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Evaluation of the Memphis Police Department's Violent Crimes Unit

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INTRODUCTION

Memphis GCU / VCU

Gun violence, with the resulting injuries and mortalities, present substantial costs on families and government, including costs on health and other support services that are needed for the families and community. According to the Council on Criminal Justice, the national gun assault clearance rate has declined in recent decades. This clearance rate is distinctly different for fatal versus nonfatal shootings. In 2019, U.S. law enforcement agencies cleared 61 percent of murders and nonnegligent homicides, as compared to 31 percent clearance rate for aggravated assaults with firearms (FBI UCR, 2019). On the other hand, the National Case Closed Project found that some agencies in the United States are clearing as few as 10-20 percent of their nonfatal shooting incidents. To note, nonfatal shootings are 3 to 4 times more common than fatal shootings (Hipple & Magee, 2017; Hipple et al., 2020; Braga, 2021). This is an important point as many who are both victims and offenders of non-fatal shootings present a higher risk of lethal gun violence.

In June 2022, MPD launched a new investigative unit, the Gun Crimes Unit (GCU), which was responsible for investigating aggravated assaults involving firearm discharge (except for domestic violence assaults) as defined by the Tennessee Incident Based Reporting System (TIBRS). The GCU investigates non-fatal shooting incidents where the victim has been shot or shot at. These cases include assaults by one person upon another where the suspect uses a weapon and the victim suffers obvious severe or aggravated bodily injury. This unit was later absorbed by the Violent Crime Unit (VCU), a previously existing unit within MPD.

Specialized Patrol Units

Recent research highlights that the allocation of resources and improvements in investigative processes can significantly enhance clearance rates, particularly by increasing the number of detectives and reducing their response times to crime scenes (Cook et al., 2019; Braga et al., 2019; Wellford, Lum, Scott, Vovak, & Scherer, 2019). Scott and Wellford (2021) further demonstrated that sustained investigative practices and dedicated organizational resources, similar to those used in homicide investigations, can improve clearance rates for aggravated assaults. Both patrol officer actions and thorough investigative practices play a crucial role in achieving higher case clearance rates.

Specialized units, such as the Gun Crimes Units (GCU), represent an alternative approach to traditional patrol structures, by focusing on specific crime types rather than dividing attention across a precinct or ward. This approach fosters specialized training and expertise for handling particular situations without requiring widespread training for all patrol officers. Moreover, specialized units can invest in targeted research and build stronger community relationships, creating a clear operational focus and improving officer engagement. Officers assigned to such units often receive additional training and resources, leading to greater investment in their work and stronger buy-in for the unit's mission (Bradford & Quinton, 2014; Ratcliffe & McCullagh, 2001; Barak, 2023).

Homicide units nationwide tend to benefit from greater resources, including smaller caseloads for investigators, priority access to crime lab staff, and closer collaboration with prosecutors. Conversely, non-fatal shootings are often investigated by district detectives who manage significantly higher caseloads, resulting in less dedicated attention (Braga, 2021; Cook et al., 2019). Given that both fatal and non-fatal shootings frequently occur under similar circumstances, the disparity in clearance rates may largely stem from differences in resource allocation rather than case complexity.

Firearm Reoffending and Revictimization

Specialized units focusing on specific types of crime with targeted groups of offenders and victims may play a vital role in preventing future gun violence. Prior research has indicated that nearly two-thirds of offenders are directly or indirectly connected to each other. For example, one study found that most non-fatal gunshot injuries in Chicago occurred within a network of offenders (Papachristos et al., 2015). Similarly, research in Boston found that the closer an individual was to a gunshot victim within that individual's network, the greater the likelihood of becoming a gunshot victim himself (Papachristos et al., 2012). These findings underscore the overlap between victims and offenders and the importance of considering their networks in understanding gun violence.

Recognizing the existence of offender networks can enhance both prevention and investigation efforts. Specialized units equipped with the mandate to focus on specific types of gun crime can better identify individuals at the highest risk of involvement, whether as victims or offenders. By mapping and analyzing these networks, units can prioritize intervention strategies that address the underlying connections driving gun violence. This

approach also aids investigations by coordinating efforts to track patterns within offender networks.

A small proportion of any city's population commits most serious offenses, and firearm-related crimes are no exception. Understanding the social networks involved in firearm acquisition is critical, as research shows that most guns used in crimes are obtained weeks or months before the offense, often through interpersonal connections. Many offenders, unable to legally purchase firearms due to criminal records, rely on illegal transfers within their networks (Cook et al., 2019). Disrupting these connections can reduce the availability of firearms and decrease the likelihood of repeat offenses.

Specialized units can leverage their expertise in gun-related crimes to deepen their understanding of offender networks and implement targeted interventions. By focusing on individuals and groups at the highest risk of involvement in gun crime, these units can not only enhance investigative outcomes but also contribute to preventing future violence. This dual role of investigation and prevention highlights the potential value of dedicated units in addressing complex gun violence patterns.

Specialized Investigative Units Elsewhere

A systematic review of shooting cases in Boston illustrates the impact of resource allocation. The study found that arrest rates for homicide and non-lethal gun violence cases were similar during the first 48 hours. However, after this initial period, homicide cases received more sustained investigative attention compared to non-fatal shootings (Cook et al., 2019). This disparity reflects the differing levels of resources allocated to homicide units versus non-fatal gun crime cases. For example, 30 percent of successful homicide investigations with cooperative witnesses took more than six months to solve, emphasizing the importance of persistent and well-resourced investigations.

