cases and the cases pending in Durham courts eventually result in a conviction, the fraction of shooting incidents in which there was both an arrest and conviction was about 15%. Thus when there is a criminal shooting in Durham, it is unlikely (85%) that anyone will be arrested and convicted.

These results are troubling, not only because the system has failed to deliver jusice, but also because of the urgent need to prevent future gun violence in Durham. An increase in the arrest and conviction rates for gun violence cases would reduce future gun violence through several mechanisms:[2] incapacitating dangerous perpetrators from engaging in subsequent violence; deterring some would-be shooters by communicating a credible threat that shooting someone will result in legal consequences; and interrupting cycles of revenge. It is also plausible that a stronger performance by the police and courts would serve to send a clear message that the authorities are determined to help improve the quality of life in violence-impacted communities.

This report is intended to provide a data-based description of gun violence and the law-enforcement response since 2017. It is not intended to *explain* the observed patterns, or provide guidance on how performance can be improved. Our hope is that documenting outcomes of police investigations and court processing will help motivate further inquiry and action. Among our conclusions for shooting incidents during the five-year period 2017-2021:

- Victims were not representative of Durham's population with respect to age, race, or sex. Indeed, most victims were youthful (ages 18-35) Black men, a group that constitutes a small percentage of Durham population. But gun violence had far-reaching effects on the City and all its residents.
- Non-fatal and fatal shootings have been similar in many respects (including the characteristics of victims and patterns over time and space), but police investigations of non-fatal shootings tended to collect less evidence and have a much lower arrest and conviction rate.
- Most cases that are cleared by an arrest result in a prosecution, including 89% of fatal shootings and 70% of nonfatal shootings. But the most serious cases typically take years to process in the courts (in Durham as elsewhere), and there has been no disposition yet in a large percentage of the fatal shootings.
- In our judgment, results of the sort presented in this report should be readily available to local government agencies and the public. But compiling these data has not been easy, and has only been possible due to the extraordinary efforts of the Durham Police and District Attorney's Office. We encourage police and court officials to coordinate on producing a similar report on an annual basis.

The next section provides a brief description of data sources and processing. Subsequent sections report the results of the data analysis on three topics:

---

[2] For a fuller discussion of these mechanisms, see Braga and Cook (2023).

- Patterns of victimization
- Investigation outcomes
- Court-processing outcomes

Brief conclusions are provided in the final section of the main text. An appendix provides some detail on data acquisition and processing.

2. Data sources and processing

The analysis here is based on data from the Durham Police Department (DPD) and the Durham Courts for incidents occurring during the five calendar years, 2017-2021. An incident was included if at least one victim was shot in the course of a criminal assault   In any one incident there may be more than one victim, as is often true, for example, in a drive-by shooting. Most of the analysis which follows tabulates incidents rather than individual victims, using the following definitions:

Fatal Shooting Incident (FS): One or more gunshot victims, of whom at least one dies

Nonfatal Shooting Incident (NFS): One or more gunshot victims, all survive

The relevant DPD records were first extracted in February 2022. These data included descriptive information on the incident, the victim(s), and the results of the DPD investigation. These data were cleaned in consultation with Jason Schiess, and the result is a complete list of incidents known to the police that meet the criteria for inclusion. Note that most gun crimes, including criminal assaults and robberies, are excluded from these data because the victim was threatened but not shot.

The current status of DPD's investigation has been updated through July 15, 2022. A total of 206 of the investigations resulted in one or more arrests. We linked these arrests to court cases partly by use of docket numbers; these numbers are assigned to charges brought by the prosecution, and link to public records on court processing which we accessed. Since early 2018, the majority of docket numbers are included in DPD records. For earlier arrests we found the docket numbers by use of other information available in the DPD records. The Office of the District Attorney provided complete case-processing data for FS cases in November 2022.

Data on case processing in the courts was accessed from public records and merged with DPD data. The resulting data set is unique in incorporating the entire trajectory from shooting incident to court disposition.

A more detailed account of data sources is included in Appendix A.

3. Patterns of Victimization

In this section, we tabulate the number of gunshot victims by year, and provide descriptive information about these victims and incidents for the five years combined. Table 1 provides annual counts. Of the 1188 shooting victims, 160 were killed, for an overall fatality rate of 13%. The number of victims is highly variable from year to year, with an unprecedented increase from 189 to 316 (67%) between 2019 and 2020. It should be noted that Durham's experience was

replicated in many other jurisdictions, and the nationwide increase in gun violence from 2019 to 2020 was the highest in recorded history, with fatal shootings surging by 34%. It was a year that was marked by the profound disruptions and unrest associated with the onset of the Covid-19 pandemic and the nationspread demonstrations against the police following the death of George Floyd.

Table 1. **Annual count of victims, by outcome**

Year	FS Victims	NFS Victims	All Victims
2017	23	194	217
2018	26	174	200
2019	33	156	189
2020	33	283	316
2021	45	221	266
TOTAL	**160**	**1028**	**1188**

Table 2 covers the same period, but provides counts of incidents rather than individual victims. Two victims were shot and killed in six of the FS incidents, which accounts for the difference in totals (154 incidents, 160 victims). In addition, there were 38 surviving victims in FS incidents. Overall, there were 1011 shooting incidents, of which 13% had more than one gunshot victim. (In 26 cases, 3% of the total, there were three or more gunshot victims.)

Table 2. **Annual count of shooting incidents, classified by whether any victims died.**

Year	FS Cases	NFS Cases	All Cases
2017	23	170	193
2018	26	143	169
2019	31	128	159
2020	33	239	272
2021	41	177	218
TOTAL	**154**	**857**	**1011**

A graph of incident counts by quarter (Figure 1) makes vivid the extraordinary surge in shooting incidents during 2020. Much of the surge was confined to the third quarter, July – September. During that period Durham was averaging more than one shooting incident per day. Total shooting incidents dropped between 2020 and 2021, although the number of deaths increased.

