

Promising Strategies for Strengthening Homicide Investigations

Findings and Recommendations from the Bureau of Justice Assistance's Homicide Investigations Enhancement Training and Technical Assistance Project



BJA
Bureau of Justice Assistance
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POLICE EXECUTIVE
RESEARCH FORUM

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Foreword

By Chuck Wexler, Executive Director, Police Executive Research Forum

Law enforcement agencies perform a very wide range of duties, including the critical responsibility of investigating the most serious type of crime: homicides. And police have had significant success in driving down homicides rates. Over the course of a generation, the national homicide rate has plummeted, from 10.2 homicides per 100,000 population in 1980 to 5.3 homicides per 100,000 in 2016.¹

However, police have had less success in maintaining clearance rates for homicides. The clearance rate is defined as the percentage of cases that are “cleared” when someone is arrested, charged with the offense, and turned over to a court for prosecution, or when certain exceptional conditions apply, such as when an identified offender is killed during apprehension or commits suicide.

Homicide clearance rates have been on a slightly downward trend, even as the numbers of homicides declined. Back in 1980, 72 percent of these crimes were cleared.² The most recent national data show that police cleared only 59 percent of murders and non-negligent homicides in 2016.³

Solving homicide cases is extremely important for many reasons, not least of which is that making an arrest can prevent a killer from committing additional homicides. So it is essential that law enforcement agencies amplify their efforts to improve their homicide investigation processes in an attempt to reverse the decline in clearance rates.

With support from the Bureau of Justice Assistance, the Police Executive Research Forum conducted a multi-year project in which we assessed homicide investigation practices in five cities: Baltimore, Cleveland, Houston, Miami, and Pittsburgh. This report summarizes the lessons we have learned from those five studies. There is significant variation in how homicides are investigated, which is what you would expect in a country with 18,000 separate law enforcement agencies. However, the lessons in this report can be applied to law enforcement agencies across the nation.

In short, we learned that strong policies, training, and organization can make a difference. Homicide detectives should be guided by clear, comprehensive, written guidance about how to do their jobs. And homicide detectives should be selected for the job based on a rigorous, formal process.

The level of resources is also critically important. It is difficult to maintain clearance rates if there are too few detectives handling too many cases, or if detectives lack training on new issues in forensics and other topics, simply because there is no funding for training or detectives have no time to attend training. The homicide detectives

1. FBI Uniform Crime Reporting Statistics <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/murder> and <https://www.ucrdatatool.gov/Search/Crime/State/RunCrimeOneYearofData.cfm>.

2. “Homicide Trends in the United States, 1980-2008.” U.S. Department of Justice, Bureau of Justice Statistics. See page 31. <https://www.bjs.gov/content/pub/pdf/htus8008.pdf>.

3. FBI UCR Data, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-17>.

interviewed during this project demonstrated a commitment to their profession and some of the strongest work ethics ever encountered. But in some cases, they are hampered by shortages in staffing and other resources.

We also learned that the nature of homicide investigations is constantly changing. Modern investigations are relying more and more on the analysis of digital evidence generated by smart phones, computers, social media accounts, and video footage from security cameras and police body-worn cameras. Additionally, advances in crime analysis are allowing investigators to better identify crime patterns, draw links between people involved in crimes, and build strong cases against suspects. These new investigative techniques require detectives to possess a different set of skills than in the past, and many police agencies are struggling to keep up. This is why we added a final chapter to this report – “The Future of Homicide Investigations: Digital Evidence, Crime Analysis, and Beyond” – which provides recommendations for the training, tools, and technologies that police agencies need to expand their digital evidence and crime analysis capabilities.

This report is intended to serve as a roadmap to effective homicide investigations, based on policies, practices, and strategies that police departments have found successful. By closely examining the status quo today, we hope to prevent additional homicides from occurring in the future.

Executive Summary

One of the most important roles of local police agencies is to investigate incidents that involve the loss of a human life due to violence. Thorough investigations of homicides are critical for ensuring that perpetrators are identified and apprehended, for bringing justice to victims and their families, and for protecting the safety of the community.

In 2014, the Police Executive Research Forum (PERF) was selected by the U.S. Justice Department's Bureau of Justice Assistance (BJA) to implement the Homicide Investigations Enhancement Training & Technical Assistance Project. As part of this project, PERF has conducted comprehensive assessments of the homicide investigation policies and practices in five police departments: the Baltimore Police Department, the Cleveland Division of Police, the Houston Police Department, the Miami Police Department, and the Pittsburgh Bureau of Police.

The project sites were chosen based on criteria that included: a recent rise in homicide rates, homicide clearance rates that were decreasing and/or were below the national average, and a commitment of the police departments' leaders to improving homicide investigation procedures.

This publication documents the findings and recommendations that emerged from the site assessments, as well as from a conference that was held by PERF and BJA on January 31, 2017, that brought together officials from the five sites and experts in the field of homicide investigations. The recommendations included in this publication, which are based on research regarding promising investigative practices, reflect many of the common challenges faced by the project sites and other agencies across the country.

“Improving homicide investigations is a top priority for BJA. One of our key goals is to invest resources in identifying and improving core competencies for law enforcement, particularly as it pertains to fighting violent crime. We are working to achieve this goal through projects like the Homicide Investigations Enhancement Training and Technical Assistance Project, which represents a huge step toward raising clearance rates and improving how homicide cases are investigated.”

– Kristen Mahoney, Deputy Director of Policy, U.S. Department of Justice, Bureau of Justice Assistance

Summary of Findings & Recommendations

Following are brief summaries of the general findings and recommendations by PERF that emerged from some or all of the five site assessments and the national conference. This guidance is applicable to all law enforcement agencies that are responsible for investigating homicides.

Homicide Unit Policies & Procedures

Finding: Effective homicide units are governed by written policies and procedures that provide clear, comprehensive, and current guidance on how to conduct an effective homicide investigation.

- **Recommendation – Update Written Policies:** Police agencies should update written standard operating policies and procedures (SOPs) that govern homicide investigations. The revised SOPs should include a detailed, step-by-step description of actions to be taken at each stage of the investigation process, as well as mechanisms for ensuring that homicide unit personnel are properly supervised and are held accountable for their performance. Policy revisions should involve a department-wide focus on examining and updating the written policies for all units involved in homicide investigations.
- **Recommendation – Revise Policy Content:** Policies should include detailed, substantive direction on topics such as: detectives' duties and responsibilities; selection and supervision of detectives; training; performance evaluations and other accountability mechanisms; and the steps that must be taken during each stage of the investigative process.
- **Recommendation – Disseminate Policies to All Detectives:** New homicide unit detectives should receive a copy of the revised policies and procedures. They should be trained on and held accountable for following the directives contained in the manual.
- **Recommendation – Incorporate Best Practices into Policies:** The revised policies and procedures should reflect the current best practices for homicide investigations, including guidance provided in this report. When developing policies, police departments should look to research-based practice guides and consult with police agencies that have demonstrated successful investigative practices.

Detective and Supervisor Selection Process

Finding: It is critical that police agencies implement a consistent, formal process for selecting patrol officers to become detectives, for assigning detectives to a homicide unit, and for selecting homicide supervisors. An effective selection process will utilize standard, objective criteria for determining which candidates are the most qualified and committed.

- **Recommendation – Establish a Formal Selection Process:** Detectives should be selected into the homicide unit pursuant to a rigorous, formal process, using a set of established qualification criteria that are consistently applied to all candidates. Police agency leaders should also implement a formal process for selecting Homicide Unit sergeants, lieutenants, and commanders. The process should be stated in written policy and consistently applied to all candidates. If necessary, police executives should work with the local bargaining unit to revise any collective bargaining agreements that govern detective selection.
- **Recommendation – Establish and Enforce a Formal Probationary Period:** Police agencies should establish and enforce a formal probationary period (e.g., 90-120 days) for newly-selected homicide detectives before they are assigned full time into the homicide unit. This would allow candidates and supervisors to determine whether the unit is a good fit for each detective.

Investigations Training

Finding: It is also critical that investigators – particularly those in a homicide unit – receive consistent, formal, and comprehensive investigations training. Training should be offered both to new and veteran investigators.

- **Recommendation – Require Basic Investigations Training:** New detectives in all investigative units should receive mandatory training on basic investigation skills and techniques, including case management and documentation, crime scene management, report writing, interview and interrogation skills, basic forensics, evidence collection (including digital evidence), managing witnesses, the use of technology, legal requirements, and departmental policies and procedures.
- **Recommendation – Require Advanced Training for Homicide Detectives:** Detectives in the Homicide Unit should receive training – both upon entering the unit and throughout their tenure in their unit – on advanced investigative techniques specific to conducting death investigations. In addition to the investigative skills taught to all new detectives, Homicide Unit detectives should receive training on conducting death investigations, constitutional law, advanced forensics and evidence collection, crime analysis, best practices for homicide investigations, and how to investigate specific types of cases handled by Homicide detectives, such as officer-involved shootings and child fatalities. Advanced training should reflect the most up-to-date information regarding innovative techniques and technologies, particularly with respect to tools such as digital evidence and crime analysis.
- **Recommendation – Strengthen On-the-Job Training:** Police departments should strengthen on-the-job (OJT) training to ensure that new Homicide Unit detectives receive appropriate field training and mentoring. This includes developing an OJT guidebook and setting benchmarks that new Homicide Unit detectives must meet before they are assigned full time to the unit.

Staffing & Caseload Management

Finding: In many police agencies, staffing and scheduling challenges can contribute to heavy caseloads for homicide detectives. PERF has found that an increase in detective caseloads can be associated with a decline in individual clearance rates, as detectives find it difficult to thoroughly investigate, document, and follow up on open cases.

- **Recommendation – Ensure Adequate Staffing of Homicide Units:** A Homicide Unit ideally should be staffed so that each detective is the lead on an average of four to six new homicide cases per year. This recommendation is based on best practices⁴ and on PERF’s finding that an increase in detectives’ average caseload size seems to be correlated with a decrease in their individual clearance rates.
- **Recommendation – Restructure Shift Rotation:** The Homicide Unit should review data to determine the times of day and days of the week when homicides most often occur. This will help the unit assess the times when more detectives are needed to cover incoming cases. If necessary, the Homicide Unit should consider restructuring its shift and case rotation design to help relieve detective caseload burdens. Any new system should be consistent and fairly structured to spread workloads evenly, and there should be room for flexibility as situations change.
- **Recommendation – Reduce Collateral Work:** Homicide Unit detectives should spend the majority of their time investigating homicide cases. Departments should limit the time detectives spend performing other duties, such as investigating non-homicide cases, performing administrative work, and serving on departmental details. Police agencies should consider staffing the Homicide Unit with a civilian aide to assist with administrative duties, such as answering telephones, transcribing reports, writing subpoenas, and helping detectives ensure that case files and other documents are filed properly in both electronic and hard copy form.
- **Recommendation – Provide Updated Equipment:** Police agencies should consider equipping Homicide Unit detectives with laptops, tablets, smartphones, or other devices that enable them to perform tasks while in the field. This would help them perform their jobs more efficiently and reduce the amount of time traveling from the field to the office.
- **Recommendation – Leverage Assistance from Civilian Analysts and Specialized Units:** Police agencies should consider leveraging assistance from specialized units to help homicide detectives locate witnesses and suspects. Having specialized units serve such functions is considered an effective use of personnel and a good practice for homicide investigations.⁵ Agencies should also explore

4. Carter, David L. (2013), *Homicide Process Mapping: Best Practices for Increasing Homicide Clearances*, Washington, DC: Bureau of Justice Assistance. http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

5. Ibid.

embedding a civilian analyst within the Homicide Unit who can provide detectives with real-time information to assist with investigations, such as critical links between suspects, witnesses, and victims. This type of analysis can relieve the burden on detectives and help them identify and follow up on valuable investigative leads.

Supervision, Accountability, & Oversight

Finding: It is important to have mechanisms in place to ensure that detectives have the guidance and oversight they need to thoroughly and effectively investigate homicide cases. This includes ensuring there is strong leadership within the homicide unit, establishing formal case planning and review processes, and implementing a system for objectively assessing and addressing detective performance.

- **Recommendation – Establish Strong Leadership and a Clear Chain of Command:** Police agency officials should ensure that there is strong and consistent leadership within a homicide unit. Additionally, the supervisory responsibilities of sergeants should be made clear in homicide unit policies and should be reinforced by top unit leaders. Homicide unit leaders should also establish a clear chain of command within the unit.
- **Recommendation – Strengthen Documentation and Data Collection:** Detectives should ensure that cases are properly documented. Homicide Unit standard operating procedures (SOPs) should include detailed instructions on proper case documentation and reporting. Police agencies should also ensure that their electronic records management systems can be used effectively by Homicide Unit detectives. The Homicide Unit should also collect and maintain consistent statistical data regarding measures such as detective clearance rates and caseloads.
- **Recommendation – Establish Investigative Plan and Checklist:** At the outset of each case, Homicide Unit supervisors should work with detectives to establish a detailed investigative plan and formal case checklist. Sample investigative plans and checklists should be included in the revised Homicide Unit SOPs and should be part of the official case file. Police agencies should consider including prosecutors in the process of developing the formal homicide case checklist.
- **Recommendation – Conduct Supervisory Case Reviews:** Supervisors should conduct mandatory, regular case reviews for the purpose of identifying potential new leads, addressing any gaps in detectives' investigative processes, and updating the investigative plan. The review process should be outlined in the Homicide Unit SOPs and should include reviews of the investigative plan and checklist, as well as the detectives' reports and case file documentation.
- **Recommendation – Strengthen Evaluation Process for Detectives:** Homicide Unit SOPs should outline a formal process for evaluating Homicide Unit detectives. Evaluations should be designed to measure whether the detective is conducting thorough investigations, performing all necessary case follow up, and

properly documenting all investigative tasks and findings. Evaluations should be conducted every six months and should include a review of each detective's case files, clearance rates, supervisor assessments, and detective self-assessments.

- **Recommendation – Take Steps to Address Underperforming Detectives:** Police agencies should have a formal plan in place for providing additional training and assistance to underperforming detectives. The plan may include additional training courses; counseling, when appropriate; and mentoring or additional on-the-job training. The sergeant should discuss the issue and the proposed plan with the detective. If the problems continue, or if the detective refuses to get additional training or follow the proposed plan, the detective should be removed from the Homicide Unit.

Cold Case Unit

Finding: If designed and implemented correctly, a cold case unit can help provide the meaningful case review and quality assurance functions that are critical to the success of the Homicide Unit.

- **Recommendation – Establish a Cold Case Unit:** Police agencies should consider establishing a Cold Case Unit whose mission is to clear unsolved homicide cases and provide a reliable quality assurance check on homicide investigations. The unit should be staffed with Homicide Unit detectives who have demonstrated outstanding performance and who express a desire to investigate cold cases.
- **Recommendation – Develop Written Policies and Procedures for Cold Cases:** The Homicide Unit SOP should include written policies and protocols for the Cold Case Unit. The SOP should emphasize that the primary mission of the squad is to clear cases and provide an additional layer of review for homicide cases.
- **Recommendation – Carefully Select Which Cold Cases Should Be Reviewed:** There should be a formal process for determining which cold cases the squad will review, based on research and best practices for conducting cold case investigations. Cases should be designated inactive and eligible for transfer to the Cold Case Squad after a specified period of time, and then reviewed by a team of experts and chosen based on established “solvability” factors grounded in research and best practices.
- **Recommendation – Track Metrics to Evaluate Effectiveness:** The Cold Case Squad should track metrics including the number of cases reviewed, the types of cases reviewed, and any weaknesses in the initial investigation uncovered during the review. The squad should also track its clearance and conviction rates. This will help police agencies identify and address any gaps in performance or investigations moving forward.⁶

6. Davis, Robert C., Carl Jensen, and Karin E. Kitchens (2011), *Cold-Case Investigations: An Analysis of Current Practices and Factors Associated with Successful Outcomes*, Washington, DC: RAND Corporation & the National Institute of Justice, http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf.

“In my experience, there are several pieces that are critical to effective homicide investigations.

“One, homicides need to be treated with a sense of urgency, from the police chief on down the line. Everyone needs to be committed to devoting the time and resources necessary for solving these crimes.

“Two, there needs to be accountability for how detectives work cases. The first-line supervisors need to be talking with their detectives every day, they need to be reviewing cases and providing feedback, and there needs to be a process for addressing detectives who consistently underperform.

“Three, there needs to be better coordination between homicide detectives and others in the police department. This coordination needs to come from both sides. For example, crime analysts need to make sure that they are giving homicide detectives actionable intelligence, not just a sheet of paper with raw data on it.”

– Dr. Ronal Serpas, Professor, Loyola University, New Orleans
Superintendent (Ret.), New Orleans Police Department

Internal Coordination

Finding: There is often significant fragmentation and a lack of coordination and collaboration among the various units within a police agency that are involved in homicide investigations. Even when individual units are dedicated and competent in completing their own missions, these units may lack a cohesive mission, fail to communicate effectively, and demonstrate a poor understanding of how their functions and goals intersect with respect to homicide investigations.