In 2018, the Buffalo Police Department established a Gun Violence Unit (GVU). The primary goal of the GVU was to investigate non-fatal gun assaults, aiming to alleviate the workload of other detectives and improve clearance rates for non-fatal shootings. The concept was to replicate the investigative environment of a homicide unit. However, while the homicide unit consisted of 20 staff members, the GVU was staffed with six investigators.

Initially, the protocol required one GVU detective and one Intelligence Unit detective to respond to shootings. In practice, however, two GVU detectives typically responded alongside the Intelligence Unit detective. At the scene, detectives documented their actions

and observations on a standardized form, which became part of the permanent case file and was included in discovery materials. The GUV operated from a separate office space located adjacent to the homicide unit, with the Intelligence Unit nearby on the same hallway.

Despite these efforts, the creation of the GUV did not significantly improve clearance rates for non-fatal shootings in Buffalo. Moreover, the clearance rate for homicides during the post-intervention period decreased significantly compared to pre-intervention rates. It is worth noting that crime levels increased during this period, potentially offsetting the impact of the new unit. For instance, the approximate caseload for non-fatal shootings rose from 23.8 in 2019 to 41.6 in 2020. Another challenge may have been the siloing of the GUV, as noted by the research team. One suggested solution is placing both units under a single commander to improve communication and coordination (Phillips, Drake, Altheimer, 2022).

Other departments, such as Denver, have implemented specialized units with similar objectives. For example, in the first seven months of 2020, Denver's specialized unit achieved a 65 percent clearance rate for non-fatal shootings, compared to a previous rate of 39 percent (Braga, 2021). Given the high occurrence of non-fatal shootings compared to fatal shootings in cities like Denver, Buffalo, and Memphis, it may be necessary to allocate resources proportionally to address this disparity effectively. This could include staffing specialized units at levels similar to those of homicide units.

Local Response: The Memphis Police Department Gun Crimes Unit

The MPD Gun Crimes Unit (GCU) was designed to handle investigations in the same manner that the Homicide Bureau conducts investigations. Now that the unit has been absorbed by the Violent Crimes Unit (VCU), cases are reviewed each morning by the VCU Bookman to ensure that they meet TIBRS standards for an aggravated assault and that the victim/suspect relationship does not constitute a domestic situation. If the case cannot be classified as an aggravated assault or it proves to be a domestic complaint, then the bookman will forward the case to the proper bureau for investigation. If the incident is an aggravated assault that fits VCU nonfatal shooting criteria, the bookman will assign the case to a VCU investigator. If a call is received regarding an aggravated assault between the hours of 8:00 am and 4:00 pm and the VCU supervisor determines that an immediate investigation is warranted, i.e., the victim is in critical condition or a suspect is in custody,

the supervisor will send investigators to the scene and to the hospital to conduct field investigations.

Once statements are taken from witnesses/victims and an effort has been made to take a statement from the suspect, the case will be reviewed and presented to the VCU advisor from the Shelby County District Attorney General's (SCDAG) Office. Although it is not necessary to have an authorization of charges form signed by the advisor, the SCDAG has requested that all cases involving Criminal Attempt First Degree Murder charges be accompanied by a charging form. Once cleared, all cases are logged into the VCU case closure book, and then into the database by the bookman. Only cases entered in the VCU database will be considered in the unit's clearance record.

The current study examines the VCU's investigation of nonfatal shooting incidents. Drawing from internal GCU/VCU data, the number of cases processed, clearance of cases, and prosecutions are analyzed for key patterns or themes. The study uses this information to identify potential successes or improvement actions for the unit.

Methods

Data Collection

Data for this assessment was primarily sourced from the GCU team, which provided information through various formats, including ComStat PowerPoint presentations, quarterly report PowerPoints, and Excel files detailing case assignments. This data served as the basis for analyzing the volume and types of cases the unit handles, along with investigative efforts and outcomes. To supplement this data, updated dispositional information was also provided by the Shelby County District Attorney General's Office (SCDAG). This additional data allowed for a more in-depth look at the cases after the GCU had finalized its investigation.

Time Frame

The time frames for the data varied across the different types of information collected. Some datasets spanned from June 2022 to June 2023 such as the number of investigators and the volume of cases (n=2166). Other datasets, such as the types of crimes that initiated GCU

investigations (n=1231), were limited to the calendar year of 2023. Finally, some data time frames were from June 2022 through December 2023, including total arrests (n=572). The difference in timeframes is based on limitation and gaps in data provided.

Variables

The **investigative capacity** of the GCU is operationalized as the number of investigators assigned to the unit and the monthly volume of cases they managed. The monthly volume of cases was developed by analyzing both the total number of investigators and the distribution of case assignments each month. We calculated the average caseload per investigator, offering a quantitative measure of resource allocation within the unit.

To further evaluate **investigative efficiency**, we incorporated the number of arrests made per month. Additionally, we tracked the total number of cases per month. Using these data, we computed an arrest-to-case ratio, which provided a standardized metric to assess the relationship between the GCU's investigative resources and arrest outcomes. This ratio enabled longitudinal analysis of the unit's performance, offering insights into how variations in caseloads and resource distribution influenced arrest productivity over time.