Figure 1.
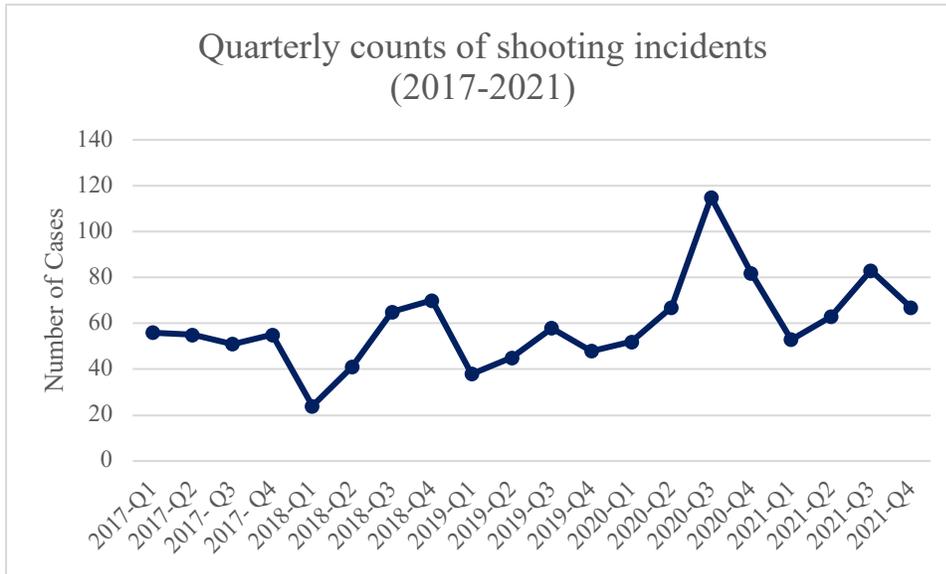
With respect to "who, when, and where," the shooting patterns tend to be fairly consistent over time. Table 3 displays data on victim characteristics for the 5 years combined. Gunshot victims in Durham were overwhelmingly male, African American, and youthful (age 18-34). The majority of Durham's residents are White, but only one in seven victims were White, and most of these White victims were Hispanic. With respect to season, rates were somewhat higher in summer than the rest of the year.

Table 3. Shooting victims, 2017-2021 combined: Who, when, where

		FS Victims N=160 %	NFS Victims N=1028 %
Sex	Female	10.6	16.8
	Male	89.4	83.2
Age Group	0-17	9.4	12.8
	18-24	30.0	31.9
	25-34	33.8	30.6
	35+	26.3	24.2
Race/ Ethnicity	White	14.4	13.0
	Black	83.8	86.1
	Other	1.9	0.9
	Hispanic	8.8	9.0
Location	Residence	25.0	35.9
	Indoor (non-Residence)	7.5	12.2
	Outdoor	66.9	48.7
	Other/unknown	0.3	3.2
Quarter of the Year	Q1	20.0	18.6
	Q2	26.3	22.3
	Q3	26.9	32.0
	Q4	26.9	27.1
Days	Weekend (Saturday and Sunday)	34.4	31.3
	Weekend (Friday, Saturday, Sunday)	45.0	45.0
	Weekend (Saturday, Sunday, Monday)	50.6	47.8
Police District	D1	25.0	29.2
	D2	20.6	20.1
	D3	14.4	12.9
	D4	33.8	32.6
	D5	6.3	5.2

The comparison of fatal and nonfatal shootings is of interest in considering the priority of these two types of cases in allocating police investigation resources. To a considerable extent, the difference between life and death in a criminal shooting is a matter of chance.[3] Hence it is not surprising that there are similar patterns of FS and NFS cases. There are exceptions – Table 3 indicates that a larger share of fatal shootings (two thirds) are outdoors than nonfatal shootings (just about half), suggesting that outdoor shootings tend to be more lethal than indoor. In other respects, the case mixes for fatal and nonfatal shootings are very similar. There is every reason to believe that the investigation of nonfatal shootings is as important from a prevention viewpoint as investigation of fatal shootings.[4]

It should be noted that DPD records include additional information about the victims and circumstances of these shootings, but with enough missing values to make its use problematic. For example, 20% of victims are identified as gang members, but the true percentage may be much higher, since most records do not indicate whether the victim was a member of a gang. Similarly, while 2% of victims are identified as intimate partners of the shooter, the true percentage may be as high as 6% given the number of cases in which police records indicate that it was unknown whether the shooter was an intimate partner of the victim.

4. Investigations

Over the 5-year period 2017-2021, the Durham Police Department investigated an average of 202 incidents a year in which at least one victim was shot. That average conceals a wide variation, from 159 (in 2019) to 272 (in 2020). In general, the resources devoted to the investigation are greatly influenced by whether the victim dies. In particular, homicide investigators have lighter caseloads than the investigators who are assigned nonfatal cases.[5] One result, in Durham as in other cities, is that investigations of FS cases are more likely to be successful.[6]

The usual measure of success is a clearance rate. A case is considered "cleared" if there is at least one arrest, or there are exceptional circumstances in which the investigator has identified a suspect but is unable to make an arrest for some reason. Table 4 displays the arrest rates and overall clearance rates by year. For the 5 years combined, the arrest rate for FS incidents was 46%, while the clearance rate (including exceptional clearances) was 50%. For NFS incidents the arrest rate was just 16%, with a 21% overall clearance rate. Thus, the likelihood of "success," measured either by arrest or by clearance, was much higher in FS than NFS incidents.

---

[3] Zimring 1968, 1972; Braga and Cook 2018
[4] Cook 2020
[5] Cook, Ho, and Shilling 2017
[6] Cook, Braga et al. 2019

Table 4. Annual arrest and overall clearance rates, 2017-2021: Counts and percentages

   A. <u>counts</u>

	Arrest # - FS incidents	Arrest # NFS incidents	Clearance # FS incidents	Clearance # NFS incidents
2017	14	30	16	44
2018	15	23	15	32
2019	15	16	17	21
2020	10	35	11	42
2021	17	31	18	43
TOTAL	(71/154)	(135/857)	(77/154)	(182/857)

   B. <u>percentages</u>

	Arrest % - FS incidents	Arrest % NFS incidents	Clearance % FS incidents	Clearance % NFS incidents
2017	61	18	70	26
2018	58	16	58	22
2019	48	13	55	16
2020	30	15	33	18
2021	41	18	44	24
TOTAL	46% (71/154)	16% (135/857)	50% (76/154)	21% (182/857)

Note: The arrest counts and percentages include incidents in which the arrest was made in another jurisdiction on a Durham warrant. These cases are ordinarily classified as "exceptionally cleared."

Most of the FS clearances are by arrest (71/77), but exceptional clearances are more common for NFS cases. Table 5 tabulates the explanations given for different types of clearances.

Table 5 Type of Clearance, 2017-2021 Combined, for FS and NFS Incidents (Counts)

Case Status	FS Cases	NFS Cases
Cleared by Arrest	71	135
Exceptional. clearance – "Prosecution declined"	2	15
Exceptional clearance – "Victim refused to cooperate"	0	32
Exceptional clearance – NA	4	0
INACTIVE/ OPEN	77	675
TOTAL	**154**	**857**

Our focus in what follows is on clearance by arrest, since it is arrest that is the precondition for a successful outcome to the investigation. Of particular concern are the exceptional clearances in which the prosecution declined to accept for prosecution (presumably because the evidence was judged inadequate to support an indictment) or the victim refused to cooperate. In those cases, the shooter remained at large, and the investigation did not contribute to the prevention of future gun violence. However, one category of "exceptional clearance" does result in arrest and prosecution. We classify the handful of exceptional cases in which the suspect was taken in custody in another jurisdiction as "cleared by arrest." These are typically the result of a Durham warrant being served by another agency, and hence should be considered a successful outcome for the DPD investigation.