- **Recommendation – Emphasize the Team Approach:** Police agency leaders should prioritize improving cross-agency communication and collaboration and should emphasize the importance of taking a team approach to preventing and solving crimes. This message should be reinforced in written policies and training. Police agencies should consider assembling a homicide investigations team for each case that is led by the primary homicide detective assigned to the case and includes other investigators, a crime analyst, the crime scene technician who worked the scene, the prosecutor assigned to the case, and a designated representative from the patrol unit, the medical examiner’s office, the district detective unit, and any other units relevant to the case.
- **Recommendation – Strengthen Information-Sharing Processes:** Police agencies should take steps to improve the flow of information across all units within the department. This includes coordinating regular training briefings, during which members of the various units could brief one another about their policies, protocols, capabilities, and missions. Other steps would include holding regular cross-agency crime briefings and in-person meetings to discuss specific cases and overall crime trends. Additionally, the homicide unit should hold regular (e.g., quarterly) briefings with command officials to provide the agency’s top leaders with information regarding the status of homicide investigations and any

investigative obstacles faced by the detectives. This will help the agency to stay abreast of investigations and determine what resources are needed to improve the investigative process.

- **Recommendation – Provide Adequate Resources to Agency Units:** Police agencies should take steps to ensure that all units involved in homicide investigations have the staffing, training, equipment, and technology they need to successfully complete their missions. This includes up-to-date equipment needed to process digital evidence, which is increasingly critical to criminal investigations.⁷ It also includes the equipment needed to process physical evidence, such as DNA evidence, in a timely fashion.
- **Recommendation – Prioritize Response to Nonfatal Shootings:** Police agencies should make it a priority to immediately respond to and investigate all shootings, including nonfatal shootings, which occur in the jurisdiction. Departments should implement policies that require a detective to respond to the scene of nonfatal shootings as well as homicides, and should take steps to improve ongoing collaboration between the Homicide Unit and detectives who investigate nonfatal shootings.

External Coordination

Finding: Prosecutors, members of the community, and others can have a significant impact on homicide investigations. Strong coordination and communication between these parties and the homicide unit (and the police agency as a whole) can promote effective investigations.

- **Recommendation – Strengthen Coordination with Prosecutors:** Police agency leaders should work with leaders from the local prosecutor’s office to establish strong information-sharing protocols and ensure that their policies and goals are aligned. For example, leaders from the police agency and prosecutor’s office should reach a consensus on what information is needed for charging decisions, whether and when prosecutors will respond to crime scenes, how prosecutors will be involved in interviews and interrogations, and ongoing communication protocols between detectives and prosecutors.
- **Recommendation – Strengthen Coordination with other External Agencies:** Police agency leaders should also strengthen coordination and communication with other external stakeholders, such as medical examiner’s officers, probation and parole offices, and external crime labs (when applicable). This includes developing formal information-sharing protocols, establishing formal procedures for submitting and following up on forensic evidence for testing, and ensuring that the agencies’ overall goals and strategies are aligned.

7. Goodison, Sean E., Robert C. Davis, and Brian A. Jackson (2015), *Digital Evidence and the U.S. Criminal Justice System: Identifying Technology and Other Needs to More Effectively Acquire and Utilize Digital Evidence*, Washington, DC: RAND Corporation, the Police Executive Research Forum, RTI International, and the University of Denver, available at http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR890/RAND_RR890.pdf.

- **Recommendation – Strengthen Coordination with the Community:** One of the many benefits of strengthening community trust in police is increasing the willingness of community members to cooperate with police investigations. To promote better relationships with the community, police leaders should continue to expand their efforts to implement strong outreach programs and community-wide initiatives. It can also be useful for homicide units to take an organized, comprehensive approach to responding to victims' families; for example, by having a social worker or victim's advocate located within the Homicide Unit. Many successful homicide units have also found that using a reward system for tips, such as Crime Stoppers, can have a positive impact on homicide investigations.⁸

The Future of Homicide Investigations: Digital Evidence and Crime Analysis

Finding: Because of the prevalence of technology such as smartphones, social media, body-worn cameras, and ubiquitous video cameras, today's homicide investigations are much more complex and require new skill sets for detectives. Police agencies must adapt to these changing needs by expanding their digital evidence and crime analysis capabilities, which includes ensuring that these units have the proper training, staffing, and resources.

- **Recommendation – Expand Crime Analysis:** Police agencies should invest in the staffing, tools, and technology needed to expand crime analysis capabilities, and should consider assigning a crime analyst directly to the Homicide Unit to work primarily on homicide investigations. Research has shown that crime analysis can play a critical role in effective homicide investigations.⁹ Putting mechanisms in place to better understand connections between crimes, suspects, victims, witnesses, locations, etc., can strengthen the investigative process.
- **Recommendation – Strengthen Digital Evidence Protocols:** Police agencies should develop written policies and procedures to govern the collection and processing of all cell phones, computers, video footage, and other electronic devices recovered as evidence. Homicide detectives should be aware of these policies and protocols and should be trained on the technical and legal issues surrounding digital evidence collection, extraction, and analysis.

Moving Forward

By taking steps to implement these recommendations, police agencies can leverage the talent and commitment of their personnel in order to strengthen homicide investigations, improve homicide clearance rates, and better protect and serve the community.

8. Ibid.

9. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

Introduction

When a human life is lost due to violence, the devastating effects are felt

throughout the entire community. This is why one of the most important functions of local police agencies is to thoroughly investigate homicide cases and bring justice to victims and their families.

Effective homicide investigations can also play a key role in *preventing* future deaths and protecting the safety of the community by ensuring that violent offenders are identified and apprehended.¹⁰ Additionally, by utilizing tools such as crime analysis, police agencies can understand ongoing crime patterns and trends regarding violence related to gangs and drugs. This can help police anticipate when retaliation is likely and intervene to prevent one homicide from sparking a series of killings.

To help promote more effective homicide investigations, the U.S. Department of Justice's Bureau of Justice Assistance (BJA) developed the Homicide Investigations Enhancement Training & Technical Assistance Project. In 2014, the Police Executive Research Forum (PERF) was selected to implement and manage this project, which focused on assessing the homicide investigation policies and practices at five police agencies across the country to identify common challenges and promising strategies for improving the investigative process.

Homicide Trends in the United States

Although violent crime rates across the country have declined in the past two decades, since 2015 many places in the United States have experienced a disturbing uptick in homicide rates.¹¹ According to FBI data, there were an estimated 17,250 murders across the nation in 2016, an 8.6 percent increase from 2015 and a 16.1 percent increase from 2012.¹²

The FBI data show that the upward trend in homicide rates is not limited to large cities. Although between 2015 and 2016 the homicide rate rose by 20.3 percent in cities with a population of 1 million or more, during that same period the homicide rate also increased in rural towns, suburban areas, and small and mid-sized cities.¹³

10. Carter, David L. (2013), *Homicide Process Mapping: Best Practices for Increasing Homicide Clearances*, Washington, DC: Bureau of Justice Assistance, http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

11. FBI UCR Data, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/murder>.

12. FBI UCR Data, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/murder>.

13. FBI UCR Data, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-10>. Between 2015 and 2016, homicide rates increased in every population category: 1 million or more (+20.3% change); 500,000 to 999,999 (+6.5% change); 250,000 to 499,999 (+11.1 change); 100,000 to 249,999 (+6.3% change); 50,000 to 99,999 (+0.7% change); 25,000 to 49,999 (+2.5% change); 10,000 to 24,999 (+3.4% change); and under 10,000 (8.4% change).

Even as homicide rates have climbed, in many places the percent of homicide cases that are cleared has declined or remained stagnant. According to FBI data, 59.4 percent of cases involving murder or non-negligent manslaughter were cleared nationwide in 2016.¹⁴ National homicide clearance rates have hovered between 60 and 65 percent since 2010,¹⁵ and in many places, only 20-30 percent of homicide cases are cleared.

Case clearance is important not just as a public metric of police effectiveness, but also because it underlies the basic deterrence principles at the core of policing.¹⁶ Additionally, when cases go unsolved – especially homicide cases – it can erode the public’s confidence in the police and undermine a police agency’s sense of legitimacy in the community.

Challenges to Improving Homicide Investigations

There are several reasons why police agencies have found it difficult to strengthen homicide investigations and improve clearance rates. This section discusses two of the key challenges that police agencies face: a lack of research into what makes an effective investigation; and the need to update investigative practices to keep up with cultural and technological changes.

Research on “What Works” in Homicide Investigations

Despite the critical role that homicide investigations play in the criminal justice process, historically there has been limited research into understanding what makes these investigations effective.¹⁷

One early study concluded that case clearances had little to do with detective work, but rather were dependent on information provided by the victim or witnesses to the responding officer at the scene.¹⁸ However, later research has found that work performed by investigators can have an impact on case outcomes.

For example, the seminal 1999 study by Charles Wellford and James Cronin identified several factors that appear to impact homicide clearance rates.¹⁹ Although some of these factors (e.g., the victim’s characteristics or the presence of an eyewitness) are outside the control of the police, the study identified many factors within police

14. FBI UCR Data, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-17>.

15. This includes clearance by arrest or by exceptional means. See FBI UCR Data: <https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/offenses-known-to-law-enforcement/clearances>; <https://ucr.fbi.gov/crime-in-the-u.s/2014/crime-in-the-u.s.-2014/offenses-known-to-law-enforcement/clearances/main>; https://ucr.fbi.gov/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/offenses-known-to-law-enforcement/clearances/clearancetopic_final; <https://ucr.fbi.gov/crime-in-the-u.s/2012/crime-in-the-u.s.-2012/offenses-known-to-law-enforcement/clearances>; <https://ucr.fbi.gov/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/clearances>; <https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/clearances>.

16. Wellford, Charles and James Cronin, *Clearing Up Homicide Clearance Rates*, National Institute of Justice Journal (April 2000), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>. See also the full report for a more comprehensive look at this study: *An Analysis of Variables Affecting the Clearance of Homicides: A Multistate Study* (October 1999), http://www.jrsa.org/pubs/reports/homicides_report.pdf.

17. Ibid.

18. Greenwood, Chaiken, & Petersilia, 1975.

19. Wellford & Cronin (1999), http://www.jrsa.org/pubs/reports/homicides_report.pdf.

control can help lead to case closure.²⁰ For example, the study found that homicide cases are more likely to be cleared when detectives arrive at the scene within 30 minutes, when detectives attend the postmortem examination, and when three or four detectives are assigned to the case.²¹

In 2013, David Carter conducted a study for BJA that examined law enforcement agencies with high homicide clearance rates.²² Carter found that these agencies shared many common factors, including ample training opportunities for new and current detectives, using patrol officers to directly assist investigators, and high levels of cooperation among criminal justice partners.

A second BJA report released in 2013 discussed recommendations from expert focus groups on how to improve homicide clearance rates, stressing the importance of structured investigations and information sharing.²³

“When it comes to improving homicide investigations, we often talk about the importance of external factors, like witness cooperation, as being key. However, research has shown that factors internal to a police department – things like leadership, resources, policies, practices, training, detective selection – these are critical as well. These internal factors count. Overwhelmingly, research shows that how you manage, run, and operate your homicide investigations explains why some agencies do well and other agencies do less well.”

– Dr. Charles Wellford, Professor Emeritus, University of Maryland

The Need for Updated Investigative Practices

Many law enforcement agencies find it difficult to improve homicide investigations because many of their investigative practices and policies have remained unchanged for more than 50 years, and fail to reflect cultural changes or critical advances in technology, science, and research.²⁴

For example, crime analysis, which involves using data, digital evidence, and other intelligence to identify crime patterns and trends, is playing an increasingly important role in homicide investigations.²⁵ One innovative technique is social network analysis (SNA), a relatively new tool that involves applying a mathematical method to analyze existing law enforcement data, such as arrests and field stops, in order to identify the structures, dynamics, and linkages within criminal street groups and develop more

20. Ibid.

21. Ibid.

22. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

23. IACP (2013), *10 Things Law Enforcement Executives Can Do To Positively Impact Homicide Investigation Outcomes*, Washington, DC: Bureau of Justice Assistance. http://www.iir.com/Documents/IACP_Homicide_Guide.pdf.

24. Braga, Flynn, Kelling and Cole 2011.

25. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

effective and targeted interventions.²⁶ Despite its potential value for criminal investigators, many law enforcement agencies lack the knowledge, training, and capabilities to effectively implement and sustain SNA.

There has also been a recent wave of new forensics tools for collecting and analyzing digital evidence and intelligence. Just as DNA testing began to change the landscape of criminal investigations a generation ago, recent technologies such as license plate readers, facial recognition software, and tools to extract and analyze evidence from personal digital devices have altered the way that police investigate crimes.²⁷ To leverage these tools, police agencies must have up-to-date equipment and must ensure that personnel are trained on how to use the equipment, how to effectively analyze and operationalize data, how to present digital evidence in court, and how digital evidence intersects with civil rights and constitutional law.

Recent shifts in how police interact with victims, witnesses, and members of the community may also have an impact on the process and outcome of criminal investigations. Research has found that people are less likely in general to cooperate with police or to come forward with information about crimes when they mistrust or fear the police,²⁸ which can be a significant obstacle for investigators who are attempting to solve cases. With many jurisdictions experiencing tensions between police and the community following high-profile police use-of-force cases, it is more important than ever that law enforcement agencies provide investigators with the tools they need to improve community trust and strengthen witness cooperation.

Project Overview and Methodology

These factors – stagnant or declining homicide clearance rates, gaps in available research, and police policies and practices that have not kept up with changes in technology, science, and culture – highlight why law enforcement agencies are in need of additional training, technical assistance, and resources aimed at strengthening their homicide investigative functions.

Addressing these needs is the goal of BJA's Homicide Investigations Enhancement Training & Technical Assistance Project. PERF's work on this project involved several different components, including assessments of five police agency sites and a convening of experts in the field of homicide investigations.

This publication documents the findings and recommendations that emerged from the project. The recommendations included in this publication, which are based on research regarding promising investigative practices, reflect many of the common challenges faced by the project sites and other agencies across the country.

26. See National Network for Safe Communities at John Jay College, <https://nnscommunities.org/our-work/innovation/social-network-analysis>; Papachristos, Andrew V., David Hureau, and Anthony A. Braga (2013), The Corner and the Crew: The Influence of Geography and Social Networks on Gang Violence, *American Sociological Review*, v.78 n3:417-447; McGloin, Jean Marie & David Kirk (2010), An Overview of Social Network Analysis, *Journal of Criminal Justice Education* 21 (2): 169-181.

27. Goodison, Sean E., Robert C. Davis, and Brian A. Jackson (2015), *Digital Evidence and the U.S. Criminal Justice System: Identifying Technology and Other Needs to More Effectively Acquire and Utilize Digital Evidence*, Washington, DC: RAND Corporation, the Police Executive Research Forum, RTI International, and the University of Denver, available at http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR890/RAND_RR890.pdf.

28. Roberts and Lyons, 2011; Borg and Parker, 2001.

Site Assessments

PERF conducted comprehensive assessments of the homicide investigation policies and practices in five police departments across the country: the Baltimore (MD) Police Department, Cleveland (OH) Division of Police, Houston (TX) Police Department, Miami (FL) Police Department, and Pittsburgh (PA) Bureau of Police. PERF and BJA are also assisting the sites with implementing strategies to strengthen their homicide investigation functions.

The project sites were chosen based on criteria that included: a recent rise in homicide rates, homicide clearance rates that were decreasing and/or below the national average, and a commitment of police department leaders to improving homicide investigation procedures.

The site reviews were conducted by assessment teams comprised of PERF researchers and outside subject-matter experts, including: a former police chief of two major city police departments; a former homicide commander from a large police department; a former homicide detective with more than 30 years of experience; a current deputy police chief and retired deputy police chief, each with more than 20 years of policing experience; a current cold case homicide detective with more than 30 years of experience; and a criminologist with more than 40 years of research experience, including extensive research regarding homicide investigations.²⁹

For each of the five sites, the assessment team conducted two site visits to collect information and one visit to present the final findings and recommendations.

Interviews: At each site, the team conducted in-person interviews with approximately 60 police department personnel, including: the chief of police and members of the executive staff; homicide unit supervisors, including majors, captains, lieutenants, and sergeants; homicide unit detectives; patrol officers and supervisors; crime analysts; crime scene technicians; forensic analysts; dispatchers and 911 call takers; district commanders and detectives; investigators from other units, such as the gang and narcotics units; video and cell phone evidence technicians; and labor organization representatives. The team also interviewed personnel from the local prosecutor's office, the medical examiner's office, the regional crime lab (if applicable), and members of the community.

Overall, the personnel interviewed by the assessment teams were talented, forthcoming, cooperative, and clearly committed to improving homicide investigations and serving the community.

Case Review: During the site visits, PERF's Senior Research Criminologist reviewed the files of homicide cases that occurred within a certain time frame (typically, the 10-12 months preceding PERF's review). This resulted in a review of more than 100 case files at each site where cases were reviewed. The purpose of the review was to collect data to help understand the nature of homicides and homicide investigations at that site, as well as to identify any obstacles to clearing cases.

The case files were evaluated using metrics that have been found to be associated with homicide case clearance, including the existence and cooperation of witnesses, the collection and examination of physical evidence, the quality of case file

29. See Appendix B for a list of the PERF assessment team members.

organization and documentation, and indications of supervisory case review.³⁰ The full list of review metrics can be found at Appendix A.

Policy review: For each site, the assessment team reviewed the written policies and procedures that govern the homicide unit, homicide investigations, and related topics (e.g., evidence collection, witness relocation, forensic analysis, etc.). The team also reviewed the site’s homicide logs, sample intelligence reports, organizational charts, sample crime reports, and staffing and clearance data.