The **status and outcomes of cases** brought by the GCU to the District Attorney's Office was also measured. Several variables were employed to capture the range of judicial resolutions such as the number of cases where prosecution was declined, diversion to Juvenile Court, cases that were still pending, and cases that resulted in probation. (See Figure 6 "Outcomes of Cases" for case categories.) By examining the frequency of case outcomes, it could allow us to infer areas where case preparation might be strengthened or highlighted. This approach aimed to allow for a more comprehensive view of how cases may be resolved through the court process, while providing an indirect measure of case quality as assessed by the prosecuting office.

Results

Figure 1 provides a monthly breakdown of the top three non-firearm offenses investigated by the GCU in 2023. Since the GCU primarily focuses on crimes involving firearms, offenses such as "weapon possession" and "convicted felon in possession of a firearm" were excluded from the analysis. Additionally, six other crime categories with 20 or fewer incidents during

the year were omitted for clarity. Assault cases were the most prevalent non-firearm-related offense, with notable spikes in March and May, each exceeding 50 cases. Gang-related incidents exhibited a more variable pattern, peaking in July and September while remaining relatively low in other months. Theft cases saw a significant increase in March. The exclusion of firearm-related offenses underscores the GCU's broader engagement with crimes not necessarily involving firearm use, highlighting its investigative scope beyond gun-related offenses.

Figure 1

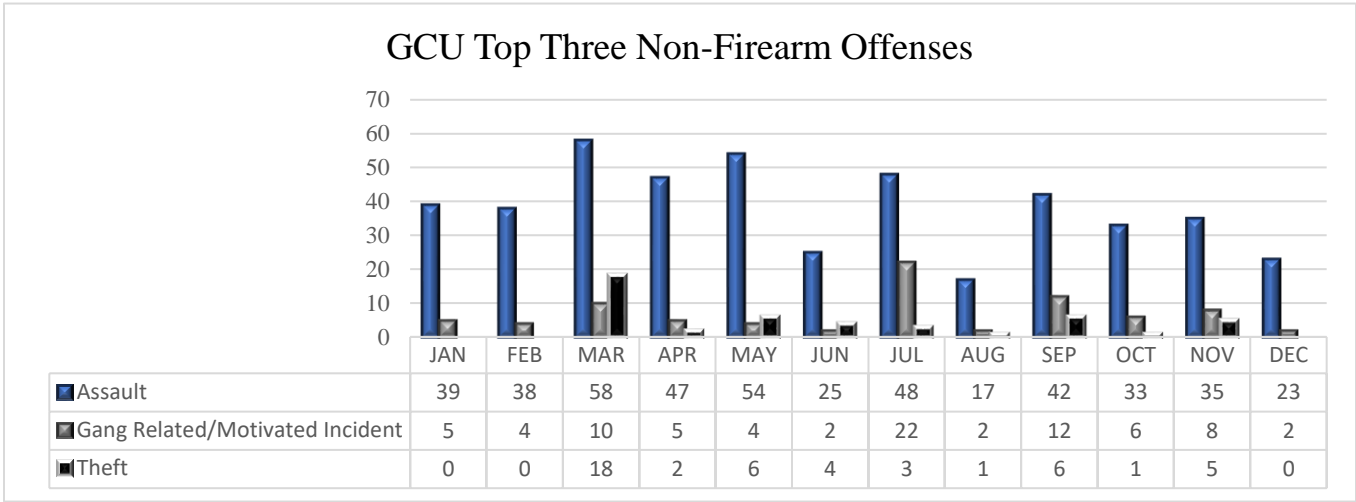
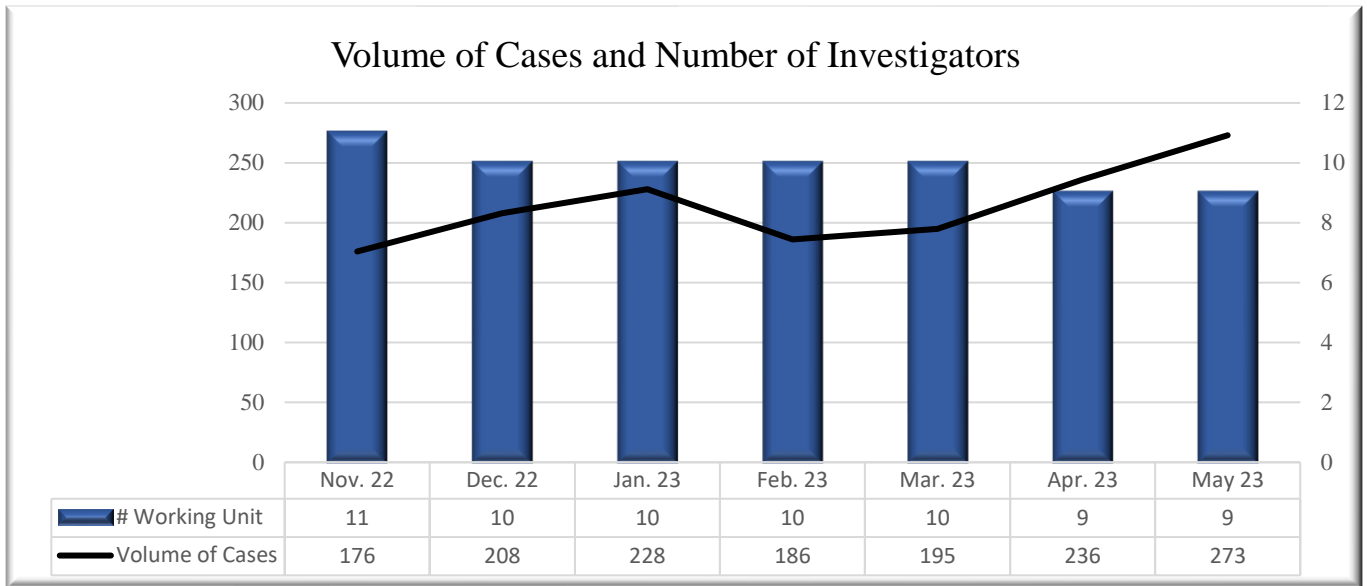