Focus on Arrests

Figure 2 illustrates the annual rates of arrest for the two groups of incidents. The large gap between arrest rates for FS and NFS cases appears each year. Also evident is that FS cases during the first three years had higher arrest rates than in 2020-2021, the COVID years.

Figure 2.
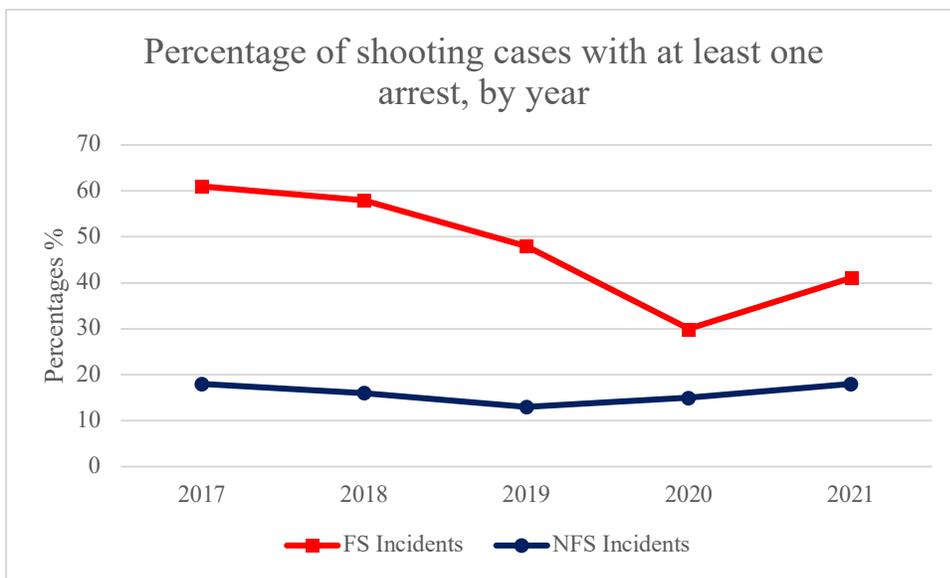
A case is counted as cleared by arrest if there is at least one arrest, regardless of the number of perpetrators in the incident. It is not uncommon for a successful investigation to result in more than one arrest, as shown in Table 6. That was true in 28% of the successful FS investigations, and 18% of the successful NFS investigations. One FS incident resulted in 6 arrests in all.

Table 6: Number of Arrests per Successful Investigation, 2017-2021 Combined (counts)

Number of Arrests	FS Incidents	NFS Incidents
1	51	111
2	11	15
3	6	8
4 or more*	3	1
Total Cases with Arrests	**71**	**135**

*One FS case resulted in 6 arrests. Others in this category had 4.*

It is also of interest to observe the timing of the (first) arrest in these investigations. Table 7 and Figure 3 depict the time to first arrest for FS and NFS Incidents. The time to arrest is an indicator of what is known as the "solvability" of the case. Some cases are readily solved, and sometimes result in an arrest on scene or shortly thereafter. An extreme example would be a domestic shooting in which the perpetrator confesses to the first officer on the scene. At the other end of the spectrum are drive-by shootings involving gang conflicts in which victims and other witnesses are unlikely to cooperate. Solving such cases, if they are solved, may require the patient collection and processing of digital and physical evidence, and "converting" reluctant witnesses. In short, the more difficult cases require resources and time, which may be lacking, especially in lower-priority nonfatal shootings.

Table 7. Time to arrest, 2017-2021 Combined: Cumulative Counts and Percentages

Number of Days	FS Cases (cumulative)	NFS Cases (cumulative)
2	18	46
7	28	54
28	40	80
183	61	112
365	65	114
Ever	71*	135*
Total Cases	154	857

includes arrests in other jurisdictions for which we have no date of arrest

Figure 3
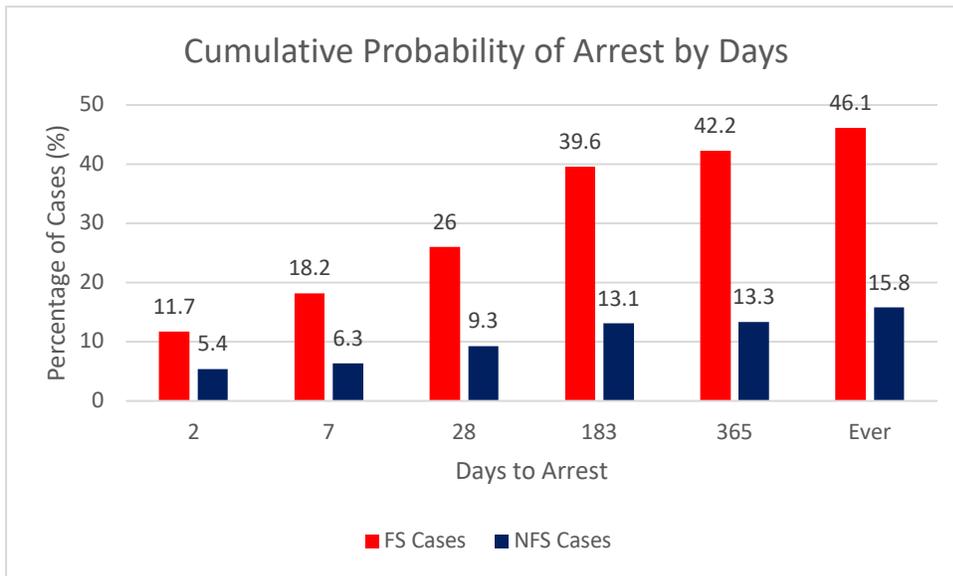
Several patterns are evident:

- At every point following the shooting, the likelihood that there has been at least one arrest is substantially higher for FS incidents than NFS incidents.
- A notable portion of all arrests occur within 2 days. That includes 25% (18/71) of successful FS investigations, and 34% (46/135) of NFS successful investigations. The median time until arrest for successful investigations is 12 days for FS incidents, and 9.5 days for NFS incidents.
- For *most* successful investigations, the first arrest occurs within 4 weeks. That is true in 56% (40/71) of the FS incident arrests, and 59% (80/135) of the NFS incidents arrests.