“Back in 2014, the Camden County Police Department (CCPD) was really struggling with a less than 20% homicide clearance rate. Through BJA’s Violence Reduction Network (now known as Public Safety Partnerships), John Skaggs from the Los Angeles Police Department came in and provided us with training and technical assistance. He helped us rethink our processes and policies, how to manage our case files, how to do case reviews, and how to better manage our caseloads. The techniques and strategies that he taught us were extremely beneficial and we now have homicide clearance rates near 60%.

The things that Detective Skaggs did in Camden County are similar to what PERF and BJA are doing through this Homicide Investigations project. It is all about giving agencies tools and ideas that they can then tailor to work in their own jurisdictions for their unique challenges. It is teaching agencies how to fish, as opposed to just handing them a meal.”

– Scott Thomson, Chief of Police, Camden County (NJ) Police Department

Site Convening

In addition to the individual site assessments, PERF and BJA coordinated a meeting that brought together executives from each of the project sites, along with subject-matter experts in the field of homicide investigations, to identify common challenges and discuss promising practices. The meeting was held on January 31, 2017, in Washington, DC, and had nearly 70 participants.³¹

The goal of the conference was to develop guidance on homicide investigations that can be useful for police agencies across the country, as well as at the five sites. Researchers and practitioners from around the country presented information on topics such as: current research on improving homicide clearance rates; the tools for building an effective homicide unit; how to improve working relationships between police and prosecutors; how to engage victims’ families and loved ones; the use of technology in homicide investigations; forensics updates; and how to build an effective cold case unit.

The lessons and promising strategies that emerged from the conference are discussed throughout this report.

30. Wellford & Cronin (1999), http://www.jrsa.org/pubs/reports/homicides_report.pdf.

31. Please see Appendix D for a full list of conference participants.

Overview of Publication

This publication documents the findings from the site assessments, discussions from the January 2017 convening, and existing research into effective homicide investigations. **The goal of this publication is to provide guidance to police agencies on how to strengthen their homicide policies and practices, improve homicide clearance rates, and more effectively address and prevent crime in the community.**

Each chapter in this publication presents findings and recommendations regarding a topic that emerged as a common area of focus during the five site assessments. The recommendations included in this report reflect many of the common challenges that are faced by the five project sites and other agencies across the country.

Chapter 1 discusses the importance of having strong written policies and procedures to govern the homicide unit. This chapter includes recommendations for developing policies that are based on research and best practices and that will provide clear and meaningful investigative guidance.

Chapter 2 focuses on the importance of implementing a consistent, formal process for selecting homicide detectives and supervisors. The recommendations in this chapter provide guidance on the criteria that agencies should use in selecting homicide unit personnel, what the selection process should entail, and how to establish an effective probationary period for new homicide detectives.

Chapter 3 looks at the need for police agencies to provide consistent, formal, and comprehensive training to all investigators, particularly homicide detectives. This chapter includes recommendations for how to establish a formal training course in basic investigations, how to ensure that homicide detectives receive advanced formal training on additional topics, and how to strengthen on-the-job training for homicide detectives.

Chapter 4 examines the impact that large caseloads can have on homicide investigations, as well as the staffing and scheduling challenges that contribute to detective workload burdens. The recommendations in this chapter outline strategies for reducing detective caseloads, including restructuring shift schedules, rethinking the case assignment process, and minimizing the time that detectives spend on duties other than investigating homicide cases.

Chapter 5 discusses the importance of ensuring that homicide detectives have the guidance, accountability, and oversight they need to effectively investigate homicide cases. This chapter provides recommendations for how to encourage strong leadership within the homicide unit, how to appropriately evaluate homicide detectives and supervisors, and how to improve the case planning, documentation, and review process.

Chapter 6 examines the benefits of implementing a cold case unit to provide meaningful case review and quality assurance. The recommendations in this chapter focus on how to build an effective cold case unit, including guidance on staffing, the case selection process, and funding opportunities.

Chapter 7 discusses how coordination between various units within a police agency is critical for promoting effective homicide investigations. This chapter examines strategies for improving overall coordination within the police agency, and presents findings and recommendations for strengthening the individual policies, practices, training, and resources for the individual units that are often involved in homicide investigations, including forensics, patrol, and other investigative units.

Chapter 8 examines the role that parties outside of the police agency play in homicide investigations. This chapter provides recommendations for how homicide units can improve coordination with external agencies and persons, such as prosecutors and members of the community.

Chapter 9 presents recommendations for ensuring that homicide units have the tools and technologies that are critical for modern homicide investigations.

Finally, **Chapter 10** discusses the future of homicide investigations, focusing on the role that digital evidence and crime analysis play in modern investigations.

The recommendations included in this report should be adapted to fit each agency's unique needs and resources.

Strengthening Homicide Investigations: How Police Can Make a Difference to Increase Clearance Rates, Make Homicide Investigations a Priority, and Be Organized About How Investigations Are Conducted

Dr. Charles Wellford, Ph.D., is a Professor Emeritus at the University of Maryland, where he was the Chair of the Criminology Department for many years. Dr. Wellford is considered one of the leading criminologists in the country, and has done extensive research on homicide and violent crime. Dr. Wellford was a consultant on the PERF/BJA Homicide Investigations project. The following is excerpted from a presentation given by Dr. Wellford at the PERF/BJA Homicide Investigations conference on January 31, 2017.

What do we know from the research on improving homicide clearance rates? Unfortunately, there isn't a lot of research on this topic that can give police agencies real day-to-day guidance. However, the research can point us in a direction as to what is important.

One of the key messages from the research is that if a police agency wants to prioritize clearing homicides, it needs to look *internally*, not externally. In other words, the things that police do – how they conduct the investigation, the steps they took during the process, the quality of their homicide units – those things can account for the differences between agencies that close cases and those that don't.³²

To help us understand how police actions can impact homicide clearance rates, we can look to the characteristics that research suggest may be shared by police agencies that are effective in solving homicide cases. These characteristics include:

- **Leadership.** In police agencies with high homicide clearance rates, one common thing we've found is that the agency's top leaders have made clearing homicides a priority – and their

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32. Wellford & Cronin (1999), http://www.jrsa.org/pubs/reports/homicides_report.pdf.

actions reflect this priority. What are those actions? Simple things, like saying to the public that a priority for our agency is to clear homicides. Leaders also meet with the homicide unit on a regular basis to review how it's going and what they're doing. Leaders can set specific goals for the homicide unit, and signal support to the unit by prioritizing their needs when it comes to allocating resources. These are all things that seem to have a very strong impact on homicide clearances – and they are all things that an agency's leaders can control.

- **Resources.** If you ask homicide unit supervisors and detectives what they need to raise their clearance rates, almost all of them will start by saying, “We need more people in the unit.” That leads logically to the question, “Well, how many detectives do you need?” Looking at caseloads, the number we often see in the literature is three to six new homicide cases per detective, per year. Although there isn't a strong evidence base for this number, I do know that having a lot of staffing resources at the beginning of an investigation that work as a team appears to be very important. In addition to adequate staffing, ensuring that homicide units have resources such as smartphones, take-home vehicles, overtime and on-call pay, etc. can signal that solving homicides is a priority.
- **Policies.** Another characteristic that appears to be associated with strong homicide units is the presence of strong policies that lay out in detail how a homicide investigation should be conducted. A good policy will have a built-in process for periodically reviewing and auditing investigations. Strong policies will also have investigative checklists that spell out what steps need to be taken and when – for example, what needs to be done by the end of the shift, at the end of 24 hours, etc. I know there is often a lot of pushback from detectives regarding the idea of checklists, as they will rightfully say that every case is different and cases don't always follow a linear timeline. But it turns out that strong agencies do make great use of these checklists, just as reminders about what needs to be done.
- **Practices.** The way that homicide investigations are conducted, and the way that homicide units are built – these things matter when it comes to solving cases. The experience that a homicide investigator has can be an important factor, as can the way that detectives are selected, trained, and supervised. We've also found that case file organization and management can play a role in ensuring effective investigations. When you walk into a department and find case files that are organized with sections that are clearly marked, and all the materials are in the right place, and there is documentation that follow-up clearly occurred, it makes you feel comfortable that the cases are being investigated correctly. All of this goes to how detectives operate, and those things really make a difference in whether cases are solved.
- **Internal and External Support.** We've found that coordination with crime analysts, forensic analysts, and other agency personnel can really help promote strong homicide investigations. Forensics and technology are increasingly important to solving crimes, and so detectives need to understand how these tools can help with their investigations and how to build strong relationships with the people performing these functions. And of course, it is always important to have support from the community. To build relationships with people in the neighborhood, with victims' families, with survivors' groups – that is critically important. We see that in every agency – an effort to develop that.

The takeaway from this research, from the work that we've done over the years to understand what factors impact homicide clearance rates, is that the actions of the police matter. There are steps police agencies can take right now to improve clearance rates – steps like prioritizing homicide cases, devoting resources to homicide units, developing strong policies and practices, and strengthening internal and external coordination. These actions can make a real difference.

CHAPTER 1.

Homicide Unit Policies & Procedures

Finding: Effective homicide units are governed by written policies and procedures that provide clear, comprehensive, and current guidance on how to conduct an effective homicide investigation.

The Importance of Strong Written Policies and Procedures

The first step in promoting effective homicide investigations is ensuring that there are strong written policies in place. Clear policies and procedures are critical for ensuring that detectives are aware of their duties and responsibilities and for ensuring that important investigative steps are not missed. An effective homicide unit will have a set of standard protocols to govern case assignments, crime scene response, evidence collection and submission, reporting and documentation, case reviews, and other critical components of a homicide investigation.

Developing Homicide Unit Policies

Written policies should reflect the current best practices for homicide investigations and should address the factors that have been shown to be associated with case clearance. (These factors are discussed throughout this report.) Although it can be useful to consult model policies – including policies from agencies that have demonstrated successful investigative practices – agencies should always adapt these policies to reflect their own needs and resources.

When developing policies, it can be helpful for agency leaders to seek input from homicide detectives, as well as leaders from other units that are involved in homicide investigations. This will help ensure that the policies reflect the realities of how cases are investigated in the field; additionally, giving detectives and other personnel a voice in the process can help promote internal procedural justice.³³

33. As described in the President's Task Force on 21st Century Policing Final Report, procedurally just behavior involves treating people with dignity, fairness, and respect, as well as giving people a "voice" in the processes that affect them. In policing, internal procedural justice refers to the way in which these principles are applied within a police agency, by department employees, to the benefit of other employees and the department as a whole. *Final Report of the President's Task Force on 21st Century Policing*. <https://assets.documentcloud.org/documents/2082979/final-report-of-the-presidents-task-force-on.pdf>. See also: PERF (2015), *Implementing a Comprehensive Performance Management Approach in Community Policing Organizations: An Executive Guidebook*. Washington, DC: Office of Community Oriented Policing Services, <https://ric-zai-inc.com/Publications/cops-p331-pub.pdf>; and PERF (2014), *Legitimacy and Procedural Justice: A New Element of Police Leadership*, http://www.policeforum.org/assets/docs/Free_Online_Documents/Leadership/legitimacy%20and%20procedural%20justice%20-%20a%20new%20element%20of%20police%20leadership.pdf.

Ensuring that Policies Are Followed

Even the best policies can be ineffective if personnel are not trained on and held accountable for following them. All policies governing the homicide unit should be made available to personnel upon joining the unit, and supervisors should review the policies with their direct reports. Policy requirements should provide the basis for evaluating detectives' performance and ensuring that cases are investigated thoroughly and consistently. (See *Recommendations 34-36* for more details on performance evaluations.)

Strengthening Policies in Other Units

Homicide investigations involve personnel from across a police agency, including patrol officers, crime analysts, forensic technicians, and detectives from other units. Therefore, a department-wide focus to improve homicide clearances will require updating and revising the policies and procedures governing not just the homicide unit, but also any other unit that is involved in homicide investigations. The effort to update these policies should be coordinated and collaborative across the department. Specific policy recommendations for other units can be found in *Recommendations 48-67 and 80-89* of this report.

Recommendations: Homicide Unit Policies & Procedures

Recommendation #1: Police agencies should ensure that all written standard operating policies and procedures (SOPs) that govern homicide investigations are updated to provide clear and comprehensive guidance on the duties and responsibilities of homicide unit personnel.

- Relevant homicide unit policies, general orders, SOPs, and checklists should be compiled into a user-friendly manual that is distributed to all members of the homicide unit (see *Recommendation 3* below).
- The Homicide Unit Manual should include a set of standard policies and protocols for conducting homicide investigations, and should prominently feature a detailed, step-by-step description of actions to be taken at each stage of the investigation process. The manual should also include mechanisms for ensuring that homicide unit personnel are properly supervised and held accountable for their performance.
- The Homicide Unit Manual should include detailed guidance and direction regarding the following topics:
 - The specific duties and responsibilities for homicide unit lieutenants, sergeants, and detectives.
 - The process for selection into the homicide unit, including the qualifications that candidates must meet, the process for applying to serve in the Homicide Unit, and the criteria used for selection. (See *Recommendations 7-12*).

- Training requirements for both newly-assigned and veteran Homicide detectives (See *Recommendations 13-17*).
- The process for assigning cases to detectives. (See *Recommendations 18-20*)
- Policies regarding how shifts will be organized and staffed. (See *Recommendations 18-20*)
- Personnel leave policies.
- Overtime policies, including how overtime is authorized.
- Crime scene response, including who will respond and the required timeframe for responding.
- Each step that must be taken at the crime scene, including securing and managing the scene, conducting the initial canvass for witnesses, identifying and collecting evidence, and communications between detectives, supervisors, and other personnel at the scene. The manual should clearly state who is responsible for each task and should provide detailed information regarding how each task should be completed.
- Protocols on who should attend autopsies.
- Protocols for securing witnesses, transporting witnesses from the scene to the homicide unit, and interviewing witnesses.
- Protocols for submitting evidence for forensic analysis, including chain of custody requirements, the process for requesting forensic testing, and procedures for following up on results. Policies should include accountability mechanisms for ensuring that detectives follow up on leads generated by forensic test results. (See *Recommendations 59-67*.)
- The required reports that must be completed throughout the duration of the investigation, and a detailed description of when each report must be submitted, what it must include, and who is responsible for completing and reviewing the report. (See *Recommendations 27-33*)
- A list of all forms and reports that must be included in the case file. (See *Recommendations 27-33*)
- The process for securing and accessing case files and case information.
- The procedure for supervisory case review, including the timeframe for each review, a checklist of items for review, and how the review should be documented. (See *Recommendation 33*)
- Requirements for case follow up, and how the follow up will be documented.
- The process for detective and supervisor evaluations, including when evaluations will be conducted, the criteria used for evaluation, and how evaluations will be documented. (See *Recommendations 34-36*)
- Protocols for handling special cases, such as an officer-involved shooting or a mass casualty event.
- Other topics as identified by agency leaders.

Recommendation #2: The Homicide Unit Manual should be organized so that information is presented clearly and in a way that is easy to follow.

- The manual should be divided into clearly-marked sections and include a detailed Table of Contents.
- The homicide investigation checklist should be featured prominently.
- The manual should only include policies and procedures that are directly related to homicide investigations, and the guidance should be specific to the agency. Policies and procedures that are only indirectly related to homicide investigations (e.g., policies for conducting nonfatal shooting investigations) should be removed from the Homicide Unit Manual and presented to personnel in a separate format.
- Sample checklists and reports should be presented with context so that detectives understand their relevance and how to complete required tasks.

Recommendation #3: All current homicide unit personnel should be given a copy of the Homicide Unit Manual, and new personnel should be given a copy of the manual upon their arrival to the unit.

- Supervisors should review the manual with homicide unit detectives, and detectives should be held accountable for following the policies and procedures contained in the manual as part of their performance evaluations.

Recommendation #4: All written general orders, policies, SOPs, and other guidance governing the homicide unit should reflect current best practices for homicide investigations. When developing policies, police departments should look to research-based practice guides and consult with police agencies that have demonstrated successful investigative practices.

- Appendix C includes a list of resources that detail best practices for homicide investigations and other investigative policies and practices.

Recommendation #5: Agency leaders should assemble a team to assist the development of homicide investigation policies. The team's role would be to provide input on policy changes, to share ideas for strengthening the investigation process, and to discuss strategies and next steps for policy implementation.

- This team should include leaders from units that are involved in homicide investigations, such as:
 - The Homicide Unit (the team should include detectives and sergeants, in addition to the commander and lieutenant)

- Patrol
- Crime Analysis
- District Detective Units
- Forensic and Crime Scene Units
- Other investigative units (e.g., Gangs, Narcotics, Nonfatal Shootings)
- Prosecutor’s Office
- Medical Examiner’s Office
- Other personnel as identified by agency leaders.

Recommendation #6: Police agencies should review the current written policies and procedures for each agency unit involved in homicide investigations, and draft or update the policies as needed. Specific policy recommendations for the various units can be found in Recommendations 48–67 and 80–89.