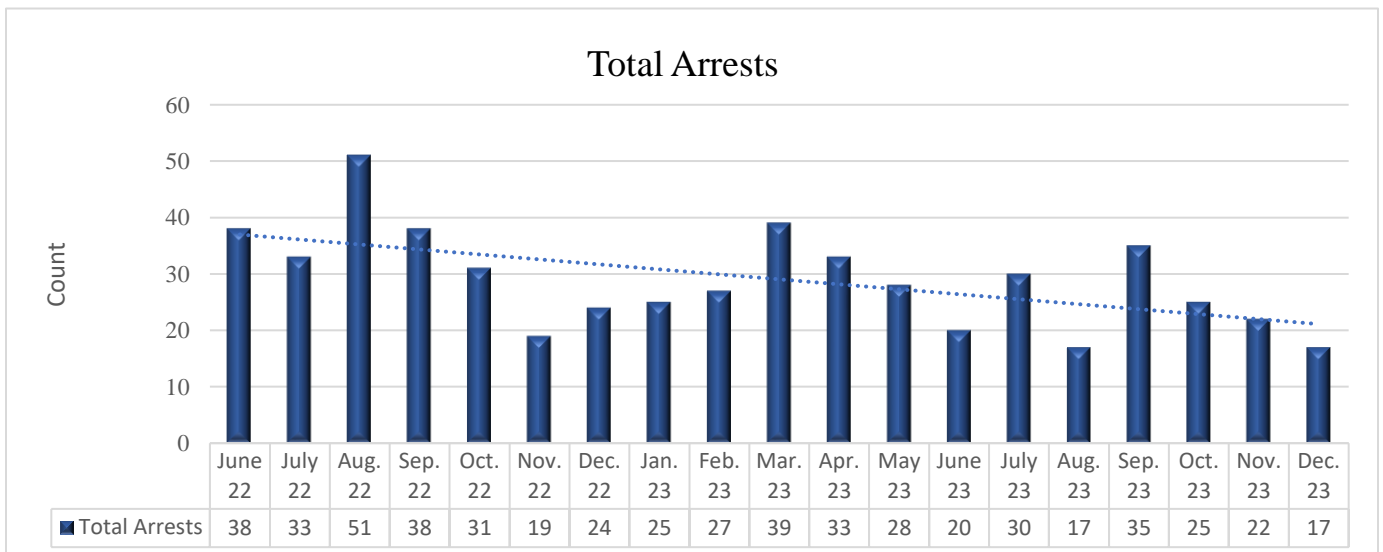
Figure 2 outlines the number of investigators in the GCU and the corresponding volume of cases from November 2022 to May 2023. The number of investigators remained relatively steady throughout the period, fluctuating between 9 and 11. Despite the stable staffing levels, the volume of cases showed considerable variation. November and December 2022 saw averages of 16.0 and 20.8 cases per investigator, respectively, reflecting an increase in case volume as investigators handled more cases. The highest average occurred in May 2023, where each investigator managed approximately 30.3 cases, driven by a surge in case volume to 273.

Figure 2



The data in Figure 3 shows the total number of arrests made by the GCU between June 2022 and December 2023. Over this period, there were notable fluctuations in arrests numbers, reflecting potential variations in enforcement activity, case complexity, or external factors affecting crime rates. Arrest totals improved once more in September with 35 arrests, though the number remained inconsistent through the end of the year. With December 2023 we see a drop back to 17 arrests. The average number of arrests per month was 30.64. There is a trend line with a slope of approximately -1.1, indicating a slight downward trend in the number of arrests over time during the period of June 2022 to June 2023.

Figure 3



The case volume to arrests comparison offers some insight into the possible efficiency of the GCU efforts in handling the caseload during the period of November 2022 to June 2023. The analysis focused on data during this time, omitting June through October 2022, to ensure a complete, uninterrupted pattern without having to make assumptions for the missing months of September and October 2022. Figure 4.1 illustrates the monthly comparison between the total case volume and the number of arrests made.