Why are FS investigations more likely to be successful? One plausible explanation is in terms of the resources devoted to the investigation. The homicide investigators generally have lighter caseloads and greater access to other resources. Investigations tend to be more sustained, as suggested by the difference in median time to arrest. Another plausible explanation is that NFS investigations are often stymied by the challenge of gaining the cooperation of the victim, without which it may be essentially impossible to make a case against a suspect that would be sufficient to gain a conviction in court.[7] (Of course FS investigations are rarely able to interview the victim, but at least the victim does not interfere with a successful investigation, and other members of the community tend to be more forthcoming if the victim has died.)

---

[7] Cook, Ho, and Shilling 2017

Evidence collection

Generally speaking, more evidence is collected in FS investigations than NFS investigations. Table 8 and Figure 4 reports the prevalence of some of the common types of evidence for the 5-year period combined. These results are suggestive of the greater resource intensity of FS investigations. Another indicator is the number of attachments included in the DPD investigation files, covering such areas as investigator notes, warrants and waivers, audio and video files, and so forth. The median FS investigation included 16 such attachments, compared with just 5 for NFS investigations.
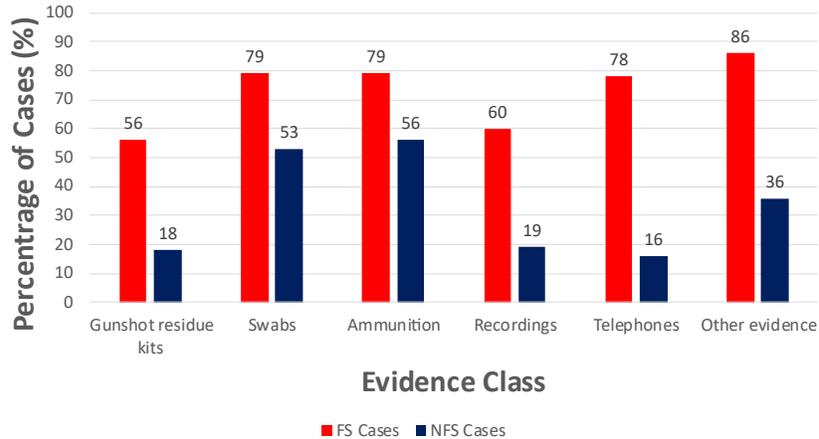
Table 8   Types of evidence collected, 2017-2021 Combined

Percentage of Types of Evidence Collected in FS vs NFS Cases

Evidence Class	**FS cases N=154**	**NFS Cases N=857**
Gunshot Residue kits	56%	18%
Swabs	79%	53%
Ammunition	79%	56%
Recordings	60%	19%
Telephones	78%	16%
Other Evidence	86%	36%

Figure 4.

Type of evidence collected , 2017-2021

5. Court-Processing Outcomes

While the usual performance measure for police investigations is the arrest rate or clearance rate, it is important to observe what happens after arrest. In theory, the prevention goal of police investigation is accomplished primarily through incapacitation and deterrence. Deterrence requires a credible threat of legal consequences for crime, while incapacitation requires restraint of dangerous people. Arrest only contributes to these mechanisms to the extent that it results in conviction and punishment. Yet in practice a percentage of arrests result not in conviction, but rather a dismissal of all charges. There is also a possibility that a defendant will be acquitted following trial, but that has been a rare event.[8]

In what follows we analyze the case histories for FS cases first, and then NFS cases. Recall that an FS case (or incident) is one in which at least one gunshot victim died. NFS cases are those in which one or more victims were shot but none died.

To be clear, in our usage the terms "incident" and "case" are closely related. The "incident" is the original shooting event, which results in one or more people killed or wounded. The "case" includes all arrests, defendants, and charges stemming from a particular incident.

---

[8] In FS cases during the five year period, there have been two trials. A fatal shooting incident in 2018 had a total of 6 defendants. One was acquitted at trial, and one convicted following a plea to second-degree murder. (The other cases are pending.) Given our definitions, we coded that case as a conviction, since the incident did result in at least one conviction. Another fatal shooting in 2018 resulted in trial and conviction for first degree murder.

<u>FS Cases</u>

A total of 71 FS incidents occurring during the period 2017-21 resulted in at least one arrest; there was a felony warrant outstanding for one other incident. Note that in a number of these incidents more than one individual was arrested and prosecuted, typically on more than one charge. Overall, the 72 cases included more than 101 defendants and 225 charges.[9] Table 9 provides the status of these cases, defendants, and charges as of July 2022. Cases are classified as follows:

- "Pending" if at least one defendant is still under indictment, and none have been convicted
- "Conviction" if at least one defendant has been convicted
- "Dismissal" if charges against all defendants have been dismissed

Table 9. Current status in Durham courts of FS cases from 2017-21 incidents combined (counts)

	Pending	Convictions	Dismissals	Federally Indicted	Totals
Incidents	35	27	8	2	72*
Individuals	50	33	9	9	101
Charges	81	49	14	81	225

While only 71 FS incidents were cleared by arrest, there was a felony warrant outstanding for an additional incident

Thus 27 of the 72 cases (38%) have resulted in any conviction in the Durham court, and half (49%) are still pending. In the remaining 10 cases (14%), all charges against all defendants were dismissed – although in two of those cases, the reason for dismissal was a transfer to federal court. (We lack data on the disposition of those cases.) Most of the other cases were dismissed for lack of evidence. The means of conviction (not shown in the table) was in every case a guilty plea.

---

[9] In fact the total number of individuals and charges is somewhat higher. The table includes all incidents in which there was at least one arrest and one charge. But in cases with two defendants with different outcomes, the incident is classified according to the more successful prosecution outcome, and the second defendant is only included if they had the same outcome. For example, if cases where two defendants were convicted, both are included in the second row, but otherwise the second defendant is dropped from the tabulation.

Table 10. Current Status of FS Cases by Year of the Shooting (counts)

Incident Year	Pending	Convictions	Dismissed	Federally Indicted	Totals
2017	2	8	4	0	14
2018	1	12	1	1	15
2019	8	4	2	1	15
2020	8	2	1	0	11
2021	16	1	0	0	17
Totals	35	27	8	2	72*

While only 71 FS incidents were cleared by arrest, there was a felony warrant outstanding for an additional incident

Table 10 divides case dispositions by the year of the incident. Most cases originating from the gun murders ("FS incidents") from 2020 and 2021 are all still pending, with the exception of one that was dismissed and 3 that resulted in conviction. It should be noted that court operations have been impaired by the restrictions implemented as a result of the COVID pandemic.