The Boston Smart Policing Initiative: How the Boston Police Department Strengthened Homicide Investigations and Improved Clearance Rates

In 2011, the Boston Police Department’s (BPD) homicide clearance rate was at 30% - well below the national average.³⁴ This number reflected many problems with BPD’s homicide investigation process, including a lack of clear policies and protocols and few formal training opportunities for homicide investigators.³⁵ Then-BPD Commissioner Edward Davis recognized the need to strengthen investigations and improve clearance rates, and in 2011, with the support of funding from BJA’s Strategies for Policing Innovation (SPI), the BPD launched a “problem-oriented policing enterprise to understand the underlying nature of their homicide clearance problem, develop appropriate responses to enhance their investigations of homicide victimizations, and evaluate the impact of the implemented intervention.”³⁶

The project team, which included practitioners from the BPD and researchers from Northeastern University, began by reviewing available research and best practices to determine which factors under police control had an impact on homicide clearance rates.³⁷ The team then completed a statistical analysis of BPD’s homicide cases between 2007 and 2011, with a focus on data regarding investigative practices and their impact on case clearance.³⁸

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34. Anthony A. Braga & Desiree Dusseault (2017), Boston, Massachusetts, Smart Policing Initiative II, *Improving Homicide Clearance Rates: The Value of Analysis to Guide Investments in Investigative Policies and Practices*, <http://www.smartpolicinginitiative.com/sites/default/files/Boston%20SPI%20Spotlight%20%282017%29%20FINAL.pdf>. For a complete review of the Boston Smart Policing Initiative II, see A. A. Braga and D. Dusseault, *Can Homicide Detectives Improve Homicide Clearance Rates? Final Report* (Boston: Northeastern University and Boston Police Department, 2016).

35. Ibid.

36. Ibid.

37. Ibid.

38. Ibid.

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Using this information, BPD identified and implemented a multitude of reforms to its homicide investigation processes. The department made significant investments as part of this effort. It expanded its investigative personnel by more than 35%, purchased additional forensic equipment, strengthened investigation training, hired a civilian crime analyst, and developed case documentation tools.³⁹ The BPD also addressed a critical gap by developing a standard set of protocols to guide each step of the homicide investigation process.⁴⁰

Homicide clearance rates immediately began to rise following implementation of these reforms, and by 2015, the BPD's clearance rate reached 61% – the highest rate in five years.⁴¹

At the PERF/BJA Homicide Investigations convening held on January 31, 2017, BPD Superintendent Gregory Long and Lieutenant Detective Darrin Greeley shared their experiences with the department's SPI intervention. Excerpts from their presentations are below.

Superintendent Gregory Long, BPD

Every city has its own dynamics, but Boston has a lot in common with other cities across the country when it comes to the challenge of solving homicide cases. As we were undertaking this initiative, one way that we were very fortunate is that we had the ongoing support of former Boston Mayor Thomas Menino, Boston's current Mayor Marty Walsh [who took office in 2014], former BPD Commissioner Ed Davis, and BPD's current Commissioner William Evans [who took office in 2013]. These leaders were very supportive in terms of investing resources into our homicide unit, which as everyone knows is a huge factor in homicide investigations.

I was the lieutenant in the homicide unit when this happened. Commissioner Davis had seen that the unit lacked a standardized approach, and by 2010 we had applied for and were awarded funding from the BJA Strategies for Policing Innovation. The project was led by Deputy Chief of Staff Desiree Duseault for the BPD, and Dr. Anthony Braga for Northeastern University.

Assessing BPD's Homicide Investigation Process

The team looked at more than 314 homicide cases from 2007 to 2011 to understand the factors that were involved in the solved and unsolved cases. We also looked at best practices in the U.S. and England to see what other departments were getting right regarding homicide investigations.

We then formed a homicide advisory committee that included people from the homicide unit, along with district detectives, district uniformed personnel, crime lab personnel – several different stakeholders. We looked at what we were doing wrong and what we were doing right, and what changes we thought we should make.

I think the key thing we found was that there wasn't a standardized approach to anything that we were doing on homicide investigations. There were wide disparities in how homicide detectives, patrol officers, crime lab personnel, and others were performing their tasks – everyone did things a little differently, and nothing was standard. There also wasn't much accountability in terms of how homicide detectives were working cases. They were all good detectives, but no one was following up with them on a day-to-day basis about their work.

39. Ibid.

40. Ibid.

41. Boston Police Cracking More Murder Cases, *Boston Globe* (January 9, 2017), <https://www.bostonglobe.com/opinion/editorials/2017/01/09/boston-police-cracking-more-murder-cases/BxmS5j5WQQEiPhU0V998DJ/story.html>.

Key Reforms Implemented

So one of the first things that we did was **create checklists to guide the process of how homicide cases should be investigated**. This helped ensure that everything was more standardized. For the patrol supervisors and district detectives who respond to homicide scenes, we created checklists of what we thought they should do at the scene. We started having Command Staff show up to the scenes, which creates accountability and signals to the community that solving these cases is a priority. We also created checklists for the homicide detectives and standardized the way they document cases. The District Attorney's Office helped us develop these checklists.

We also took steps to address a lack of communication that existed within the BPD. **The researchers had found that half of our homicides were related to gang violence, and nearly one-quarter were drug-related**. And yet we were finding that the various units responsible for handling these types of cases – the Homicide Unit, the Gang Unit, the Drug Unit – weren't doing a good job of sharing information with one another, or with our fusion center, the Boston Regional Intelligence Center. So we started holding meetings to discuss each homicide case, and invited personnel from each of these units and from the district where the homicide took place. Our goal was to **facilitate better information-sharing** so that we could identify possible witnesses and suspects, get them off the streets, and solve these cases.

We also worked to improve communication between the Homicide Unit and the forensics personnel. To make sure that everyone is on the same page regarding what evidence should be collected and tested, we established **standardized debriefings between homicide detectives and crime lab personnel**, both before and after the scene is processed.

We also realized that we were woefully lacking in formal homicide investigations training. At the time, the training was very sporadic. The department might send a couple of detectives to outside training if the money was there, but that was about it. **Now we send all new homicide detectives to a two-day training course provided through BPD's academy, as well as to a homicide seminar offered by the New York State Police**. We also hold regular trainings with crime lab personnel and prosecutors from the District Attorney's Office, which we had not done before.

Securing Support for the Initiative

Of course, one of the biggest hurdles to implementing these changes was making sure that we had buy-in from the detectives and others throughout the department. In the beginning, there was some skepticism in the Homicide Unit when we told them we were embarking on this project. The detectives take a lot of pride in their work, and they were worried this was going to be some kind of "gotcha" project, or that they'd be made to look bad. And I'll be honest – I was skeptical about it as well, even though I knew there were changes that needed to be made.

Before we implemented the reforms, Commissioner Davis issued a memorandum that outlined each of the steps we were going to take. I think that began to really change people's minds and show them all of the good things that were going to happen. **Over time, the detectives really started embracing what we were doing**. They saw that the department was willing to invest in training and other resources, and they saw the positive outcomes. Now, many of the changes that we implemented have become common practice.

Lieutenant Detective Darrin Greeley, BPD

I can't say enough about how important it is to invest in your homicide unit. **It is nearly impossible to improve clearance rates when you're dealing with large caseloads, as you are forced to just triage and you can't dig into the investigation**. We were so lucky to have support from our mayor and

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commissioner and to be able to really expand our capabilities as a unit. We now have 40 detectives who work homicides. We have four squads working days, four squads working nights, an “unsolved case” squad, and an accident squad. We also have a 15-person fugitive team that serves subpoenas and tracks down witnesses and suspects. I know how fortunate we are to have these resources.

We’ve also been able to expand our technological capabilities, which is so important in today’s investigations. **Technology is driving a lot of how we solve cases. Everyone has a smartphone, there are videos and GPS devices and other tools producing evidence, and it can create additional work for detectives.** We addressed this by creating a forensic video team, by bringing in a crime analyst, and by really expanding our ability to collect and analyze digital evidence.

We also started ensuring that we were **doing the basics of homicide investigations:** training people on how to do interviews and interrogations; assigning detectives a take-home car so that they can get to the scene quickly; videotaping suspect interviews; making sure that ballistics and fingerprint evidence is tested. These are the building blocks of effective investigations, and they can’t be overlooked.

CHAPTER 2.

Detective and Supervisor Selection Process

Finding: It is critical that police agencies implement a consistent, formal process for selecting patrol officers to become detectives, for assigning detectives to a homicide unit, and for selecting homicide supervisors. An effective selection process will utilize standard, objective criteria for determining which candidates are the most qualified and committed.

Developing an Effective Selection Process

One of the most important steps in building a successful homicide unit is ensuring that the unit is staffed with qualified, dedicated personnel.⁴² While police agencies take several different approaches to choosing homicide detective and supervisors, the most effective approaches all involve a formal selection process and clear criteria for selection.⁴³

The first step in staffing a qualified homicide unit is to develop a formal job description that clearly outlines the duties and responsibilities of a homicide detective or supervisor. This description should be included in the written homicide SOP and should be posted when vacancies become open.

Next, the agency must develop the set of criteria that it will use for selecting homicide detective and supervisor candidates. The criteria should be clearly stated in written policy. Candidates should be ranked according to the criteria, which may include factors such as years of service, past performance (assessed by reviewing candidates' case folders and performance reviews), limited or no history of disciplinary issues, writing and computer skills, a desire and commitment to work homicide cases, and a willingness to work flexible hours and be on call.⁴⁴

Many agencies also require candidates for the homicide unit to have prior investigative experience, usually as a detective in another unit that investigates crimes against persons.⁴⁵ The Bureau of Justice Assistance's best practices guide states that the optimum training and preparation for the position of homicide investigator is at least three years as a patrol officer, and at least two years as an investigator with general investigative experience.⁴⁶

42. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

43. Ibid.

44. Ibid.

45. Ibid.

46. Ibid.

Candidates for the homicide unit should undergo a formal application process that includes submitting a resume, demonstrating writing abilities (through written tests and/or the submission of writing samples), and being interviewed by homicide unit supervisors.⁴⁷ The application process should be consistent for all potential candidates and formalized in written policy.

“What traits should you look for in a homicide investigator? Someone who is persistent and conscientious. Someone who will persevere, even when it seems like a long shot, because every once in a while, that long shot is going to pan out. And perhaps most importantly, someone who is willing to talk to people and who knows how to elicit information from people. If you have someone with those qualities, they will figure out the rest as time goes on.”

– George Kucik, Deputy Chief (Ret.), Washington, DC Metropolitan Police Department

Recommendations: Detective and Supervisor Selection Process

Recommendation #7: Police agencies should establish a formal process for selecting patrol officers to become detectives. Police agencies should also institute a formal training program for newly-promoted detectives, including a basic investigation course. (See Recommendation 13). This will ensure that there is a pool of trained and qualified detectives eligible to fill vacant slots in the Homicide Unit.

- Criteria for selection to detective should be clearly stated in written policy and should include factors such as:
 - Years of experience
 - No prior disciplinary issues or excessive use of sick leave
 - Demonstrated written and oral communication skills
 - Demonstrated computer skills
 - A good performance record
 - Ability to work flexible hours and be on call
 - Willingness to be a team player and assist others
 - Recommendations from supervisors
 - Other criteria as determined by agency leaders.
- Candidates should be ranked on the above criteria and selected for promotion through a formal process based on this ranking.

47. Ibid.

Recommendation #8: Police agencies should establish a rigorous, formal process for selecting detectives into a homicide unit. The process should be based on a set of established qualification criteria that are stated in written policy and consistently applied to all candidates.

- The revised detective selection process should include the following components, which are based on best practices outlined in BJA's best practices guide and the experiences of PERF's subject matter experts:
- Develop a formal job description for homicide detectives that clearly and comprehensively states the required duties and responsibilities. This description should be formalized in the written policy and should be posted when vacancies occur.
- Develop a set of standard criteria for candidate selection. Candidates should be ranked based on these criteria, which should include:
 - The qualifications outlined above in *Recommendation 7*
 - Prior investigative experience, either as a patrol officer or as a detective in another unit. Many successful homicide units select detectives from an applicant pool of detectives in other units, with a preference for candidates with experience investigating crimes against persons (aggravated assaults, shootings, robberies, etc.)⁴⁸
 - Past performance conducting investigations, as assessed through reviewing the candidates' case files and performance evaluations
 - A desire and commitment to working homicide cases
 - Other objective, job-related, and clearly articulated criteria as determined by agency leaders.
- Require candidates to undergo a formal, rigorous application process that may include:
 - Submission of a resume
 - Demonstration of writing ability, through submission of writing samples and/or written tests
 - An oral interview with a diverse panel that includes homicide unit supervisors and leaders outside the homicide unit
 - A review of the applicant's current case files.
- Candidates should be ranked on the above criteria and selected through a formal process based on this ranking.
- Criteria for selection to detective should be clearly stated in written policy.

48. Ibid.

Recommendation #9: Police agencies should take steps to avoid unfilled vacancies within the homicide unit.

- Some police agencies wait until a position in the homicide unit becomes vacant before advertising the position agency-wide. The problem with this approach is two-fold: (1) there is no overlap in which the retiring detective can train and mentor his or her replacement; and (2) there exists an avoidable delay in filling the position, thereby causing the unit to be temporarily understaffed. (For more on homicide unit staffing, see the “Homicide Unit Staffing and Caseload Management” section of this report.)
- To avoid this problem, it is recommended that police agencies:
 - Maintain an active list of personnel who are interested in joining the homicide unit, so that potential candidates can be engaged and prepared to apply once a vacancy is announced.
 - Announcing the vacancy as soon as possible once it is anticipated (e.g., due to impending retirement of a homicide detective). This will help enable the new detective to receive on-the-job training prior to the departure of the experienced investigator. (For more information on on-the-job training, see the “Investigations Training” section of this report.)

Recommendation #10: Police agencies should establish and enforce a formal probationary period (e.g., 90-120 days) for newly-selected homicide detectives before they are assigned full time into the homicide unit. This would allow candidates and supervisors to determine whether the unit is a good fit for the new detective.

- In addition to a probationary period for newly-selected Homicide detectives, some police agencies have also provided opportunities for patrol officers and investigators in other units to be temporarily detailed to the Homicide Unit to assist with investigations. This strategy gives personnel outside the Homicide Unit an opportunity to gain homicide investigation experience, and it also allows members of the unit to evaluate whether the person may someday be a good candidate for the Homicide Unit.⁴⁹
- BJA’s guide on best practices for homicide investigations provides several examples of agencies that have used temporary details on homicide investigations:
 - The San Diego Police Department has a “Homicide Relief” program, through which detectives in other units are placed on an on-call list to assist in a homicide investigation when the homicide unit is short on personnel. The detailed detective works with a homicide detective through the duration of the case.⁵⁰

49. Ibid.

50. Ibid. The examples in this recommendation are from BJA’s guide, which was published in 2013. It is not known whether these practices are still ongoing.

- In San Diego and Denver, whenever there is a drug- or gang-related homicide, an investigator from the appropriate drug or gang unit is assigned to the homicide investigation team on the case for up to 72 hours, depending on the status of the case and the facts.⁵¹ Or if it appears that a homicide is related to a previous nonfatal shooting, it could be useful for the District Detective Unit (DDU) detective who investigated the earlier shooting to assist homicide detectives in the investigation.
- In another example, the Baltimore County Police Department assigns the initial responding patrol officer at a homicide scene to the homicide investigation team for the first 48-72 hours of the investigation. The officer often is able to provide local knowledge that can assist homicide detectives, and the assignment can help give insight into whether the officer would make a good homicide detective.⁵²

Recommendation #11: Police agencies should implement a formal process for selecting homicide unit supervisors (sergeants, lieutenants, and commanders). The process should be stated in written policy and consistently applied for all candidates.

- The criteria used to select homicide unit sergeants and lieutenants should include:
 - A criminal investigative background, though not necessarily in the Homicide Unit
 - Demonstrated leadership skills
 - The ability to effectively manage personnel.
- The criteria used to select the homicide unit Commander should include:
 - Prior supervisory experience in an investigative unit (though not necessarily just the homicide unit)
 - A clear vision for the direction of the homicide unit
 - A reputation as a strong and respected leader
 - Strong problem-solving skills and experience with fixing problems in departmental units.

Recommendation #12: If necessary, police agency executives should work with the local bargaining unit to revise the collective bargaining agreement that governs detective selection.

51. Ibid.

52. Ibid.

Building an Effective Homicide Unit: Los Angeles, CA

*Detective John Skaggs has been with the Los Angeles Police Department (LAPD) for more than 30 years, including 24 years in the homicide unit as a detective and supervisor. He has been the lead investigator on 165 murder cases and supervised more than 200 investigations. Detective Skaggs is featured in the book *Ghettoside: A True Story of Murder in America*,⁵³ which explores homicides and homicide investigations in Los Angeles. He also is involved with BJA's Public Safety Partnership (PSP) and has provided extensive technical assistance to police agencies across the country. The following is excerpted from a presentation given by Detective Skaggs at the PERF/BJA Homicide Investigations conference on January 31, 2017.*

In my experience, building an effective homicide unit starts with **detective selection**. Investigating murders is an extremely hard job, and you have to get people whose hearts are really vested in this type of work. The process for selecting who works murders is critical. At the LAPD, to become a homicide detective, you have to have already served five years as a police officer, then test to promote to the rank of detective. We want people for the homicide unit who are personable and who have good people skills, because a lot of the job consists of talking to people and trying to get information.

Another key part of building an effective homicide unit is **supervisor selection**. I've found that it is helpful to bring in supervisors who have homicide experience, because they have the best understanding of what makes a good homicide detective. Supervisors who have experience working homicide cases also have knowledge about how to successfully get a case from the crime scene to the conviction, which is very important.

Once you have the right people on board, it is critical that they receive **support from the police department**. The people working homicides need to have resources to help them do their incredibly demanding jobs, and giving them benefits such as take-home cars and overtime pay will help show that they are a priority.

These three things – choosing the right detectives, selecting the right supervisors, and getting support from the department – are the building blocks of an effective homicide unit. They provide the foundation that you can build upon as you address all of the other things that are so important, like training, case management, and shift structures.