Figure 4.1

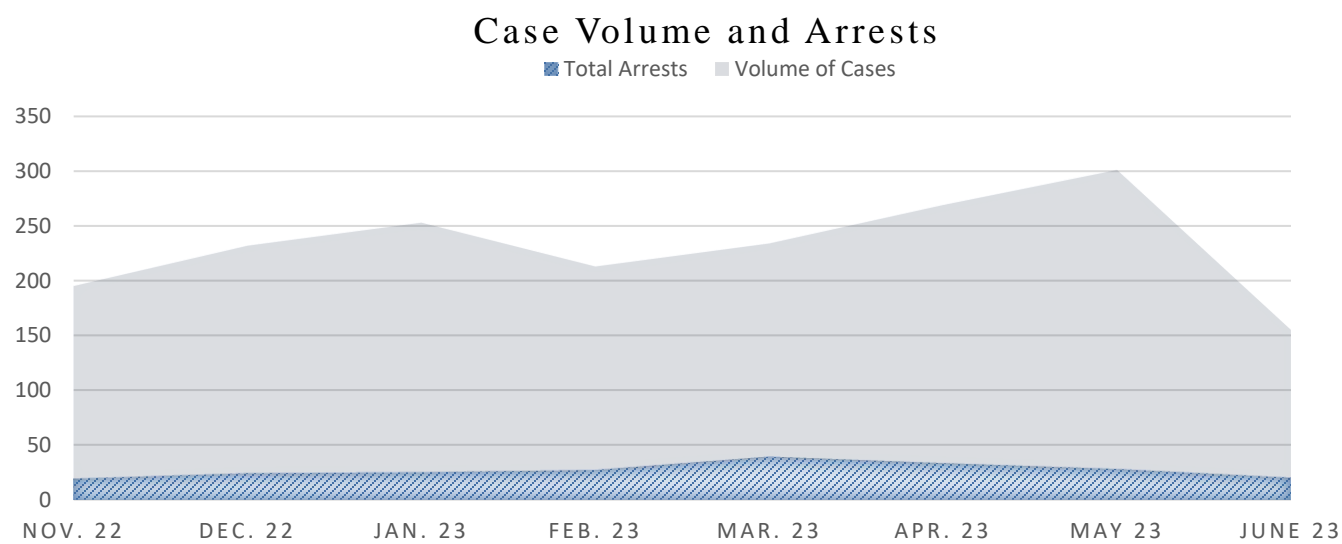
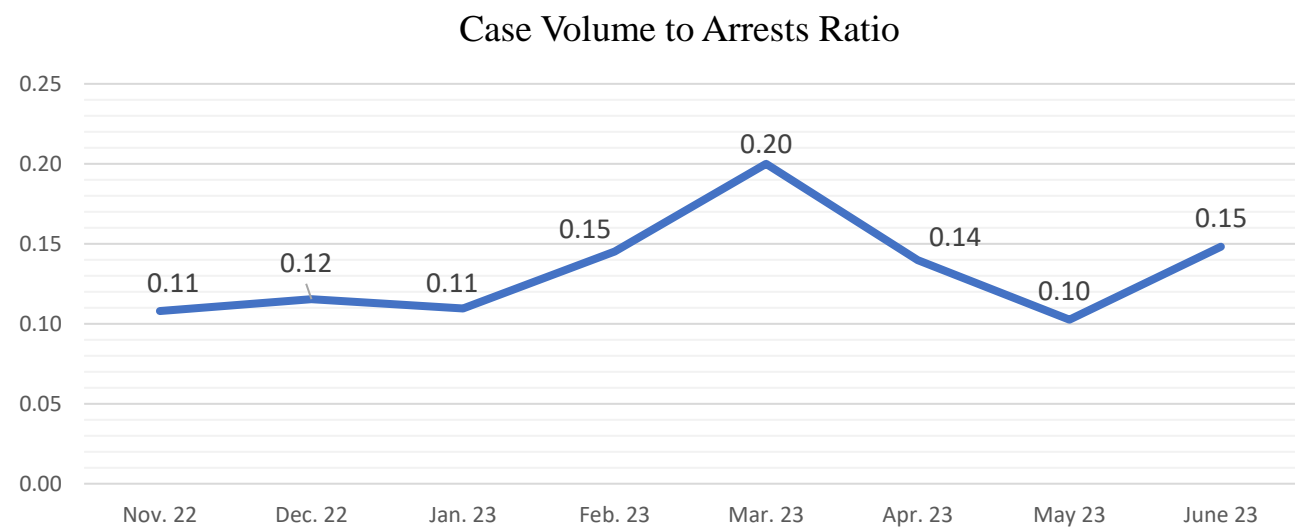


Figure 4.2 is a ratio calculated from case volume and total arrests. The ratio fluctuates over a period, peaking at 0.20 in March 2023 and reaching its lowest point of 0.10 in May 2023. Higher ratios, as seen in February and June 2023 (0.15), suggest that a greater proportion of cases led to arrests during these months, which may indicate a period of heightened enforcement activity or more straightforward cases to supply easier arrests. However, lower ratios such as in January 2023 and May 2023 (0.11 and 0.10 respectively) indicate a reduced arrest rate relative to the volume of cases, which could reflect a heightened complexity with cases or difficulty with resource allocation during those months.

Figure 4.2



In Figure 5, the data illustrates the number of firearms acquired by the GCU from June 2022 to December 2023, distinguishing between handguns and long guns. Over this period, the total number of firearms acquired fluctuated to various degrees. In August 2022, the GCU acquired 14 firearms, the highest number in 2022, consisting of 11 handguns and 3 long guns. July 2022 saw the lowest numbers, with only 5 firearms (4 handguns and 1 long gun) acquired. The latter months of 2022 experienced a reduction in firearm acquisition, with no firearms acquired in December 2022, marking the only month with zero acquisitions. It is unclear why September 2023 had such a high number of firearms recovered.