The plea-bargaining process is evident from the gap between the initial charge and the ultimate conviction charge. Most telling is that while 21 of the convicted defendants were initially charged with an A felony (which carries a sentence of life without parole), the only one that was convicted at that level was the lone FS defendant convicted at trial.[10] Of the 27 FS cases in which there has been at least one defendant convicted, the most serious charge for 16 cases was a B1 felony, which has a minimum presumptive sentence of 16-20 years in prison, and more if the defendant has a prior record of convictions. Seven others were convicted of a B2, C or D felony, in which an active prison sentence is presumptive, and the other three of an F or H felony in which only defendants who have a serious record of prior convictions presumptively receive active sentences. Note that several of these defendants were also convicted of other charges, and the judge had the possibility of making the sentences consecutive. In any event, we lack information about the actual sentences.

---

[10] Stirling Whitted was convicted in October, 2019, of first degree murder for a fatal shooting on July 31, 2018.

Table 11.
Most serious conviction charge for FS Cases that resulted in at least one conviction

Felony class	Count
A	1
B1	16
B2	1
C	2
D	4
F	2
H	1

Note: "Felony class" is the class of the most serious charge of conviction. In cases in which more than one defendant was convicted, "felony class" is the class of the convicted charge for the defendant who was convicted of the most serious charge.

NFS Cases

Of the 135 incidents in which there was at least one arrest recorded in the DPD data, we were able to track 129 cases in the Durham courts. As shown in Table 12, 47 resulted in at least one conviction, all by guilty plea, while 27 are pending. In cases stemming from 45 incidents, all charges were dismissed against all defendants; in 4 of those incidents (involving 6 defendants and 23 charges), the defendants were federally indicted. Among the 41 dismissals without federal indictment, there were 6 incidents in which the defendant was prosecuted for a different, even more serious criminal incident. The other 35 incidents all defendants went free.

Table 12. Current status of NFS cases (counts)[11]

	Juveniles	Pending	Convictions	Dismissals***	Federally Indicted	Totals
Incident #s	10	27	47	41	4	129*
Individuals	12	32	49	43	6	142
Charges	29**	93	83	88	23	316

* there were 6 incidents that had arrests but we were unable to locate docket information (for more details see explanatory memo).
**Juvenile charges are based on police data and cannot be confirmed from court records. Therefore, there may be more or fewer charges depending on what the DAs office decided to charge
***In 6 of these incidents the charges were dismissed for this shooting but the defendants were prosecuted for another crime that was deemed more serious.

Table 13 groups cases according to the year of the incident. Most of the pending cases (22 of 27) are from 2020 and 2021. The conviction percentage for 2017-2019 incidents, where there are only 5 pending cases, is 47%. If all those cases eventually result in a conviction, and the cases that were dismissed due to federal indictment result in conviction in federal court, then the percentage of incidents with at least one conviction would be about 63% (excluding juveniles).

---

[11] The previous footnote also applies to this table.

Table 12. Current Status of NFS cases by year of incident (counts)

Incident Year	Juveniles	Pending	Convictions	Dismissed	Federally Indicted	Totals
2017	1	2	16	9	1	29
2018	0	2	9	10	2	23
2019	2	1	7	5	1	16
2020	5	7	10	11	0	33
2021	2	15	5	6	0	28
Totals	10	27	47	41	4	129

For the entire 5-year period, there were 49 defendants convicted in the 47 cases in which there was at least one conviction. We do not have information on sentencing for these defendants.

6. Conclusions

Gun violence is arguably Durham's most pressing crime problem. Currently there is every reason to believe that the problem is exacerbated by the fact that so few shootings result in arrest and conviction. This report has documented that fact in some detail, and in particular provides statistics on conviction rates that have not been publicly available before.

In brief, for incidents occurring during the five-year period 2017 – 2021, 27 of the 154 fatal-shooting incidents (18%) have resulted in a conviction to date, and defendants for 2 other cases were processed in federal court. Only 47 of the 857 non-fatal shooting incidents (5%) have resulted in a conviction.[12] If we confine the calculation to incidents for the years 2017-2019 (to allow most cases the time to have worked their way through the courts), the percentages increase to 33% for FS incidents, and 8% for non-fatal incidents (assuming that the federal cases resulted in conviction). Taking all shooting cases together for 2017-19, 17% have resulted in arrest and 12% in conviction.[13]

Regardless of which statistics are used, two conclusions stand out. First, people who shoot others in criminal assault incidents are unlikely to be arrested and convicted. The chances of getting away with it are 7 in 8. Second, there is a large disparity in conviction rates depending on whether the victim lives or dies; the likelihood of arrest followed by conviction is 4 times as high if the victim dies.

What can be done to improve the effectiveness of law enforcement against gun violence, and in particular improving the performance of investigations and prosecutions? A good place to start is increased resources and an evidence-based plan for using them most effectively (Bureau of Justice Assistance, 2018). Creating a plan of this sort is well beyond the scope of the current report, but here are two observations that we believe are a good starting point.

---

[12] An additional 5 NFS cases had all charges dismissed, but the defendants were prosecuted and convicted for another, still more serious crime.

[13] Assuming that the cases that are federally indicted result in conviction.

First, in Durham and elsewhere one pervasive obstacle to successful investigation and prosecution is the lack of witness cooperation. While the police have access to increasingly sophisticated technology for obtaining forensic evidence, human witnesses remain essential to solving crimes and trying cases. There are a variety of ways in which the police and courts could reduce the barriers to cooperation: protecting against retaliation, ensuring that financial costs of cooperation including lost wages are reimbursed, and – perhaps most important – taking the time and effort required to overcome witnesses' distrust of the police. These and other approaches require additional resources of investigator time and funding.

Second, while it is understandable that the police department and courts devote more resources to murders than to non-fatal shootings, it is hard to justify that disparity if the goal is preventing future gun violence. There is a large element of chance in whether a shooting victim lives or dies. As a logical consequence, the mix of fatal cases is similar to the mix of non-fatal cases. In particular, substantial overlap exists in the mix of circumstances, motivations, and people involved. The goal is to reduce future shootings, and that can be accomplished by improving success in investigating and prosecuting non-fatal shootings as well as fatal. A very recent restructuring of Durham Police Department investigations is noteworthy for giving higher priority to nonfatal shooting cases.

Our report provides a quantitative description of the law-enforcement response to gun violence as it has played out in Durham over a recent five-year period. The problems we have documented reflect the intrinsic challenges faced by the police and the courts in this arena. But we believe that it is feasible to do better.

References

Braga, AA and PJ Cook (2018) "The Association of Firearm Caliber With Likelihood of Death From Gunshot Injury in Criminal Assaults" <u>JAMA Network Open</u>, (released July 27, 2018).