53. Jill Leovy, *Ghettoside: A True Story of Murder in America*, Spiegel & Grau, 2015.

CHAPTER 3.

Investigations Training

Finding: It is critical that investigators – particularly those in a homicide unit – receive consistent, formal, and comprehensive investigations training. Training should be offered both to new and veteran investigators.

All detectives, particularly those investigating homicide cases, must be equipped with the knowledge and skills to conduct thorough investigations.⁵⁴ Police agencies must ensure that detectives acquire these tools through comprehensive formal investigations training, along with rigorous on-the-job (OTJ) training.

“When developing training, you have to do things systematically. It also helps to listen to your detectives and trust that they know what to do. You’re there to help them, not hold them back. When I first started putting together training programs in Baltimore, one of the first things I did was bring in the field training officers (FTOs) to get their perspectives. I think they were a bit skeptical that we’d actually make changes based on their input, but that’s exactly what we did. And that helped give our training program more credibility.”

– Pam Davis, Director of Professional Development and Training,
Baltimore Police Department

Formal Investigations Training

All new detectives assigned to any investigative unit (not only homicide unit) should receive basic investigations training. This training gives detectives the knowledge and skills they need to work general investigations, and ensures that detectives selected into a homicide unit are well-versed in basic investigative techniques.⁵⁵ This training should cover departmental policies and procedures, investigative techniques, case management and documentation, interrogations and interviews, report writing, the use of databases and other technology, basic forensics, legal requirements for obtaining warrants, how to testify in court, and other investigative responsibilities that are applicable to all crimes.⁵⁶

54. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

55. Ibid.

56. Ibid.

Detectives who have been newly assigned to a homicide unit should receive additional formal training relevant to conducting homicide investigations. This training should include courses on topics such as death investigations, advanced interview and interrogation techniques, advanced evidence collection and forensics, preparing cases for court, and best practices for conducting homicide investigations.⁵⁷ It may also be helpful if training for newly-assigned homicide detectives includes refresher courses on basic investigation techniques, particularly if investigations training is not consistently provided to new detectives.

In addition to the training they receive when joining a homicide unit, homicide detectives should also receive regular, ongoing training that covers legal updates, new technologies, new policies and procedures, and specialized courses such as the recovery of digital evidence.⁵⁸

“It takes time to really master the skill of homicide investigations. I’d say that a new homicide detective can be effective in as little as one year, but to really master this job, it may take five years or more.

“A lot of these skills are learned on the job. For example, when you see your first case all the way through court that is when you really can identify mistakes you’ve made and begin to learn how to address them. But having a solid foundation of formal training is also critical. In the LAPD, homicide detectives go through two schools – a two-week basic detective school upon becoming a detective, and then another two-week course on homicide investigations upon joining the homicide unit. And the State of California also offers another two-week course for homicide detectives.

“So when all is said and done, all of the detectives in the homicide unit have more than four weeks of classroom training dedicated to homicide investigations alone.”

– John Skaggs, Detective, Los Angeles Police Department

On-the-Job Training

The BJA guide on best practices for homicide investigations recommends that detectives who are new to a homicide unit be assigned to a seasoned investigator for field training and mentorship for a period of at least three months.⁵⁹ The BJA guide stresses that this on-the-job training (OJT) should go beyond a new detective merely “shadowing” a veteran detective. Rather, OJT should be a true mentorship in which the veteran detective provides direction and advice, and reviews the new detective’s notes and reports to ensure they meet quality standards.⁶⁰

Additionally, OJT should follow a formal curriculum that includes metrics to evaluate whether detectives have met the required milestones before joining the homicide unit full time. This will help ensure that training is consistent across the unit and that

57. Ibid.

58. Ibid.

59. Ibid.

60. Ibid.

detectives are learning proper protocols. To facilitate the adoption of formal, consistent standards, some police agencies have developed an OJT manual that is similar to the manual that guides field training for new officers.

Recommendations: Investigations Training

Recommendation #13: All new detectives assigned to investigative units should receive a formal course in basic investigations.

- Training should be mandatory, consistent for all detectives, and focused on establishing skills and techniques needed to conduct effective investigations. For example, some police agencies require all new detectives to complete an in-house “investigator school” that lasts one or two weeks, with courses taught by experienced personnel from within the police agency, prosecutors, and personnel from the Medical Examiner’s office.
- This course should cover the following topics:
 - Departmental investigative policies and procedures
 - Case management and documentation
 - Crime scene management
 - Report writing
 - Interrogation and witness interview skills
 - Basic forensics, including DNA, ballistics, fingerprints, and trace analysis
 - Evidence collection and submission
 - Cell phone, computer, and internet investigations
 - Surveillance techniques
 - Managing witnesses and informants
 - Interactions with crime victims’ families
 - Constitutional law and the legal requirements involved with investigations (e.g., obtaining warrants, *Brady* requirements, evidentiary rules)
 - How to testify and present cases in court
 - Steps detectives can take to prevent the potential for wrongful convictions, such as how to properly record witness statements and assess and utilize eye-witness testimony and other evidence
 - Case review processes
 - The roles and responsibilities of various investigative units
 - The use of technology to further investigations (e.g., tracking social media for investigations; eTrace, NIBIN, and other firearms tracking technologies; smartphone and computer forensics; “Stingray” cell phone tracking technology; license plate readers; facial recognition software and other video-related issues; cybercrime investigative tools; and other technologies)

- Crime analysis, including the use of any electronic crime analysis programs
- Other basic investigative techniques.

Recommendation #14: All newly-assigned homicide detectives should be required to receive formal training on topics related to homicide investigations.

- Training should be mandatory, consistent for all detectives, and focused on establishing skills and techniques needed to conduct effective homicide investigations. Training should be offered shortly after a detective is first assigned to the homicide unit.
- All homicide detectives should also receive the basic investigations training described above in *Recommendation 13*. If they have not had such training prior to joining the homicide unit, they should receive it as soon as possible after joining the unit.
- The topics that training for newly-assigned homicide detectives should cover include:
 - Advanced interview and interrogation techniques
 - Updates on legal requirements for searches and seizures
 - Advanced forensics and evidence collection
 - Advanced computer and cell phone forensics
 - How to prepare homicide cases for court
 - Steps that detectives can take to prevent the potential for wrongful convictions, such as how to properly record witness statements and assess and utilize eyewitness testimony and other evidence
 - Investigating specific types of cases handled by homicide detectives, such as officer-involved shootings, child deaths, in-custody deaths, mass casualty scenes, infant deaths, arson deaths, etc.
 - Best practices for conducting homicide investigations.
- Advanced training for new homicide unit detectives should take place within the detectives' first year in the unit. For example, according to the BJA best practices guide, the San Diego Police Department requires new homicide detectives to complete five weeks of advanced training within a year of joining the homicide unit.⁶¹

61. Ibid.

Recommendation #15: All homicide unit detectives, including experienced detectives, should receive regular, ongoing training relevant to conducting homicide investigations.

- Ongoing training should include updates on topics that are evolving, such as technology, forensic analysis, legal standards and requirements, and the policies and protocols of other agency units and external agencies involved in homicide investigations.
- Training should also include refresher courses for trainings that detectives may have previously received.
- To help detectives prepare homicide cases for prosecution, police agencies should collaborate with the prosecutor's office to provide training to detectives on the requirements for search warrant and arrest warrant applications, case documentation, proper report writing, and legal updates.

Recommendation #16: To strengthen the expertise of the homicide unit, police agencies should ensure that there is additional training made available to detectives that covers specialized areas (e.g., blood spatter analysis, conducting infant death investigations, the use of a particular type of technology, etc.).

Recommendation #17: Homicide units should have strong on-the-job training (OJT) to ensure that new homicide detectives receive appropriate and comprehensive field training and mentoring.

- Upon selection to the homicide unit, new detectives should be partnered with a veteran homicide detective for three to six months prior to becoming a primary detective on a homicide case.
- The veteran detective should have a field training officer (FTO) certification.
- Police agencies should develop an OJT guidebook, similar to the FTO guidebook used with new recruits, which contains standardized policies and procedures for OJT. The guidebook should contain a checklist of the duties required by the OJT trainer, including requirements for reviewing new detectives' reports and notes for quality assurance. The guidebook should also include benchmarks that new homicide unit detectives must meet before they are assigned full time to the unit.

Developing a Homicide Investigations School

Many police agencies have found that establishing an in-house “homicide investigations school” can be an effective way to train new homicide detectives on the basic skills and tools needed to conduct homicide investigations. These training programs often last one or two weeks and are taught by instructors within the police agency.

Benefits of Developing an In-House Homicide Training Program

Developing an in-house training course allows police agencies to tailor the curriculum to the specific policies, practices, and needs of the agency. Rather than learning about homicide investigations in the abstract, detectives will gain an understanding of how these investigations work within their own agencies – for example, how to submit evidence to the agency’s crime lab, the specific rules for obtaining a warrant to conduct cell phone surveillance within their jurisdiction, or the capabilities of the agency’s crime analysis unit.

Additionally, in-house homicide investigations courses are often taught by people within the agency (e.g., detectives and supervisors from various units, forensic analysts, crime analysts), as well as personnel from the local prosecutor’s and medical examiner’s offices. These instructors have an understanding of how homicide cases work within the jurisdiction and can serve as an ongoing resource to new homicide detectives as they begin investigating cases.

Finally, developing an in-house training program can often be less costly than sending detectives to outside training courses. For agencies with limited resources, establishing an in-house program may be the best way to ensure that *all* new homicide detectives receive consistent, comprehensive training.

Washington, DC Metropolitan Police Department (MPD)

MPD’s Homicide Training Course is an intensive two-week, all-day program that is offered to all new homicide detectives. Each day, detectives attend multiple courses that are taught by MPD personnel (both active and retired), as well as local prosecutors and medical examiner personnel.

Courses that are taught during the two-week program include:

- Crime Scene Sciences
- Forensic Intelligence Unit
- Forensic Biology Unit
- Medical Examiner Jurisdiction and Medico-legal Death Scene Investigation
- Autopsy
- Forensic Chemistry
- Latent Fingerprint Unit
- Identification of Injuries
- Deaths in Police Custody
- Mass Fatality Management
- Forensic Toxicology
- Estimating Time of Death/Post-Mortem Changes
- Suicide Scenes
- Digital Evidence Unit

- Firearms Examination Unit
- Mimics of Trauma – Abuse and Neglect
- Intelligence and Gang Unit
- Next of Kin Notifications
- Law Enforcement Officers as Offenders
- Police-Involved Shooting
- Detective Testimony Issues
- Legal Issues (United States Attorney’s Office)
- Homicide Standard Operating Procedures (SOPs)
- Missing Persons Investigations
- Infant Death Investigations
- Interview and Interrogation

The program also includes a tour of DC’s Consolidated Forensics Lab, presentations by prosecutors and defense attorneys, and an in-depth review of several unique cases that were handled by the Homicide Unit.

Los Angeles Police Department (LAPD)

The LAPD also has an in-house “Homicide and Death Investigation Course” that is provided to new homicide detectives. This program, which is also an intensive two-week, all-day course, is offered as part of a partnership between the LAPD and the Los Angeles Sheriff’s Department.

Courses included in this program are:

- Role of the Homicide Investigator and the Mindset Shift
- Crime Scene Management
- Child and Elder Death Investigations & Other Death (Industrial, Accidental, etc.)
- Tactical Planning for Court
- Homicide and Law (LA County District Attorney)
- Crime Scene Practical Application
- Forensic Art
- Investigative Resources and High-Profile Cases
- Case Management Interaction with Suspects/Witnesses
- Interview & Interrogation Techniques
- Forensic Entomology & Anthropology
- Telephone Investigations
- Role of the Coroner (LA County Coroner)
- Roles of the Crime Lab
- Trace Evidence/Questioned Documents/Firearms
- Media Relations

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- Investigator Wellness
- DNA/CODIS
- Managing Officer-Involved Shootings
- Arson and Terrorist-Related Homicides

The program includes many interactive exercises and breakout sessions aimed at providing new homicide detectives with a practical look at how investigations are conducted.

In addition to attending the in-house training program, all of LAPD's new homicide detectives also attend a two-week course offered by the State of California's Institute of Criminal Investigations (ICI).

Boston Police Department (BPD)

The BPD takes a hybrid approach to training for new homicide detectives, providing training through both internal and external programs.

- **Internal Training:** New homicide detectives at BPD typically attend a two-day training held by BPD's academy. This training covers the following topics: two case studies; forensics information from the BPD Crime Lab; a presentation from the Center for Homicide Bereavement regarding family resources; interviews and interrogations; and cell phone and internet utilization.
- **External Training:** In addition to the two-day internal training course, new homicide detectives also attend two outside, basic-level training programs:
 - **The New York State Police Department's Colonel Henry F. Williams Homicide Seminar.** This training provides the opportunity to gain insight and feedback from international organizations on BPD's current procedures, as well as to learn formal practices in critical areas of investigation such as forensic pathology, anthropology, psychology and behavior analysis, crime scene reconstruction, domestic violence, and advances in forensic technology.
 - Detectives have also attended **Boston University's Medico-Legal Death Investigation Course** for baseline training. This lecture-based seminar follows a death investigation from the crime scene to the courtroom and is designed to benefit law enforcement supervisors, investigators, crime scene specialists, prosecutors, medical personnel and those whose professional responsibilities include or interact with any facet of medico-legal death investigations.

CHAPTER 4.

Staffing & Caseload Management

Finding: In many police agencies, inadequate staffing and inefficient scheduling can contribute to heavy caseloads for homicide detectives. Excessive caseloads can be associated with a decline in individual detective clearance rates, as detectives may not have time to thoroughly investigate, document, and follow up on open cases.

Although homicide units are staffed and structured differently across jurisdictions, many police agencies face common challenges when it comes to ensuring that homicide detectives have manageable caseloads.

This section discusses the typical responsibilities of a homicide unit, various ways that homicide units are staffed and structured, how these staffing and structural factors can contribute to heavy caseloads, and the impact that caseloads can have on clearance rates. Recommendations for addressing these challenges are presented at the end of this section.

Homicide Unit Responsibilities

In many police agencies, homicide detectives are responsible for investigating many types of incidents in addition to homicides. Types of cases that may fall under the purview of a homicide unit include: suspicious deaths, suicides, child fatalities, fatal drug overdoses, accidental deaths, life-threatening assaults, kidnappings, in-custody deaths, and the use of lethal force by police officers.

Homicide detectives must also perform many administrative duties, such as answering telephones, transcribing reports and statements, filing, and drafting subpoenas. Additionally, some police agencies do not have a separate unit dedicated to tracking down suspects and witnesses, which means that homicide detectives must perform this function as well. These additional ministerial duties can contribute to the workload of an understaffed homicide unit and take away from time that detectives can spend investigating active homicide cases.

Homicide Unit Staffing and Structure

Homicide units' staffing and shift structure vary from agency to agency. How a unit is structured will depend largely on the agency's resources, needs, and investigative philosophy.

Partners: Typically, homicide detectives are assigned a regular partner and work in teams of two. In some homicide units, one member of the team is designated as the primary (or lead) detective on a case, with the role of primary alternating from case to

case. In other homicide units, both members of the team are equally responsible for each of the team's cases, with neither member serving in the role of primary.

Squads: Another variation in homicide unit staffing involves the use of a squad system. In some homicide units, detectives (or two-person teams of detectives) are grouped into squads comprised of six or eight members, with each squad led by a sergeant. Members of the squad work the same shift and are expected to operate somewhat as a team when investigating cases. For example, if one member of the squad "catches" a case, the other members of the squad step in and assist with tasks (e.g., interviewing witnesses, tracking down leads) as they are able.

Shifts: Shift schedules also vary among homicide units, though most provide full-time coverage seven days per week during at least the daytime and evening hours. Some agencies also staff a full-time overnight (or midnight) shift, which often runs from 12:00 a.m. until 8:00 a.m., while other agencies use an on-call system for incidents that occur during the overnight hours.

Case Assignment: Some homicide units use a systematic process for assigning new cases to detectives, taking into account factors such as the detectives' caseloads and when a detective last caught a new case. Other units do not utilize a formal assignment process, and instead assign cases based on whichever detective happened to take the call.

Personnel: In addition to detectives, sergeants, lieutenants, and a commander, some homicide units may also include non-sworn personnel such as administrative assistants, social workers, and victim advocates. As discussed further in *Recommendation 21*, utilizing non-sworn personnel in these roles can help maximize the amount of time that detectives can spend investigating cases.

Homicide Unit Caseloads

According to the BJA's guide on best practices for homicide investigations, research has found that **a homicide unit is optimally staffed when each detective is the lead investigator on an average of three to four new homicide cases per year**, though this number may vary depending on the solvability of the case (e.g., a detective may be able to handle more cases of types that are typically quicker to solve, such as a murder-suicide).⁶²

This number is recommended to allow detectives to thoroughly investigate new homicide cases, while still giving them time to perform other duties, such as following up on cases from prior years, acting as a secondary investigator on other homicide cases, investigating non-homicide cases, testifying in court, attending training, and performing administrative duties.⁶³

Despite this recommendation, few homicide units across the country are able to limit detective caseloads to three or four new homicide cases per year. In fact, in many

62. Ibid. It is important to note that this recommendation is not an empirically established number, but rather a guidepost. The actual number will depend on the nature and complexity of the homicide involved, and whether it is a case that can be cleared quickly.