Figure 5

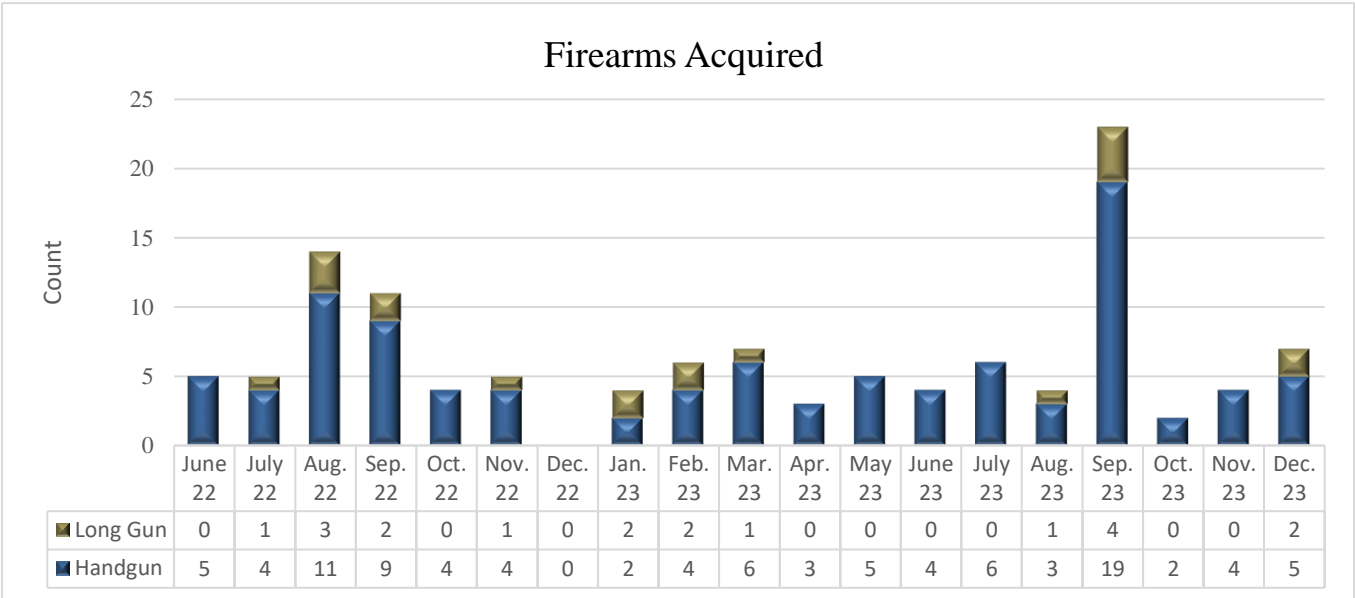
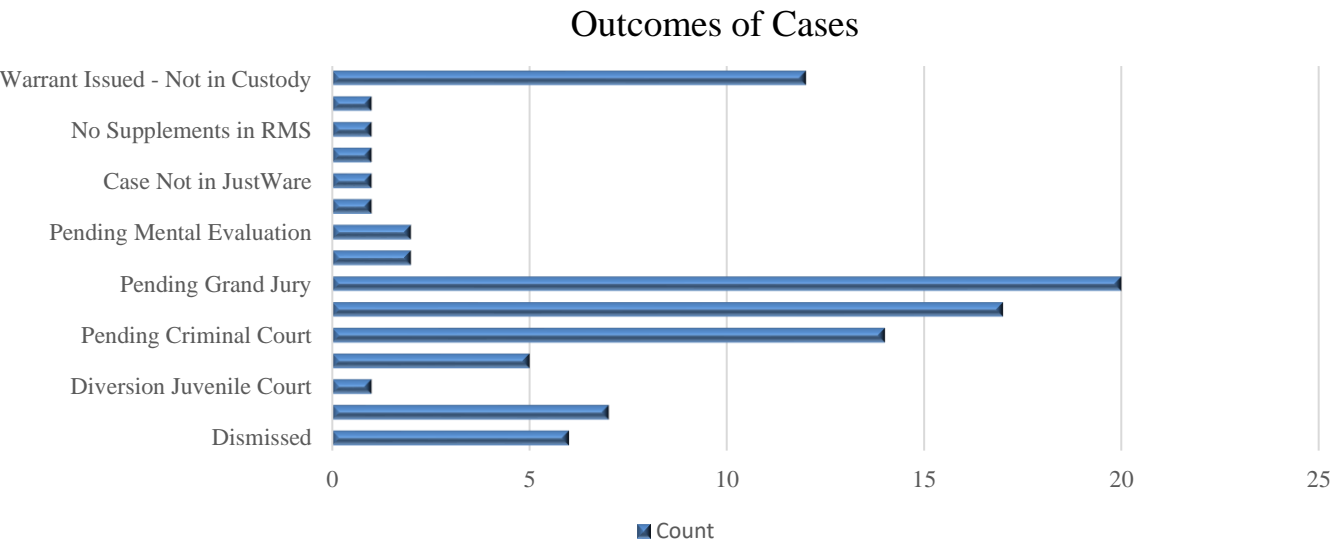


Figure 6 (below) outlines the status and outcomes of the 341 cases brought by the GCU to the District Attorney’s office between June 2022 and June 2023, focusing on judicial outcomes like dismissals, guilty pleas, and pending cases. Out of the 341, 89 cases contained information on the status/outcome of the case. This is excluding categories such as ‘Unknown,’ (comprising the most cases) ‘Case Not in JustWare,’ ‘No arrest per RMS,’ and ‘No Supplements in RMS.’

Out of the 89 cases in which judicial outcomes have been recorded, the majority of cases were still pending at various stages (61.80 percent). Within that subcategory, 36.36 percent were pending grand jury, 30.91 percent were pending general sessions, and 25.45 percent were pending criminal court. Thirteen cases (14.61 percent) were dismissed, with seven of those being listed as dismissed due to a lack of prosecution. 5.56 percent resulted in a guilty plea, while 2.25 percent of cases were diverted to Juvenile Court or resulted in a juvenile summons. Furthermore, 13.33 percent of cases involved a warrant being issued but the suspect was not in custody at the time.