Braga, AA and PJ Cook (2023) <u>Policing Gun Violence: Strategic Reforms for Controlling Our Most Pressing Crime Problem</u>. Oxford University Press.

Bureau of Justice Assistance, US Department of Justice (2018) Promising Strategies for Strengthening Homicide Investigations Findings and Recommendations from the Bureau of Justice Assistance's Homicide Investigations Enhancement Training and Technical Assistance Project

Cook, PJ (2020) Thinking about gun violence. <u>Criminology & Public Policy</u>, 19(4) Nov. 2020; 1371-1393.

Cook, PJ, AA Braga, BS Turchan, LM Barao (2019). Why Do Gun Murders Have A Higher Clearance Rate than Gunshot Assaults? <u>Criminology & Public Policy</u> August 1.

Cook, PJ, J Ho, and S Shilling (2017) "Criminal Investigations of Gun Assaults and Murders in Durham, 2015: The challenge of securing victim and witness cooperation." Unpublished manuscript, Sanford School of Public Policy, Duke University.

Zimring, F. E. (1968). Is gun control likely to reduce violent killings? <u>University of Chicago Law Review</u>, *35*, 721–737.

Zimring, F. E. (1972). The medium is the message: Firearm caliber as a determinant of death from assault. <u>The Journal of Legal Studies</u>, *1*, 97–123.

Appendix: Data sources and processing

Here we provide a detailed account of data sources, variable definitions, and remaining gaps in the data.

An unusual feature of this report is that it attempts to combine police data with court data. The result is that we're able to go beyond arrest to document the final disposition of cases. There are inherent complexities when trying to join law enforcement and court data. The data collection systems have different purposes that are siloed to those functions. Law enforcement data is concerned with crime reports and their investigative outcomes, and is organized by case number. Court data is concerned with criminal charges and their adjudication outcomes, and is organized by docket number. These two systems do not reliably record the primary database identifier of the other for cross-reference purposes.

An earlier version of this report was reviewed by the District Attorney and Durham Police Department. With helpful feedback and some additional data from the DA, Jason Schiess conducted an audit of the data obtained from these two systems. Several discrepancies were identified in both the fatal and nonfatal shooting incidents. A review of 172 law enforcement reports was conducted, comparing the number of named offenders on cases cleared by arrest against the number of corresponding arrest records under the same case number. The vast majority of the discrepancies identified came from two categories.

- Law enforcement data is largely governed by the FBI's Uniform Crime Report guidelines. During the study period (2017-2021), UCR data collection in the agency transitioned from the Summary Reporting System (SRS) to the National Incident Based Reporting System (NIBRS) on 10-1-2018, which proved relevant during the audit. Under SRS, arrests were not directly connected to incidents at the case level; they were independent but related datasets. It was not uncommon, when an offender was taken to jail on charges from multiple incidents, for them to be combined on the same arrest report under a new case number. The final version of our report has solved this problem as a result of consultation between Jason Schiess and the Durham District Attorney.
- At the case level, there is either a clearance (by arrest or exception) or not, regardless of the number of offenders. At the offender level, arrests are recorded based on the reporting agency making an arrest for offenses committed in the jurisdiction. Circumstances in which all offenders on a case were arrested by DPD, or all offenders were arrested in another jurisdiction pursuant to a DPD warrant, were accounted for initially. However, the audit located several records involving a mixture of these situations, where there were multiple offenders and a mixture of arrest types. Additional data was provided regarding these records.

The current version may still have some minor inaccuracies, but we believe that it is generally an accurate account of the outcomes of investigations of the most serious firearms-related crime in Durham for a 5 year period.

1. **Sources of information**
   a. Durham Police Department Shooting Records: Jason Schiess provided six excel files, only four of which were used in this analysis.
      1. Shot Victim Incidents (2017-2021) – each row is a victim of a shooting event. One event can have multiple victims.
      2. Shot Victim Arrests (2017-2021) – includes all arrests associated with shooting incident numbers and the charges the individual was arrested on. Data was updated through 7/15/22 to complete the analysis.
      3. Shot Victim MOs (2017-2021) – includes categorical information about shooting events which was used to confirm incidents in which a victim was shot (as opposed to present but not shot).
      4. Shot Victim Evidence (2017-2021) – a log that includes the evidence collected by the police department for each incident
   b. Automated Criminal/Infractions System (ACIS): A criminal record keeping database created and maintained by the North Carolina Administrative Office of the Courts that provides Superior and District Courts with accurate and timely criminal and infractions. Court proceedings can be located with a docket number or with information about the defendant.
   c. Durham Police to Citizen Portal (P2C): An online database maintained by the Durham Police Department which makes public the arrest reports for the city of Durham. The analysis uses this database to look up arrest reports by incident number. The arrest reports are used to find docket numbers in ACIS using defendant information.
   d. Durham District Attorney's Office – After a meeting with the DA's office, missing data was ident

2. **Identifiers Used**
   a. DPD Data
      1. Incident number: DPD generated identifier used to distinguish shooting events. These numbers were provided in DPD records from Jason Schiess. If someone is arrested in the following investigation, the link between the arrest and the incident is provided by the incident number.
      2. ID Number: In the arrest data from DPD, each person arrested was given an ID number.
      3. Most Serious Offense: in the victims data, each line (victim) included a value for the most serious offense associated with that victim. The most serious offense was used to determine if victims were killed. Nonfatal shootings included charges such as Robbery or aggravated assault.
      4. Primary vs Secondary victims: Each incident has a Primary victim associated with the most serious offense. Secondary victims are associated with secondary offenses for the incident however we do not have this information. If two victims were associated with the most serious offense they would each be a primary victim. For example, with homicide as the most serious offense, there were a few incidents in which two victims were listed as primary because they were both

killed. The designation of "primary" was used to determine the Fatal shooting incidents.

5. Sequence: numeric variable in the arrest data that counts the number of charges against an individual. A "1" signified the first and most serious charge against an arrested individual, based on the NIBRS classification rather than state statute.
6. Status: a column in the victim dataset which is supposed to identify the outcome of the investigation ie: Cleared by Arrest (CBA), exceptional clearance, Open, or Inactive.

b. Docket number: A number assigned by Durham courts to each case following arrest. A docket number can only have one defendant but can have multiple charges. Docket numbers were included in the DPD records for most cases. For missing docket numbers before 10/1/2018, we contacted Jason Schiess who returned the docket numbers for each incident. For incidents after 10/1/2018, docket numbers were found by looking up the incident in P2C and searching for the defendant listed on the arrest report in ACIS. Docket numbers were confirmed to be associated with the incident by comparing "Offense Dates" in the DPD record and the ACIS record.