63. Ibid.

agencies detectives are handling more than 10 new homicide cases a year. This section describes why homicide detectives in so many agencies are carrying such heavy caseloads, and how these heavy caseloads can have a negative impact on the effectiveness of an investigation.

“I believe that the amount of work that detectives have to do for each case has increased tenfold due to technology. Now you’ve got videos from the scene, cell phone data, information from license plate readers and GPS tracking devices, body-worn camera footage, DNA, social media communications – all of these pieces of potential evidence that you have to track down, obtain, and analyze. This has really changed how cases are investigated.”

– George Kucik, Deputy Chief (Ret.), Washington, DC Metropolitan Police Department

Factors Contributing to Homicide Detective Caseloads

During the course of this project, PERF worked with several project sites that were struggling with trying to limit the caseloads of their homicide detectives. PERF found that there were several common challenges among these sites that contributed to large caseloads.

Decline in Staffing Levels: First, in many of the homicide units that PERF examined, the staffing levels had declined in recent years. This is not unusual, as many homicide units across the country are seeing lower staffing levels due to budget cuts and agency-wide difficulties with hiring and retention of officers. With fewer homicide detectives available to work cases, those who remain are seeing their caseloads increase.

Poorly-Structured Shift Schedules: Second, the structure of the shift schedules used in some homicide units can contribute to detective workload burdens. As discussed more in *Recommendations 19-20* below, shifts should be structured to ensure there are enough detective available to respond to the volume of incoming calls. To guide this effort, police agencies should review their homicide data to determine the times of day and days of the week when homicides are most likely to occur, and should strive to schedule homicide detectives accordingly.

Additionally, police agencies must try to ensure that the structure of the shift schedules does not cause detectives to catch multiple new cases in a row. This is especially true in homicide units that do not have a formal case assignment system that promotes a fair and balanced distribution of cases among detectives.

For example, in homicide units that use an on-call system for the midnight shift, the team or squad of detectives that is on call will be responsible for investigating *all* new homicides that occur during the overnight hours. And in places where a significant portion of homicides occur during the midnight shift – which was the case in several of the project sites⁶⁴ – the on-call team will likely catch a considerable number

64. For example, at one project site, 40% of all homicide cases that PERF reviewed took place between midnight and 8:00am, which was more than during any other shift.

of new cases in a row, especially if the on-call rotation exceeds a week or two. This creates a significant burden on detectives, who are also continuing to receive new cases during their regular day shift.⁶⁵

Focus on Non-Homicide Cases and Other Tasks: Another factor that contributes to heavy caseloads is the time that many homicide detectives must spend on tasks that are unrelated to homicide investigations. These tasks include: investigating non-homicide cases; completing administrative tasks; locating witnesses; and working departmental details.

Impact of Caseloads on Investigations

PERF reviewed individual detective caseload and clearance data at some of the project sites.⁶⁶ This review found that there was some association between detectives' caseloads and their personal clearance rates. In general, as caseloads increased, personal clearance rates decreased.⁶⁷

Interviews with homicide unit personnel revealed several ways in which excessive caseloads can limit investigations. First, having large caseloads can make it difficult for homicide detectives to thoroughly investigate any single case for a very long period of time. This is especially true when detectives are assigned to multiple new cases in a row, or within a short time frame. When detectives have to stop investigating a current case to start investigating a new one, they can lose the opportunity to be proactive and quickly follow up on important investigative leads.

Second, large caseloads make it difficult for detectives to assist on investigations to which they are not directly assigned. If homicide unit detectives instead had the opportunity to help each other on investigations, it could mean that tasks would be completed more thoroughly and efficiently. Improved collaboration could also help improve the quality of investigations by ensuring that each case is regularly seen by a fresh set of eyes.

Third, heavy caseloads may also make it difficult for detectives to perform tasks in a timely manner, which research shows can be an important factor for clearing homicide cases.⁶⁸ For example, one study found that there is a relationship between case clearance and whether detectives arrive at a crime scene within 30 minutes of the initial call.⁶⁹ This same study also found a relationship between case clearance and whether detectives attend the post-mortem examination.⁷⁰ Detectives may have a difficult time responding within this 30-minute window or attending autopsies when they are called out to another case or are overwhelmed with other work.

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65. For example, at one project site that uses an on-call system, one team of two detectives was assigned to three new homicide cases during a five-day span, while another team received nine new homicides in one month during the on-call shift alone.

66. Some sites did not maintain this data, thus PERF was unable to review it for each site.

67. For example, PERF found that at one site detectives who had a personal clearance rate greater than 50% tended to have, on average, around two fewer new homicide cases per year than detectives with clearance rates lower than 50%.

68. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf; Wellford & Cronin (1999), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>.

69. Wellford & Cronin (1999), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>.

70. Ibid.

Structuring Case Assignments and Investigations: Strategies from Two Police Departments

There are many ways to structure a homicide unit in terms of detective shift schedules, case rotation and assignment, response to the scene, and initial investigative process. These structural issues are often impacted by a homicide unit's staffing levels and other resources, which can in turn contribute to heavy caseloads that are difficult to manage.

Below are examples of how two large police agencies handle case response, assignment, and investigation. These examples are excerpted from presentations given at the PERF/BJA Homicide Investigations meeting on January 31, 2017.

Detective John Skaggs, Los Angeles Police Department

In our unit, detectives work in pairs and are considered a two-person team. When a case comes in, I always assign one person on the team to be the **lead detective**. This system works well, because any time that I need an update on a case, I can go to one person, even though either of them can answer my questions. Plus, it is good for detectives to know that for that particular case, they will proceed from crime scene through conviction as the lead detective.

We have a structured system for **case rotation and assignment**. We know who is “on deck” for the next homicide case at all times. We always have four detectives on standby – two are considered the primary team, and two are the secondary team. When a homicide occurs, I assign the “on deck” team to the case.

If the homicide happens during regular on-duty hours, **every available detective who is not tied up in court or on other duties responds to the crime scene**. If it occurs during off-duty hours, the four detectives on standby are the ones who respond. Although the standby teams are paid to be on standby, every detective on my squad will respond to a call regardless of whether they are being compensated or not. Throughout the whole department, there are probably 20 homicide detectives who are on-call during off-duty hours and can respond to a scene. So we have access to a lot of resources.

Once detectives respond to the crime scene, the first thing they do is assess and secure the scene. If we don't have any leads at the scene, generally everyone will head back to the station and huddle with every available detective to discuss the case. It is really a **team approach**. The primary team focuses on the heavy lifting – the important witness interviews, etc. Everyone else is dispatched to handle the secondary duties, like taking shell casings in for analysis, searching the suspect's or victim's vehicle that was taken into impound, things like that. The key is that everyone who is available is going to do something, which frees up the primary detectives to do the heavy lifting.

Right now, the average **caseload** for an LAPD homicide detective is about six new murders per year. Back in the 1990s, we were handling more than 20. I don't know that you can necessarily put an exact number on how many cases we can or should work, since some cases are a lot more difficult to solve than others. But those agencies where each detective has 30 or more cases per year? I don't know how they do it.

George Kucik, Homicide Unit Commander (Ret.), Washington, DC Metropolitan Police Department (MPD)

Manpower is always an issue, especially during the overnight shifts. One thing that MPD has done to **improve the response to homicide scenes** is give authority to the Criminal Investigations Division (CID) watch commander to call in detectives from the districts to help out. The homicide detectives

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handle all of the integral parts of the investigation, but when needed a district detective can come in and help with getting warrants, collecting videos from the scene, canvassing for witnesses, and other similar tasks. When your resources are spread thin, it helps to be able to pull everyone together to lend a hand.

When it comes to the initial homicide investigation, MPD takes a **team approach**. Everyone in the homicide unit has a role to play when a call comes in. Some detectives go to the scene and help out. Someone stays behind at the station and handles witnesses who are being brought in for interviews. If a victim is still alive and is transported to the hospital, we'll send a detective there to talk to people. Someone helps out with the search warrants. Everyone pitches in to help out with what is needed. If you're just sending one or two detectives to handle the entire investigation during the initial 24 hours, there's no way that they can do everything that needs to be accomplished, as quickly as it needs to be accomplished.

During the initial scene response, MPD assigns a **lead detective** to be in charge of the case. The lead detective meets with everyone who assisted in the initial investigation, and they sit around the table and share the information they gathered. The lead detective will then handle the integral follow-up tasks, like interviewing a suspect. But everyone gets tasked with doing something.

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Recommendations: Homicide Unit Staffing and Caseload Management

Recommendation #18: A homicide unit ideally should be staffed so that each detective is the lead on an average of four to six new homicide cases per year. This recommendation is based on best practices⁷¹ and on concerns that an increase in detectives' caseloads can be related to a decline in clearance rates.

- In some police agencies, meeting this recommendation would mean staffing the homicide unit to full capacity and possibly also hiring additional detectives.
- PERF understands that budget limitations may make it challenging to increase staffing in a homicide unit. However, as BJA's best practices guide notes: "While every unit in the law enforcement agency can make a legitimate argument for resources, the homicide unit is responsible for investigating the most serious criminal act to mankind . . . **If there is an inadequate number of [homicide] investigators to fully handle each case, then the number of clearances and successful prosecutions will fall.**"⁷²

71. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf. Although BJA's best practices guide recommends that detectives serve as the lead on an average of three to five new homicide cases per year, this number may be difficult for many agencies to achieve given limited resources for hiring additional detectives. This is why PERF recommends four to six cases at a maximum.

72. Ibid.

- If a homicide unit hires additional detectives, it should also hire additional sergeants and lieutenants to ensure that detectives receive adequate supervision and guidance. (See *Recommendation 26*.)
- If a police agency does not have the resources to increase homicide unit staffing, it should explore other ways to reduce detectives' workloads and distribute assignments more fairly. Suggestions for doing so are found below in *Recommendations 19-23*.

Recommendation #19: Homicide units should ensure that shift schedules and case rotations are designed in a way that will distribute the burden on detectives evenly and fairly. There should be room for flexibility as situations change. The schedule should be set in advance (e.g., at the beginning of each year) and should be managed by supervisors.

- Before restructuring the shift and case rotation design, homicide unit personnel should first review data to determine the times of day and days of the week when homicides most often occur in the jurisdictions. This will help the unit assess the times when more detectives are needed to cover incoming cases.
- Shift schedules and case rotations should be designed so that detectives do not receive two new homicide cases in a row.
 - For example, if the squad system is used, there should be two squads available to receive new cases assigned to the shifts during which homicides are most likely to occur. The two squads should alternate responding to calls so that the same squad does not catch two new cases in a row.
- If possible, homicide units should avoid using an on-call system for the overnight shift, and instead should staff this shift full-time.
 - This step would likely require hiring additional detectives and possibly renegotiating bargaining agreements with the department's labor organizations.
 - If an agency is unable to staff a full-time overnight shift, it should at least ensure that the on-call system does not create an additional caseload burden. Examples of how the on-call system could be structured to achieve this goal include:
 - ▶ Keeping the duration of the on-call rotation short; e.g., one week.
 - ▶ Maintaining the one-month rotation, but have two teams assigned to be on call at a time and alternating which team responds to a new call. This could help ensure that one team does not receive multiple new cases in a row.
 - ▶ Assigning a back-up on-call team to provide coverage when the regularly scheduled on-call team has the day off.

Recommendation #20: Homicide unit leaders should ensure that the unit has a clear organizational structure. The unit should be organized in a way that promotes accountability and collaboration.

- Many homicide units are organized into two-person detective teams. If this is the case, one team member should be designated as the primary detective on each case, and this designation should alternate between cases. This system ensures that there is one point person on each case who is responsible for coordinating and delegating tasks, ensuring that tasks are completed, and reporting to supervisors.
- When possible, detectives in the homicide unit should take a team approach to investigating new cases. One way to do this is to implement a squad structure within the unit. Other detectives who are on duty when a new homicide case comes in should assist the primary detective(s) with tasks such as interviewing witnesses, retrieving video footage, etc. in order to help ensure that these tasks are completed promptly. This team approach is easier to implement if detectives' caseloads are relatively small and the unit's staffing levels are high.

Recommendation #21: When possible, police agencies should seek to maximize the amount of time that homicide detectives spend investigating homicide cases by limiting the time they spend performing other duties, such as investigating non-homicide cases, performing administrative work, and serving on departmental details.

- Agency leaders should review the types of non-homicide cases that homicide units are responsible for investigating, and determine if any of these types of requests could be handled by another investigative unit.
- Police agencies should also consider detailing a patrol officer or a new detective from a district unit to the homicide unit to **assist** homicide detectives on questionable death investigations. Not only would this help relieve the burden on Homicide detectives, but it would also give patrol officers and new district detectives opportunities to obtain investigative experience. **Although the Homicide detective would be the primary investigator and in charge of leading the case**, the assigned patrol officer/district detective could provide support to the extent that his or her training and experience allow. (See Recommendation 10 for a similar strategy taken by the San Diego Police Department.)
- Homicide units should be staffed with a civilian aide who is responsible for coordinating and performing administrative tasks. This aide could provide support to the detectives by assisting with administrative duties such as answering telephones, transcribing reports and victim/witness statements, filing, and writing subpoenas. The U.S. Department of Justice's Office of Community Oriented Policing Services (COPS Office) 2014 publication,

Integrating Civilian Staff into Police Agencies,⁷³ discusses the benefits of hiring civilian personnel.

- Homicide detectives should be assigned to departmental details, such as working crowd control at events, only when absolutely necessary. They should be the last personnel chosen for these details.

Recommendation #22: Police agencies should explore creating a specialized unit whose full-time function is to locate witnesses and other persons of interest in violent crime investigations, including homicides. Having a specialized unit to serve this function is considered an effective use of personnel and a good practice for homicide investigations.⁷⁴

- According to the BJA best practices guide, while it is important for case detectives to take an active role in locating witnesses and suspects for their cases, it is considered useful to have a specialized unit dedicated to tracking down witnesses and suspects in homicide cases.⁷⁵ The BJA guide noted that these types of units are often very successful, are heavily relied upon by homicide detectives, and are an effective use of personnel because they allow investigators more time for case development and case management.⁷⁶

Recommendation #23: Police agencies should consider equipping Homicide Unit detectives with laptops, tablets, smartphones, or other devices that enable them to perform tasks while in the field. This helps them perform their jobs more efficiently and reduces the amount of time traveling from the field to the office.

- For additional information regarding useful resources for homicide units, see *Recommendations 78-79*.

73. King, William R., and Jeremy M. Wilson (2014), *Integrating Civilian Staff into Police Agencies*. Washington, DC: Office of Community Oriented Policing Services, available at https://www.researchgate.net/publication/272480179_Integrating_Civilian_Staff_into_Police_Agencies.

74. Ibid.

75. Ibid.

76. Ibid.

CHAPTER 5.

Supervision, Accountability, & Oversight

Finding: It is important to have mechanisms in place to ensure that detectives have the guidance and oversight they need to thoroughly and effectively investigate homicide cases. This includes ensuring there is strong leadership within the homicide unit, establishing formal case planning and review processes, and implementing a system for objectively assessing and addressing detectives' performance.

It is important that homicide detectives receive effective supervision and have a clear set of standards to follow.⁷⁷ For example, BJA guidance states: “Having and maintaining a system (e.g., standard operating practices, case management system, case file checklist, etc.) that supports these factors is paramount to quality homicide investigations. Without such, it becomes a subjective, inconsistent process open for additional criticism and skepticism.”⁷⁸

This section discusses how to better leverage the talent of homicide detectives by ensuring there is effective supervision, accountability, and oversight within a homicide unit. This includes establishing strong leadership, strengthening the case documentation, planning, and review processes, and creating mechanisms for evaluating detectives' performance. Recommendations for implementing these systems are included at the end of this section.

Leadership and Supervision

Strong and innovative leadership at all levels in a homicide unit is necessary for improving investigative practices. The unit's top leaders must be open to new ideas, dedicated to making positive changes, and willing to listen to concerns and advice from inside and outside of the unit.

The sergeants who serve as front-line supervisors play a critical role within a homicide unit. Ideally, sergeants are in the best position to provide guidance to detectives, to review and provide feedback on cases, and to evaluate and address any

77. Cronin, James M., Gerard R. Murphy, Lisa L. Spahr, et al. (2007) *Promoting Effective Homicide Investigations*, Washington, DC: The U.S. Department of Justice's Office of Community Oriented Policing Services and the Police Executive Research Forum, http://www.policeforum.org/assets/docs/Free_Online_Documents/Homicide/promoting%20effective%20homicide%20investigations%202007.pdf.

78. IACP (2013), http://www.iir.com/Documents/IACP_Homicide_Guide.pdf.

performance issues. In some homicide units, however, sergeants face challenges that make it difficult to perform these important functions.

For example, some homicide units are so understaffed that sergeants feel it is necessary to act as an “extra” detective. When this happens, sergeants may spend more time investigating cases and performing detective duties than fulfilling their supervisory roles.

Additionally, in some homicide units detectives are not assigned to a particular sergeant. Instead, sergeants are responsible for supervising all detectives in the unit equally. This lack of a clear chain of command can make it difficult for detectives to know where to turn when they have questions or need assistance, and it can make it difficult to establish proper supervision and accountability. This is especially true when sergeants’ and detectives’ shift rotations do not align, meaning that sergeants may be working with different teams of detectives each day.

Case Documentation and Review

Thorough case documentation, planning, and review are critical for ensuring that homicide cases are being properly investigated. Though most homicide units have informal documentation and review practices in place, it is important that these practices are part of a formal, systematic process that is outlined in official agency policies.