Figure 6



Discussion

Case Volume and Outcomes

The comparison between the number of investigators and case volume from June 2022 to June 2023 reveals notable patterns. While staffing levels remained relatively stable, case volume fluctuated significantly. Case volume peaked in May 2023 with 273 cases but dropped sharply to 135 cases in June 2023. This fluctuation also impacted the number of cases per investigator, with May 2023 being the most demanding month in terms of caseload.

When analyzing the relationship between case volume and arrests, the arrest-to-case ratio displayed a mixed pattern. For instance, despite the high case volume in May 2023 (273 cases), only 28 arrests were made, resulting in a lower arrest-to-case ratio compared to other months. This suggests that higher case volume may not necessarily lead to a proportional increase in arrests. However, it is important to note that arrests may originate from previous months' case volume. A significant proportion of cases remain pending at various stages of the judicial process, with relatively few reaching resolutions through dismissals, guilty pleas, or other outcomes. This is likely, because it is still relatively early in the process as some of these cases may take years to reach a resolution. The high percentage of cases with issued warrants where the suspect is not in custody indicates potential challenges in advancing these cases to the court docket and may be tied to overall case volume per investigator.

Sustained and Strategic Investigations

Improving nonfatal shooting clearance rates requires prioritizing increased resources and sustaining investigative efforts beyond the critical first 48 hours (Braga, 2021). Establishing a specialized unit focused on nonfatal shootings is a promising strategy; however, this approach necessitates allocating resources that account for the significantly higher caseload of nonfatal shootings compared to homicide investigations. Research highlights that nonfatal shooting

units typically manage four times as many cases as homicide units, underscoring the need for adequate staffing, funding, and support to ensure their effectiveness (Hipple & Magee, 2017; Hipple et al., 2020; Braga, 2021).

Investigating the underlying causes of outstanding warrants in Memphis could provide valuable insights for advancing more cases through the judicial process. In Memphis, as in other cities, victim noncooperation and significant victim-offender overlap are key factors contributing to low clearance rates. These challenges are consistent with broader national trends and remain substantial barriers to improving case outcomes.

Conclusion

The GCU is now a unit incorporated as part of the VCU. The data and findings for this report are still relevant to the current structure of the unit as it has largely been unchanged. Findings and previous literature demonstrate the need for increased inter-precinct collaboration and enhanced coordination between the gun crimes units and homicide units. This may require a critical examination of how the physical location and organizational structure of these units impact organic, day-to-day interactions among officers (Phillips, Kim, Drake, & Altheimer, 2021). Similar to findings from research on Buffalo's specialized unit strategy, Memphis' implementation of the GCU may perform at a higher level of efficiency by increasing communication and matching resources for the unit as compared to the Homicide Unit respectively.

While the GCU, Homicide Unit, and Multi-Agency Gang Unit (MGU) seem like a natural fit for collaboration, discussions with investigators show that these perceived links may not often materialize in working collaborative efforts. It was suggested that this may be due to structural and logistical barriers, leading to fragmented communication and inefficiencies at the investigator level. Internal discussions may bring to light some ways to increase efficiencies.

Practical challenges also impede the unit's effectiveness. Investigators have cited issues such as inadequate equipment and inappropriate attire, which affect their ability to perform tasks effectively. These challenges are consistent with findings from Buffalo, where specialized units faced resource shortages while attempting to manage caseloads roughly four times greater than those of homicide units. It is important to note that the link between these units relate to a link between the crimes. In short, providing additional resources to gun crimes units, where suspects and victims are at increased risk for lethal outcomes, may help to prevent future homicides. This may also be seen as investing in lethal crime prevention.

Importantly, with limited resources, it is difficult to maintain numbers needed in all units. Command Staff must and is already examining and putting into place practices that increase efficiencies. While sustained resources are needed, continued strategic planning provides a path to ensure the unit and others within MPD can meet its objectives. Addressing these structural and logistical challenges is crucial to improving the GCU's effectiveness.

References

- Abt, T. (2019). *Bleeding out: The devastating consequences of urban violence-- and a bold new plan for peace in the streets* (First edition). Basic Books.
- Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. W.W. Norton & Company, Inc.
- Bolland, J. M., Lian, B. E., & Formichella, C. M. (2005). The Origins of Hopelessness Among Inner-City African-American Adolescents. *American Journal of Community Psychology*, 36(3–4), 293–305. <https://doi.org/10.1007/s10464-005-8627-x>.
- Braga, A. A., & Weisburd, D. L. (2012). The Effects of Focused Deterrence Strategies on Crime: A Systematic Review and Meta-Analysis of the Empirical Evidence. *Journal of Research in Crime and Delinquency*, 49(3), 323–358. <https://doi.org/10.1177/0022427811419368>.
- Brezina, T., Tekin, E., & Topalli, V. (2008). “Might Not Be a Tomorrow”: A Multi-Methods Approach to Anticipated Early Death and Youth Crime. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1305815>.
- Chalfin, A., & McCrary, J. (2017). Criminal Deterrence: A Review of the Literature. *Journal of Economic Literature*, 55(1), 5–48. <https://doi.org/10.1257/jel.20141147>.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (Fifth edition). SAGE.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (Third Edition). SAGE.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2003). *Collecting and interpreting qualitative materials* (2nd ed). Sage.
- Duke, N. N., Borowsky, I. W., Pettingell, S. L., Skay, C. L., & McMorris, B. J. (2011). Adolescent Early Death Perception: Links to Behavioral and Life Outcomes in Young Adulthood. *Journal of Pediatric Health Care*, 25(4), 224–234. <https://doi.org/10.1016/j.pedhc.2010.03.004>.