1. Docket numbers contain all information regarding a defendant's charges and the disposition of the case. ACIS will report if the charges are still pending. ACIS provides many additional pieces of data such as the sentence length, conditions of the disposition, the reason for dismissal, or the date of arrest.

Data Cleaning and Analysis Process
1. **Victim Analysis**
   a. Uploaded "Shot_Victim_Incidents_2017_2021_" from PD file
   b. Removed all victims in which the injury was "none" or blank on the assumption that they were not shot during the incident
   c. Create the Fatal Shooting (FS) victims data frame with all victims that are the primary victim with Homicide or Neligent Manslughter as the most serious charge. Confirmed total fatal shootings per year with Jason Schiess' totals.
   d. Create Non-fatal Shooting (NFS) victims data with all the rest.
   e. From the NFS victims, took out all injuries that weren't "Gunshot wound" in the years 2019, 2020, 2021. The "gunshot wound" category did not exist for the years prior and therefore all injuries must be included.
   f. Uploaded the "Shot_Victim_MOs_2017_2021_" and determined incidents that indicated there was a victim shot. Compared this list with the FS and NFS victims lists
      1. This comparison found that there were no incidents included that did not have a victim shot. However, there were 22 nonfatal incidents in which a victim was shot and had been removed from the data per "Step E".
         1. One of these was confirmed by Jason Scheiss as victim was shot (1191430)
         2. The following 15 incident numbers were confirmed by Jason Scheiss as no victim was shot
            1. 21014972: Suspect shot
            2. 17033933: Erroneous entry
            3. 20038905: Erroneous entry
            4. 19010813: Suspect shot
            5. 18046150: VI #1287107 was struck but uninjured

6. 17001773: VI #1149751 was struck in right shoulder
7. 17027932: VI #1190873 was struck in lower back
8. 17023059: VI #1182833 was struck in abdomen
9. 18026922: VI #1257933 was struck in fingertip
10. 17036038: VI #1203716 was struck in right leg
11. 17036644: VI #1204627 was struck in right leg
12. 17013776: VI #1166976 was struck in finger
13. 17039869: Suspect shot
14. 17012871: VI #1165646 was struck in back
15. 17035129: VI #1202307 was struck twice

3. Four of the incidents had one victim and were added back into the victims dataset (17033390, 19022852, 20039596, 21004247)
4. One incident had two victims, with one victim noted as the "primary" victim. Therefore, only the primary victim was added back in (17028359)
5. The last two incidents had more than one victim. For each of them, one of the victims was noted as "Other major injury" so this victim was added back into the data (20001333, 20041553)

g. From here, the following data frames were created and used in the analysis
1. Fatal Shooting victims – all victims that died in a shooting incident
2. Nonfatal Shooting victims – all victims shot but did not die in shooting incident
3. Fatal Shooting Incident Victims – all victims shot in an incident in which at least one person died
4. Nonfatal Shooting Incident Victims – all victims in a shooting incident where all victims survived

2. Evidence Collection Analysis
a. Uploaded the "Shot Victim Evidence (2017-2021)" dataset.
b. Used the FS and NFS Incident IDs to determine which had certain types of evidence collected (such as ammunition, swabs, etc).
c. Created tables from these totals

3. Arrest Analysis
a. Uploaded the "Shot Victim Arrests (2017-2021)" dataset. Data was updated with arrests up to 7/15/22 for accurate analysis of the time to arrest.
b. Create arrest data frames:
1. FS arrests data frame was created for FS Incidents in which there was an arrest.
1. The following incident numbers were added because the Durham warrant was served by another jurisdiction. Therefore, they are not in the arrest dataset but they represent an arrest made in the case from the Durham investigation.

17035616
18014212
18038690
19034919
21000667
21028637

*each of these had only one person arrested

2. NFS arrest data frame created for NFS incidents in which there was an arrest
    1. The following incident numbers were added because the Durham warrant was served by another jurisdiction. Therefore, they are not in the arrest dataset, but they represent an arrest made in the case from the Durham investigation.

17002003	**20022270	21008744
17012299	20033955	21028058
17028571	20035016	21028807
17042453	20036988	21040742
17044296	20040692	21004247
20010411	21000818	
20014600	21005009	

**each of these had one arrest except for this incident number

c. Create date frame to only include the first arrest for each incident number. First sorted the arrests by date of arrest and then eliminated subsequent instances of the incident number
    1. Incident #17037687, ID#303647 was manually adjusted to correct an arrest date. The data indicates the individual was arrested 28 days prior to the shooting on 10/3/17 when the shooting occurred on 10/31/17. The arrest is listed as "On-view" which implies the arrest was made on the date of the shooting. Therefore, the arrest date was changed to 10/31/2017 and assumed as a typo.
d. To determine the final status of an incident, the "Status" Column was disregarded for errors found such as open incidents with arrests and incidents designated as close by arrest but did not have a corresponding arrest in the arrest dataset. To determine final incident status:
    1. Closed by Arrest (CBA) was determined by the number of incidents with a reported arrest in the Arrest data.
    2. Exceptional Incidents were noted using the status column
    3. All other incidents were designated as "Open/ Inactive" per the previous categories in the "Status" column.

4. **Court Processing Cleaning**
a. From the arrest analysis there were a total of 206 incidents with arrests. Each of the arrests should have included an associate docket number included in the data. If the arrest did not have a docket number, Jason Scheiss provided one. (See Docket Number description above for more info)
b. In November 2022, a meeting with the DA's office provided more docket numbers. Many of these docket numbers were additional defendants for FS incidents for which we

already had information on one arrest. However, there were also docket numbers for incidents not previously recorded with arrests. From the information provided at this meeting Jason Scheiss was able to account for all of the missing data and ensure that there were no other discrepancies. New Docket information included the following:

17CRS051483	18CRS055903; 19CRS1071	20CRS001658; 20CRS1659
17CRS54527; 17CRS1712	21CRS912;21CRS151; 19CRS10965; 18CRS56149	20CRS1280; 20CRS1278; 20CRS1281
17CRS54528	19CRS001915; 19CRS2788	21CRS050880; 21CRS050881
17CRS54529	19CRS50918	21CRS51050
17CRS002668; 17CRS2667	19CRS50046; 19CRS50048	21CRS273; 21CRS274
17CRS57282	19CRS1249; 19CRS1248	20CRS56661
17CRS59624	19CRS54320; 20CRS1828	21CRS869; 21CRS868; 21CRS930
19CRS1325; 18CRS50782	19CRS2571; 19CRS2572; 19CRS2573; 19CRS2574; 19CRS2575; 19CRS2576	21CRS001641
18CRS53206	19CR056910	21CRS1129
19CRS1913	20CRS001088; 20CRS1087	21CRS1280; 21CRS1281

c. In total, Docket numbers were found for 190 out of 206 incidents
   1. 12 incidents involved juvenile defendants

      • 2 of these incidents were FS and therefore their case dispositions were given to us by the DA (21010448, 20015601)
      • 10 cases were NFS and we did not have access to any information because they were juveniles. Therefore, the police department did not provide us with a docket number to track and we were not able to get it from the DA.