Case Documentation

Without proper case documentation, it is difficult to determine which leads have been followed, whether the case has been reviewed by a supervisor, what evidence has been collected and submitted for processing, and whether the detective is properly following up with witnesses, prosecutors, and lab results. Additionally, robust case documentation will be necessary in order for a cold case unit to properly review and follow up on cases according to the case review process described below in *Recommendation 33*.

“Our case file reviews demonstrated that case file management can have a direct link to clearance. Well-organized case jackets with detailed documentation allow for better review by other detectives, supervisors, and even cold case units. There is a benefit even to the assigned detectives, as working multiple cases simultaneously can be a challenge to keep leads and development straight without maintaining organization. And ultimately, it comes down to one key rule: if it’s not documented, it didn’t happen. So keeping the record updated and organized allows anyone to assess what’s been done, what can be done, and what should be done. Even beyond clearance, this can have a downstream impact to working with prosecutors who are going to need comprehensive documentation to keep murderers off the streets.”

– Dr. Sean Goodison, Deputy Director of the Center for Applied Research and Management, Police Executive Research Forum

There are several components to proper case documentation:

Substance of Case Files: As described in more detail in *Recommendation 27*, case files should contain comprehensive information about each investigative step taken by the detective. Documentation should span the duration of the investigation and should include all reports, statements, background information, forensic test results, requests for information, contacts with external agencies (e.g., prosecutors), and any other relevant information about the case.

Case File Organization: In reviewing case files as part of this project, PERF found that highly-organized case files were associated with greater case clearance rates.⁷⁹ To be considered highly organized, case files had to meet a number of objective standards (e.g., files were bound, documents were in order) and subjective measures (e.g., whether a clear narrative of the case could be captured by reading documents in the files). *Recommendations 27-31* provides suggestions for how to improve case file organization, including establishing a standard template or checklist for what must be included in the file, and in what order.

Electronic Documentation: One way to strengthen homicide case documentation is by linking homicide files to department-wide electronic records management systems and databases. **When a homicide unit's electronic files are linked to these systems – rather than simply being saved locally or to external hard drives – it can help detectives conduct electronic searches to identify pertinent names, locations, or crime patterns that can help them solve cases.**

To promote utilization of electronic documentation systems, these systems should include a way to segregate public and non-public information, should include a module that is specifically designed for collecting information about investigations, and should contain strong protections against tampering or unauthorized access. More information about electronic documentation can be found in *Recommendation 28*.

Statistical Data: In addition to case documentation, homicide units should collect and maintain consistent statistical data for measures such as detective clearance rates and caseloads. This kind of information is critical for effective supervision and evaluation of personnel.

Case Planning and Review

In addition to case documentation, consistent and formal supervisory case review should be a standard part of the homicide investigation process. Supervisory case review is one way to ensure that detectives are properly supervised and that there is adequate oversight of case documentation, management, and investigation.

The following are general components that should be included in a case review process. These steps are discussed in more detail in *Recommendations 31-33*.

- **Investigative Plan:** To start, as soon as possible after a detective receives a new homicide case, the detective should work with his or her supervisor to develop

79. For example, PERF's review of one homicide unit's case files found that well-documented, highly-organized files were associated with a three times higher case clearance than files with poor organization.

an investigative plan. The plan should include items such as a to-do list for steps that need to be taken and a rough timeline for completing them.

- **Case Checklist:** Each case file should also contain a standard case checklist form. The checklist should include basic investigative tasks that are applicable to most homicide investigations, and detectives should be required to note on the form whether they completed each task, the date it was completed, and the reason for not completing any unfinished tasks.
- **Supervisor Case Review:** Supervisors should use the case checklist form as the primary basis to conduct case reviews at specified intervals throughout the investigation. Supervisors should also be trained to ensure that they are conducting substantive reviews, rather than simply marking items off of the checklist.

“The purpose of a checklist is just to remind detectives of everything that needs to get done. Supervisors shouldn’t use checklists as a ‘gotcha’ tool. Instead, they should use checklists to help facilitate a discussion with their detectives about what follow up is needed, and what the next steps should be. For example, a supervisor can look at the checklist and say, ‘Okay, you’ve gotten the 911 tape – what did it tell us? Is there follow up that we need to do, or can we move on from that?’ Checklists are important, but they should always be used appropriately.”

– George Kucik, Deputy Chief (Ret.), Washington, DC Metropolitan Police Department

Performance Evaluation and Accountability Mechanisms

In order to promote accountability, it is important that police agencies regularly review and address employee performance issues. In many cases, performance evaluations are the only formal mechanism for assessing employee actions and behaviors, and thus they serve as an important tool for managing performance and ensuring that officers are held accountable.⁸⁰ Regular performance evaluations can also help supervisors proactively identify problems and take corrective action, such as recommending additional training or counseling.

When evaluating homicide unit detectives and supervisors, the focus should be on assessing whether cases are being thoroughly investigated and documented. Thus, evaluations of investigators – including homicide unit personnel – should include measures that go beyond the standard evaluation form used for all department personnel.

80. PERF (2015). *Implementing a Comprehensive Performance Management Approach in Community Policing Organizations: An Executive Guidebook*. Washington, DC: Office of Community Oriented Policing Services, <https://ric-zai-inc.com/Publications/cops-p331-pub.pdf>; PERF, *Critical Response Technical Assessment Review: Police Accountability – Findings and National Implications of an Assessment of the San Diego Police Department*, <https://www.sandiego.gov/sites/default/files/legacy/police/pdf/perfrpt.pdf>, see pp. 41-42 for a discussion regarding the importance of performance evaluations in police agencies.

Recommendations 34-36 below provide more details on what should be included in the evaluation process for homicide unit detectives and supervisors, as well as suggestions for how to address performance issues that arise.

Recommendations: Supervision, Accountability, and Oversight

Recommendation #24: Police agency officials should ensure that there is strong and consistent leadership within a homicide unit. Leadership stability is critical for ensuring that any communication gaps are addressed and that information is shared within the unit. Too much transition among commanders results in a misunderstanding of expectations and a lack of institutional knowledge.

Recommendation #25: The supervisory responsibilities of sergeants should be made clear in homicide unit policies and should be reinforced by top unit leaders. This includes clarifying that sergeants should serve as supervisors first and foremost, and that they will be held accountable for their performance as supervisors, not as detectives.

- The Homicide Unit should be staffed as fully as possible to avoid sergeants having to fill in as an “extra” detective. (See Recommendations 18-23 on unit staffing.)
- Homicide Unit sergeants should meet with detectives on a daily basis to stay abreast of investigation steps and help facilitate resources for detectives. As a result of the daily meetings, strategies should be developed to continue moving investigations forward.

Recommendation #26: Homicide unit leaders should establish a clear chain of command within unit. Homicide sergeants should be assigned to directly supervise specific teams or squads of detectives, and these assignments should be made clear to the sergeants and the detectives.

- One way to establish a clear chain of command is to ensure that sergeants’ shift schedules are aligned with the schedules of the detectives they supervise. This way, sergeants will respond to the same homicide scenes as their direct reports, which will enable them to provide better guidance and supervision.

Recommendation #27: Homicide unit policies, including the Homicide Unit Manual, should include directions on proper case documentation, file organization, and required reporting.

- The importance of case documentation and organization should be highlighted during training, with an emphasis on the link between case file organization and case clearance.
- The Homicide Unit Manual should include a case file checklist that directs which documents must be included in the file and the order in which they should be filed. Supervisors should periodically review case files to ensure that detectives are adhering to the checklist, and this review should be part of the detectives' evaluations.
- At a minimum, homicide case files should include the following completed documents:
 - Case file index
 - Investigative plan (See *Recommendation 31*)
 - Case checklist form (See *Recommendation 32*)
 - Initial incident report
 - 24-hour report
 - 5-day supplemental report
 - 10-day supplemental report
 - 30-day supplemental report
 - Supervisor case review sheets (completed by detective's supervisor)
 - Autopsy report and other communications/reports from the medical examiner's office
 - Copies of submissions for forensic tests
 - Forensic test results
 - Witness statements
 - A log of contacts with the prosecutor's office
 - Intelligence reports
 - Any other forms or reports required by the department
 - Documentation of all other investigative tasks completed

Recommendation #28: Police agencies should explore ways to ensure that their electronic records management systems can be fully leveraged by the homicide unit to strengthen case documentation and investigations. Personnel should be fully trained on all electronic records management systems and databases.

- Agencies should examine whether items the records management system can be segregated between public and non-public documents, so that detectives are able to upload their notes and other non-public documents into the system.

- Homicide unit detectives should have access to a secure database and electronic storage so that documents can be searched and utilized by authorized personnel. Policies should clearly state who has access to the files and under what circumstances they may be accessed.
- Agencies should explore creating an investigations module within their records management systems for use by the homicide unit and other investigative units.
- Police agencies should take steps to protect the security of both hard copy and electronic case records.
- Police agencies should have a system in place to promote the use of electronic investigative case files, even if the agency's electronic records system is not yet fully functional or linked with the homicide unit. For example, agencies should require homicide units to create electronic versions of the types of documents that are often included in homicide case files (e.g., reports, evidence submission requests), and these documents should be filed in a shared drive that is accessible to homicide unit personnel.

Recommendation #29: It may be useful for a departmental Inspections Unit to periodically review the homicide unit's case files to ensure that established documentation protocols are being followed. Performance evaluations for detectives and sergeants should assess whether documentation protocols are being properly followed (see Recommendations 34-36).

Recommendation #30: A homicide unit should collect and maintain accurate and consistent statistical data regarding measures such as detectives' clearance rates and caseloads. To assist with this effort, homicide unit supervisors should work with the agency's crime analysts to develop relevant data points and methods for collecting the data. (See Recommendations 86-89 for more information on crime analysis.)

Recommendation #31: The Homicide Unit Manual should require that Homicide Unit detectives, working with their supervisors, develop a written investigative plan for each new homicide case.

- The plan should be developed by the lead case detective, along with the detective's sergeant and lieutenant. It should be developed as quickly as possible after the detective is assigned a new case.
- The plan should include items such as:
 - A to-do list for steps that need to be taken
 - A summary of existing leads, evidence, suspects, etc.
 - A list of people and items for follow-up

- A rough timeline for completing each task.
- The plan should be put in writing and become part of the case file. It should be updated as needed.

Recommendation #32: The Homicide Unit Manual should include a standard case checklist form. The checklist should include basic investigative tasks that are applicable to most homicide investigations, and detectives should be required to note on the form whether they completed each task, the date it was completed, and the reason for not completing any unfinished tasks.

- The checklist should include a detailed list of steps that detectives should take during each phase of the investigation. It should cover items such as:
 - Steps taken at the crime scene (e.g., witness canvass, evidence collection)
 - Notifications made (to supervisors, other units within the agency, external agencies, victims' families)
 - Attendance at the autopsy and collection of evidence from the medical examiner's office
 - Reporting (initial report and all supplemental reports)
 - Submission of evidence to evidence control and to the forensic units for forensics testing
 - Witness interviews
 - Suspect interviews
 - Follow-up on forensic test results
 - Follow-up with intelligence units (computer forensics, cell phone forensics, criminal analysts, etc.)
 - Other investigatory tasks, as outlined in the Homicide Unit Manual and in best practices guides.

Recommendation #33: Homicide unit policies should mandate that supervisors conduct formal periodic case reviews. The policies should outline the case review process in detail, and should include template supervisor review forms. The supervisor should use the review process as an opportunity to identify potential new leads or avenues for investigation, to address any gaps in the detective's investigative process, and to update the investigative plan as needed.

- The reviews should take place at specific intervals that are consistent in each case. (For example, after 24 hours, five days, 10 days, two weeks, one month, three months, and every 30 days after until the case is solved or all leads exhausted.)

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The Importance of Case Documentation: LAPD's Murder Book

The following is excerpted from a presentation given by Detective John Skaggs of the Los Angeles Police Department at the PERF/BJA Homicide Investigations conference on January 31, 2017.

In a lot of police departments, when you go in and look at a homicide case file, you'll generally find an accordion file stuffed with papers, with no real organization or narrative to what you're seeing. It may take the lead detective several minutes of digging through the file to find a key witness statement or some other important document. And if someone else needs to review the file – a supervisor, a prosecutor, a cold case detective – it can be impossible for them to figure out what they're looking at.

At the LAPD, **we use a standard format for every single homicide case**, and we have done so for 40-plus years now. We call it the murder book. The table of contents for each murder book is the same. We always use a three-ring binder, or a bigger binder if everything doesn't fit. But the important thing is that anyone from my supervisor, to my commanding officer, to my chief of police can grab that book and know exactly what they are going to find, and where to find it. If you're looking for statement from your most important witness, you know which section it is going to be in, and that it will be the first statement filed.

One of the most critical things in the murder book is the **120-day report**. This is a report that the lead detective is required to write for every unsolved case once it reaches the 120-day mark. It is an in-depth report that explains every action that the detectives have taken to solve the case, and what factors may have kept the case from being solved. The biggest benefit of the 120-day report is that as the detective is writing it, he or she can take another look at all of the information and perhaps identify a lead that wasn't followed. For example, the detective may re-read a witness statement that mentioned a blue Chevy Caprice with gold rims driving down the street, and then realize, 'I didn't do a search for a blue Caprice with gold rims – I'm going to follow up on that now.' Writing this report allows detectives to catch and correct any errors in the investigation.

After writing the 120-day report, the detective gives it to his or her supervisor. That provides another layer of review and assessment. So as the supervisor, I can look at the report and say, 'Oh, you didn't do this, or you didn't do that. Let's take a look at that now.' By the time it goes up the chain to the lieutenant or deputy chief, everyone is pretty dialed in to why the case is unsolved and what the next steps should be.

Another important piece of documentation that we emphasize is the **Follow-Up Investigation Report that we give to the prosecutor**. In many other agencies, detectives present their cases to the prosecutor verbally and then show them a big accordion file stuffed with papers in no particular order. The prosecutor is just inundated with this disorganized information, and so they leave it, just agreeing to mull the case over, and then weeks or months go by and no decisions have been made. At the LAPD, any time we are ready to present a case to the prosecutor, we produce a Follow-Up Report. It is about four or five pages and explains every reason why we are seeking charges on this individual. This is just another way that we try to organize and present information in a way that is clear, concise, and useful to all of the stakeholders.

- Items that supervisors should review as part of the process include:
 - The investigative plan (See Recommendation 25)
 - The case checklist (See Recommendation 26)
 - All reports filed
 - Witness statements and interviews
 - Suspect statements and interviews
 - Tips received and results from tips
 - All evidentiary findings and forensic test results.
- Supervisory case reviews must be properly documented in the case files using standardized review forms.

Recommendation #34: Police agencies should establish a formal process for evaluating homicide unit detectives. The evaluations should be designed to measure whether the detective is conducting thorough investigations, performing all necessary case follow up, and properly documenting all investigative tasks and findings.

- Formal evaluations should be conducted every six months. The detective's sergeant should conduct the evaluation, and it should be reviewed by the homicide unit lieutenants and commander.
- The detective's evaluation should be based on the following:
 - A review of the detective's case files, including all reports, investigative plans, case checklist forms, witness statements, etc. The sergeant should ensure that all documentation is complete, up to date, and reflects thorough investigation and follow up.
 - The detective's clearance rates.
 - The sergeant's personal assessment of the detective's skills and abilities, based on the sergeant's interactions and observations.
 - A self-assessment written by the detective, which may include items such as: accomplishments during the review period, challenges faced during the review period, areas for improvement, goals, etc.
 - Data on taking excessive leave, any disciplinary actions taken against the detective, any complaints filed against the detective, etc.
- Agencies should develop a standard Homicide Unit detective evaluation form, which should be attached to the Homicide Unit manual.

Recommendation #35: Police agencies should establish a formal process for evaluating Homicide Unit sergeants. The evaluations should be designed to measure whether the sergeant is properly supervising detectives, conducting regular case reviews, and providing appropriate guidance and direction to members of the squad.

- The evaluations should be conducted every six months. The detective's lieutenant should conduct the evaluation, and it should be reviewed by the unit's commander.
- The sergeant's evaluation should be based on the following:
 - A review of the case files from the detectives under the sergeant's direct report, including all reports, investigative plans, and case checklist forms. The lieutenant should ensure that all documentation is complete, up to date, and reflects thorough investigation and follow up. This will serve not only as a check on whether sergeants are conducting thorough case reviews and working with detectives, but also as an additional check on the detectives.
 - The sergeant's squad's clearance rates.
 - The case distribution among detectives on the sergeant's squad.
 - The lieutenant's personal assessment of the sergeant's skills and abilities, based on the lieutenant's interactions and observations.
 - A self-assessment written by the sergeant, which may include items such as: accomplishments during the review period, challenges faced during the review period, areas for improvement, goals, etc.
 - Other employee evaluation criteria, such as taking excessive leave, any disciplinary actions taken against the sergeant, any complaints filed against the sergeant, etc.
- Agencies should develop a standard Homicide Unit sergeant evaluation form, which should be attached to the Homicide Unit manual.

Recommendation #36: Police agencies should ensure that there is a formal process for addressing underperforming detectives. If a detective's evaluation indicates a performance problem (e.g., poor case documentation, poor interviewing or interrogation skills, lack of follow-up, etc.), the agency should consider implementing the following general process:

- The detective's sergeant should work with the lieutenant to identify the problem and create a plan for addressing it. At this phase, absent any obvious disciplinary issues (untruthfulness, insubordination, etc.), the focus of the plan should be on offering guidance and direction, not discipline. The plan may include:
 - Additional training courses
 - Counseling, when appropriate
 - Mentoring or additional on-the-job training.