Duke, N. N., Skay, C. L., Pettingell, S. L., & Borowsky, I. W. (2009). Adolescent Perception of Premature Risk for Death: Contributions from Individual and Environmental Contextual Factors. *Academic Pediatrics*, 9(4), 256–262. <https://doi.org/10.1016/j.acap.2009.02.004>.

Garbarino, J. (1992). *Children in danger: Coping with the consequences of community violence*. Jossey-Bass.

Hagan, J. (1991). Destiny and Drift: Subcultural Preferences, Status Attainments, and the Risks and Rewards of Youth. *American Sociological Review*, 56(5), 567. <https://doi.org/10.2307/2096080>.

Hagan, J. (1997). Defiance and Despair: Subcultural and Structural Linkages between Delinquency and Despair in the Life Course. *Social Forces*, 76(1), 119. <https://doi.org/10.2307/2580320>.

Haynie, D. L., Soller, B., & Williams, K. (2014). Anticipating Early Fatality: Friends', Schoolmates' and Individual Perceptions of Fatality on Adolescent Risk Behaviors. *Journal of Youth and Adolescence*, 43(2), 175–192. <https://doi.org/10.1007/s10964-013-9968-7>.

Hill, E. M., Ross, L. T., & Low, B. S. (1997). The role of future unpredictability in human risk-taking. *Human Nature*, 8(4), 287–325. <https://doi.org/10.1007/BF02913037>.

Hoffman, J. S. (2004). *Youth violence, resilience, and rehabilitation*. LFB Scholarly Pub.

Jacobs, B. A., Topalli, V., & Wright, R. (2000). MANAGING RETALIATION: DRUG ROBBERY AND INFORMAL SANCTION THREATS*. *Criminology*, 38(1), 171–198. <https://doi.org/10.1111/j.1745-9125.2000.tb00887.x>.

Jamieson, P. E., & Romer, D. (2008). Unrealistic Fatalism in U.S. Youth Ages 14 to 22: Prevalence and Characteristics. *Journal of Adolescent Health*, 42(2), 154–160. <https://doi.org/10.1016/j.jadohealth.2007.07.010>.

Kvale, S., & Brinkmann, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (Third edition). Sage Publications.

Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed). Sage Publications.

McCarthy, B., & Hagan, J. (2005). Danger and the Decision to Offend. *Social Forces*, 83(3), 1065–1096. <https://doi.org/10.1353/sof.2005.0040>.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(4), 674–701.

Navarro, R., Yubero, S., & Larrañaga, E. (2018). Cyberbullying victimization and fatalism in adolescence: Resilience as a moderator. *Children and Youth Services Review*, 84, 215–221. <https://doi.org/10.1016/j.childyouth.2017.12.011>.

Piquero, A. R. (2016). “Take My License n’ All That Jive, I Can’t See ... 35”: Little Hope for the Future Encourages Offending Over time. *Justice Quarterly*, 33(1), 73–99. <https://doi.org/10.1080/07418825.2014.896396>.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1–28. <https://doi.org/10.1037/h0092976>.

Sampson, R. J., & Laub, J. H. (1997a). A life course theory of cumulative disadvantage and the stability of delinquency. In *Developmental theories of crime and delinquency*. (pp. 133–161). Transaction Publishers.

Sampson, R. J., & Laub, J. H. (1997b). *Crime in the making: Pathways and turning points through life* (3. print). Harvard Univ. Press.

Solomon, R. C. (2003). On Fate and Fatalism. *Philosophy East and West*, 53(4), 435–454. <https://doi.org/10.1353/pew.2003.0047>.

Swisher, R. R., & Warner, T. D. (2013). If They Grow up: Exploring the Neighborhood Context of Adolescent and Young Adult Survival Expectations. *Journal of Research on Adolescence*, 23(4), 678–694. <https://doi.org/10.1111/jora.12027>.

Tillyer, M. S. (2015). Victimization, Offending, and Perceived Risk for Early Violent Death. *Criminal Justice and Behavior*, 42(5), 529–545. <https://doi.org/10.1177/0093854814554447>

Topalli, V. (2005). WHEN BEING GOOD IS BAD: AN EXPANSION OF NEUTRALIZATION THEORY*. *Criminology*, 43(3), 797–836. <https://doi.org/10.1111/j.0011-1348.2005.00024.x>.

Twenge, J. M., Zhang, L., & Im, C. (2004). It's Beyond My Control: A Cross-Temporal Meta-Analysis of Increasing Externality in Locus of Control, 1960-2002. *Personality and Social Psychology Review*, 8(3), 308–319. https://doi.org/10.1207/s15327957pspr0803_5.

Warner, T. D., & Swisher, R. R. (2015). Adolescent Survival Expectations: Variations by Race, Ethnicity, and Nativity. *Journal of Health and Social Behavior*, 56(4), 478–494. <https://doi.org/10.1177/0022146515611730>.

Wolff, K. T., Intravia, J., Baglivio, M. T., & Piquero, A. R. (2020). Adherence to the Street Code Predicts an Earlier Anticipated Death. *Journal of Research in Crime and Delinquency*, 57(2), 139–181. <https://doi.org/10.1177/0022427819868754>.



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