17037687	19017384	19022852
20006480	20010885	20029968
20028565	20029272	21008247
21041972		

   2. 1 incident "Unrelated DCSO Case" (17025790)
   3. 1 incident "Unrelated drug charge on the victim" (21032355)
   4. 4 incidents had docket numbers in the data that did not exist in ACIS. The arrest report for each were retrieved and the defendant's name was used to search for a docket number in ACIS. However, no docket number was found for the that defendant related to the shooting incident.

Incident #	Provided Docket #
21023822	21CR053586
21039823	21CR056240
20010411	20CR51935
	20CR51936
	20CR51937
	20CR51938
21028807	21CR55386

d. The arrest data contained other docket numbers (below) that didn't exist in ACIS. Each of these incidents had other docket numbers included that did have charging information. For the below Docket numbers, the defendants name from the related docket numbers was used in ACIS to find any charges that had been filed against them in this incident. To ensure it was from the same incident, the "offense dates" from DPD data and ACIS were compared. If a new docket number for the shooting incident was found, it was added to the court processing data and shown below. The following incident numbers went through this process:

Incident #	Docket #	New Docket #
18011976	18CR205947	None
18011976	14CR705562	None
20013147	20CR052320	None
20013777	20CR052305	21CRS000233
20022315	20WFA623264	20CRS053772
20033883	20CR056736	None
20042105	20CR056651	None
21002616	21CR050394	None
21016958	21CR55208	None
21016958	21CR55209	None
21040721	21CR056667	None
21040721	22CR050096	None
21040721	21CR055916	None

e. Finally, the 190 incidents with Docket Numbers were analyzed by looking up each docket number up in ACIS. The following information was collected for each:
   1. Offense number, Case Status, Race, Sex, Date of Birth, Court Type, Filing Date, Charged/ Arraigned Offense, Offense Date, Disposition Date, Plea, Verdict, Modification, Convicted Offense, Consolidated Judgement Docket, Reason for Disposition, Special Conditions, Arrest Date
f. All charges within a docket number were included in the analysis. For example, under one docket number a defendant could have up to 8 charges. Each charge was a line in the dataset.
g. If ACIS noted an associated docket number for the same incident this was also included.
h. If the docket number was transitioned to superior court, the initial charge was not included in the following analysis to accurately reflect the charges against the defendant and the stage of the court process.
i. The following were changed for accuracy of analysis
   1. FS Incidents
      1. Docket #19CR 053500 was removed for co-defendant because the charge was "F larceny of a motor vehicle". Kept the dismissed murder charge in the dataset because felony larceny does not reflect a disposition of the shooting incident
      2. Incident #18025054 – while there are 5 co-defendants in this case, one defendant plead guilty to second degree murder and therefore this whole case is designated as conviction. One defendant went to trial and was found Not Guilty.
      3. Incident #18040442 – while there are 4 co-defendants in this case, one plead guilty and therefore the whole incident is designated as conviction
      4. Incident # 18044141 - while there are 3 co-defendants in this case, one plead guilty and therefore the whole incident is designated as conviction
      5. Incident #20041413 - while there are 3 co-defendants in this case, one plead guilty and therefore the whole incident is designated as conviction
   2. NFS Incidents
      1. Incident # 18044111 – docket #s 18CR058736 and 20CRS680 were removed because these two defendants had their charges dismissed and the last defendant still has charges pending. Therefore, the incident as a whole is still pending.
      2. Incident #20042105 – removed docket #20CR052085 because charges are pending the co-defendant was convicted
      3. Incident #20036988 - new docket number was found by looking up the defendant's name and indicating there were other charges brought against the defendant for this incient. These charges were still pending and therefore 21CR50328-9 were removed
      4. Incident #21026101- new docket number was provided by the DA indicating there were other charges brought against the defendant. These charges were still pending and therefore 21CR053974 and 21CR053975 were removed

5. **Court Process Analysis**
   a. From the above cleaned data, FS and NFS data frames were created using the incident numbers from the previous analysis.
   b. To find pending charges, the data was sorted by the "Case Status" noted as pending. If an incident had pending charges and dismissals it was considered pending because there is still a chance for a conviction in the incident.
   c. For convictions, the data was sorted by charges with a "JU" signifying a judgement entered. If an incident had any conviction it was included in this category
   d. For dismissals, the data was sorted by those with a "VD" signifying voluntary dismissal. This category only includes incidents in which all of the charges and defendants were dismissed.
      1. There were multiple dismissed charges in NFS incidents that included a reason for disposition that implied another docket number may exist (per plea agreement, to indict). All dismissed charges were checked for associate docket numbers by looking up the defendant's name in ACIS and determining if they had any other charges with the same offense date as the incident in question. The results were:

17007532	No related docket number
17044068	18CRS645
17028359	No related docket number
18013590	Convicted on Different Incident
18023997	Federally Indicted
18029897	Convicted on Different Incident
18038732	Convicted on Different Incident
19043160	20CRS1723-4
20002903	19CRS56606 (Dismissed)
20013777	Participated in Restorative Justice Intensive
20030834	Convicted on Different Incident
20032292	Convicted on Different Incident
20035016	21CRS055148 (conviction)
20036561	No related docket number – according to DA's office, indicted in superior court but dismissed and auto-expunged
20036988	20CRS001728
20038704	No related docket number
20040692	Convicted on Different Incident
21002616	No related docket number - – according to DA's office, indicted in superior court but dismissed and auto-expunged
21004444	Pending on Different Incident
21005569	No related docket number
21026101	According to DA's office, indicted under 21CRS001282
21032496	No related docket number

2. Additionally, the dismissal summaries include all reasons for dismissals, even when there were multiple for a single incident or docket number including:
   1. NFS
      1. Incident #17007532 – Two incidents dismissed for possible indictment and one incident dismissed for insufficient evidence
      2. Incident #20002903 had three defendants and three separate reasons for dismissal: interest of justice, potential indictment, State does not wish to proceed
   2. The DA's office provided additional information for reasons that some of the cases were dismissed. Most of the information was already provided by the ACIS data.

e. A list of the pending offenses, charged offenses, convicted offenses, and dismissed offenses were tabulated by class.