- The sergeant should then discuss the issue and the proposed plan with the detective.
- If the problems continue, or if the detective refuses to follow the proposed plan, the detective should be removed from the homicide unit.
- This process should be applied consistently for every detective.

CHAPTER 6.

Cold Case Unit

Finding: If designed and implemented correctly, a cold case unit can help provide meaningful case review and quality assurance functions that are critical to the success of the Homicide Unit.

Many police agencies have found that having a cold case unit can offer several benefits.⁸¹ Many cold case units have had great success with solving homicide cases and bringing perpetrators to justice. This not only is an important outcome in itself, it also can raise morale within the department and strengthen the community's trust and satisfaction in the police.⁸² A cold case unit can also relieve the burden on detectives working active cases.⁸³ In some jurisdictions, Cold Case units also relieve the burdens on homicide units by taking responsibility for investigating critical incidents, such as mass shootings. And importantly, a cold case unit can serve as a quality assurance check on detectives by acting as an extra layer of case review.⁸⁴

However, these benefits will not be fully realized unless the cold case unit is properly designed and implemented. Research has shown that an effective cold case process used in many police agencies involves the following general steps: designating cases as inactive and eligible for transfer to the cold case unit after a set period of time; screening eligible cases to rank their "solvability" based on an established set of criteria;⁸⁵ and presenting the highest-ranked cases to a team that includes cold case detectives, the original case detective, and prosecutors, who decide which cases should be investigated.⁸⁶

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81. Cronin, Murphy, Spahr, et al. (2007), http://www.policeforum.org/assets/docs/Free_Online_Documents/Homicide/promoting%20effective%20homicide%20investigations%202007.pdf.

82. Ibid.

83. Ibid.

84. Ibid.

85. Research shows that certain factors are associated with the likelihood of clearing a cold case; for example, a cold case is more likely to be cleared if it involves the presence of a known suspect or motive during the initial investigation, while a cold case is less likely to be cleared if the victim is a drug user or if the cold case investigation was initiated at the request of a family member. Davis, Robert C., Carl Jensen, and Karin E. Kitchens (2011), *Cold-Case Investigations: An Analysis of Current Practices and Factors Associated with Successful Outcomes*, Washington, DC: RAND Corporation & the National Institute of Justice, http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf.

86. Cronin, Murphy, Spahr, et al. (2007), http://www.policeforum.org/assets/docs/Free_Online_Documents/Homicide/promoting%20effective%20homicide%20investigations%202007.pdf.

Lessons Learned from Developing a Cold Case Unit: Washington, DC

Detective James Trainum is a retired homicide detective with the Washington, DC Metropolitan Police Department (MPD). He spent 17 years in MPD's Homicide Unit, led the department's Cold Case Unit, and served as the Program Director for MPD's Violent Criminal Apprehension Program (ViCAP) database. Detective Trainum also created the Violent Crime Case Review Project, which focused on improving the cold case process and providing a comprehensive review of old homicide cases. In 2016, he authored the book, How to Generate False Confessions.

The following is excerpted from Detective Trainum's comments at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

As we put together the Cold Case Unit at MPD, we learned several lessons about what works, what doesn't, and the functions that a Cold Case Unit can serve.

First, we learned that it was important to **create a searchable database** of our case records. All of our records were on paper, and we were having to do manual searches of even basic information. So the first thing we did was get that information into a searchable database. That way, when we need information about a case, we can do a quick electronic search and find it.

Second, we **established a massive intern program** of graduate student interns. The interns assisted with all of our case reviews by summarizing cases and entering information into our databases. This proved to be a huge help, because it enabled detectives to just quickly review the summaries and get a good grasp on the case without having to go through the entire file.

Third, as we began going through old cases, we started finding deficiencies in some of our own investigations. We were able to **serve as a quality control function, and it helped us understand how to improve homicide investigations from the start**. I think this was one of the most important takeaways, and it helped shape our purpose as a unit.

Finally, **we became a clearinghouse of sorts**, not just for family members who had questions about their cases, but for other police agencies as well. They would call up looking for information or help, and we could connect them with the appropriate person.

Through our work, we were able to really move a lot of cases forward. And with other cases, we were able to at least move them to a position where if new information came in, someone could find it and jump on it pretty quickly.

Recommendations: Cold Case Unit

Recommendation #37: Police agencies should consider establishing a cold case unit whose mission is to clear unsolved homicide cases and provide a reliable quality assurance check on homicide investigations. If an agency already has a cold case unit, its policies and practices should be reviewed to ensure that it is adequately serving these functions.

Recommendation #38: Cold case units should be governed by strong written policies and protocols that reflect best practices for cold case investigations.⁸⁷

- Cold case unit policies should include:
 - The unit's mission
 - The duties and responsibilities of the unit's detectives and supervisors
 - The process for selecting detectives and supervisors for the unit
 - Any special training required for cold case detectives
 - The process for determining that a case is inactive and eligible for transfer to the cold case unit
 - The process for determining which cases the cold case unit will take for review.

Recommendation #39: The cold case unit should be assigned to the office of the homicide unit commander and should be led by a lieutenant. The cold case unit should be primarily comprised of top homicide detectives who have demonstrated outstanding performance and who express a desire to investigate cold cases.

- While the Cold Case Squad should primarily include top veteran homicide detectives, police agencies may also consider requiring newly-assigned homicide detectives to complete a rotation on the cold case unit during their first year in the homicide unit. Cold cases offer a valuable training opportunity, because they can be worked at a more deliberate pace, and they can provide valuable lessons about the importance of thorough case investigation and documentation.

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87. See Appendix C for a list of resources.

Lessons Learned from Developing a Cold Case Unit: Fairfax County, VA

Chris Flanagan is a detective with the Fairfax County (VA) Police Department (FCPD), where he has spent 16 years with the Homicide Squad and Cold Case Homicide Squad. He is currently part of FCPD's Cold Case Homicide Squad. Detective Flanagan is also the President of the Mid-Atlantic Cold Case Homicide Investigators Association and the Training Director for the Virginia Homicide Investigators Association.

The following is excerpted from Detective Flanagan's presentation at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

Background on FCPD Cold Case Squad

At FCPD, we have a standalone Cold Case Squad that is part of our Major Crimes Bureau. The Cold Case Squad is made up of a lieutenant and four detectives. Two detectives work unsolved homicides and equivocal deaths (cases that might be homicides but that need further investigation to determine cause and/or manner of death), and the other two work unresolved sex offenses. Detectives are chosen for the Cold Case Squad based on their experience in working homicides and sex crimes.

We are lucky that FCPD has the resources to fund a lot of what we do on the Cold Case Squad. We did rely more on **grant funding** when the squad first started, especially for expensive things such as DNA testing. I know that smaller departments rely heavily on grant funding not just for testing, but also for actual manpower and other overhead costs. So grant funding can be really important for a lot of agencies.

Selecting and Investigating Cold Cases

Homicide cases come to the Cold Case Squad once the detective initially assigned to the case leaves the Homicide Squad. Our Cold Case detectives also sometimes consult on open cases upon request by the detective or supervisor working the case. This can be a good way to **provide a fresh set of eyes** on cases that have been open for a while.

Once the Cold Case Squad gets a homicide case, the first thing we do is put together a **case summary**. Summaries can be as short as 15 pages or up to 70 or 80 pages, depending on the evidence collected and examined, witness and suspect statements, and documented investigative steps taken during the initial investigation. The summary is organized into separate sections, including a brief synopsis of the incident, victimology, witness statements, suspect statements, and an evidence section which identifies each piece of evidence collected, its verified location, and any testing that was conducted on the evidence.

The summaries are prepared by the Cold Case detectives if they have time, but often **we utilize unpaid interns** from area colleges. These interns are usually third- or fourth-year students and come to us as part of an intern program through their school, so they get college credit. At any given time, we typically have one or two interns working on the homicide cases. We make sure that the interns go through the same background checks that a police officer goes through, so they are thoroughly vetted. The interns provide a valuable resource to us and do a great job with preparing these summaries.

After the case summary is finished, the Cold Case Squad detective and supervisor make a determination about whether the squad should investigate the case. We look at **solvability factors**, such as what kind of physical evidence still exists, whether there are living witnesses, and whether suspects have been identified.

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Recommendations and Lessons Learned

One of the keys to an effective cold case unit is that it **should be a standalone unit dedicated to working cold cases**. The detectives who work cold cases shouldn't have several collateral duties – they should be able to focus on working cold cases. FCPD didn't have a standalone unit when detectives first started working cold cases back in the 1990s, and the detectives ended up just getting pulled off the cold cases anytime a “hot” case came up.

It is also important to have **experienced homicide detectives** working cold cases. They should be self-motivated and require little supervision.

I've also found that it is really helpful to **leverage connections and contacts as resources** for things like testing evidence, conducting legwork, and providing investigative support. This is especially important for smaller agencies that might not have the resources to do everything on their own. There are a number of national and regional cold case organizations out there, such as the one I'm involved with – the Mid-Atlantic Cold Case Homicide Investigators Association. These organizations can provide great networking opportunities and support. Detectives often have a lot of great contacts and connections as well. With one phone call, the work of one can be supported by several other homicide detectives, forensic scientists, and subject matter experts.

I'd also highly recommend that when a police agency first starts a cold case unit, it should **begin by reviewing all cold cases (or as many as possible depending on the number of actual open cases), doing case summaries, and looking at solvability factors**. Prioritize cases using that process, not by just focusing on a cold case that a detective or supervisor recalls from their past and wants to close. Don't just start a cold case unit for the sole purpose of closing a particular case because it received a lot of media attention. Typically, those cases have been more thoroughly investigated and re-investigated and have a lower probability of closure. This means that everyone – including the agency leaders – needs to be prepared for the fact that there may not be immediate results in terms of case closures. Many of the early closures will be the result of resubmitting evidence for more current forensic analysis including DNA and fingerprints. That first year is going to largely be spent getting the unit set up, reviewing cases, and developing the process for moving forward.

Recommendation #40: Police agencies should implement a system for determining which cases the cold case unit will review. This system should incorporate research and best practices from other police agencies. The process should include the following general steps:

- Cases should be designated **inactive and eligible for transfer** to the cold case unit after a specified period of time.
 - There is no universally accepted metric for when a case becomes cold, though many police agencies use the somewhat arbitrary threshold of one year.⁸⁸
 - A case should be designated as eligible for transfer to the cold case unit only if:
 - ▶ A detective is not currently working the case,
 - ▶ All leads on the case have been exhausted, and
 - ▶ The homicide unit supervisors and unit commander review the case and agree that the case is inactive.
- Once a case is designated inactive and eligible for transfer, a review team should analyze and rank the case based on established solvability factors.
 - Many police agencies use civilians to conduct the initial case screening and review.⁸⁹ Civilian review teams may be comprised of retired law enforcement personnel, forensics lab technicians, professors, etc. Graduate student interns may also be able to provide administrative and organizational support (e.g., data entry and analysis, file organization).⁹⁰
 - The review team should use a standardized form to rank the case based on the solvability factors. For sample ranking forms, see the PERF/COPS Office publication referenced in Appendix C.
 - Solvability factors that have effectively been used in other police agencies include:⁹¹
 - ▶ A suspect has been identified and is currently living.
 - ▶ Eyewitnesses have been identified, or a previously uncooperative witness has had a change of heart (and the witness or witnesses are available).
 - ▶ The presence of physical evidence conducive to testing, such as DNA or fingerprints.
 - ▶ During the initial investigation, there was a known suspect or motive, there was witness identification, and/or there was physical evidence connecting a suspect to the crime scene.

88. Davis, Robert C., Carl Jensen, and Karin E. Kitchens (2011), *Cold-Case Investigations: An Analysis of Current Practices and Factors Associated with Successful Outcomes*, Washington, DC: RAND Corporation & the National Institute of Justice, http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf.

89. Cronin, Murphy, Spahr, et al. (2007), http://www.policeforum.org/assets/docs/Free_Online_Documents/Homicide/promoting%20effective%20homicide%20investigations%202007.pdf.

90. Ibid.

91. Ibid.

- The review team should then present the case to a “cold case team” comprised of cold case detectives, the original case detective (if possible), prosecutors, and forensic scientists.⁹² The cold case team should review the case, decide whether it should be investigated, and discuss an investigative plan.⁹³

Recommendation #41: Police agencies should consider exploring grant funding from federal and state sources to support the cold case unit. Research has shown that this is a common source of funding for cold case units, and that the level of funding dedicated to a cold case squad can have a significant impact on the number of cases that the squad clears.⁹⁴

Recommendation #42: The cold case unit should track metrics including the number of cases it reviews, the types of cases reviewed, and any quality issues from the initial investigations that are uncovered during the review. The squad should also track its clearance and conviction rates. This will help police agencies identify and address any gaps in performance or investigations moving forward.⁹⁵

92. Davis, Jensen, & Kitchens (2011), http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf; Cronin, Murphy, Spahr, et al. (2007), http://www.policeforum.org/assets/docs/Free_Online_Documents/Homicide/promoting%20effective%20homicide%20investigations%202007.pdf.

93. Ibid.

94. Davis, Jensen, & Kitchens (2011), http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf.

95. Davis, Jensen, & Kitchens (2011), http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf.

Lessons Learned from Developing a Cold Case Unit: Charlotte, NC

Sergeant Darrell Price has been with the Charlotte-Mecklenburg (NC) Police Department (CMPD) for more than 36 years, and has served in the Criminal Investigations Bureau for almost 30 years. Upon being promoted to sergeant, he was assigned to supervise CMPD's Sexual Assault Unit where he organized the Sexual Assault Cold Case Unit. Sergeant Price retired in 2010, but then was rehired by CMPD to combine and supervise both the Sexual Assault Cold Case Unit and Homicide Cold Case Unit. During his time supervising cold cases he has secured more than \$3 million in grant funds to assist with hiring personnel, evidence testing, and prosecution.

The following is excerpted from Sergeant Price's presentation at the PERF/BJA Homicide Investigations meeting held on January 31, 2017.

Background on CMPD's Cold Case Unit

Our Cold Case Unit, which was established in 2003, works both sexual assault and homicide cases. On the homicide side, we have two full-time detectives and two "hire-back" detectives, who are retired detectives with homicide investigation experience. On the sexual assault side, we have one full-time detective, one hire-back detective, and one civilian analyst. I supervise both sides of the unit. We also have six volunteers who help with administrative work and other daily tasks.

When we are bringing in detectives to the Cold Case Unit, **we typically prefer more experienced detectives**. Part of this is because many of the cold cases we review tend to be older cases, so the experienced detectives will often understand the context of these cases a bit better.

In a lot of police agencies, cold case units tend to be at the low end of the priority list when it comes to allocating resources and personnel. Our Cold Case Unit relies on a lot of grant funding. We've received more than \$2 million in grants funds to date, mostly to do DNA testing, since that is always the most expensive part. But trying to find funding is always one of our biggest challenges.

Selecting and Investigating Cold Cases

Once a case enters the Cold Case Unit, it is **assigned to our review team**. The review team is made up of six volunteers, including three retired FBI agents, a former criminal justice professor at the University of North Carolina-Charlotte, an analyst with Bank of America, and a young professional who has no connections to law enforcement. Our goal was to assemble a diverse review team with a variety of perspectives.

Each case is assigned to a review team member, who is given a copy of the complete case file and **prepares a short summary** of the case. **The review team member presents the case at a monthly meeting, where we discuss the case and decide whether it should be investigated.** The monthly meetings are attended by all six members of the review team, all the homicide detectives from the Cold Case Unit, and sometimes personnel from the chain of command if they are available.

As we discuss the prioritization of which cases get worked first, we **rank each case based on solvability factors** using a scale of 1-5. Solvability factors include whether we have live witnesses and physical evidence that can be tested. Each person at the meeting discusses where they would rank the case, and we reach an agreement based on those discussions. There is flexibility to the rankings, which can be changed. For example, if we test physical evidence and get results, we can increase that case's ranking number.

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This review process takes about six months by the time the case is reviewed, written up, and presented and discussed at the monthly meeting. There are more than 600 open homicide cases in the city, and at any given time our detectives are working on 10 to 12 cases.

Recommendations and Lessons Learned

I think the most important part of building an effective cold case unit is **securing support from all stakeholders, at all levels**. This of course starts with the chief of police, who must be committed to supporting a dedicated unit for cold case investigations. If you're going to do this, you have to go all in – otherwise it isn't worth it.

You also have to have support from units such as the crime lab. If the crime lab doesn't think that testing evidence from cold cases is a priority, then the case will get stuck in the backlog. The same goes with prosecutors – if they don't feel that working cold cases is a priority, then cases are more likely to get delayed or dismissed. **Without support at these levels, the cases won't go anywhere, no matter how hard they are worked by detectives.**

Lessons Learned from Developing a Cold Case Unit: Denver, CO

Lt. Matthew Clark has been with the Denver Police Department (DPD) for more than 16 years. During this time, he has worked in a number of assignments, including supervising a team of detectives responsible for investigating property crimes and assault cases, as well as serving as a sector commander in the Patrol Division. For the past three years, Lieutenant Clark has managed DPD's Robbery-Homicide Section, which includes the Homicide Unit, Cold Case Unit, Robbery Unit, and Night Shift Unit, as well as the FBI Rocky Mountain Safe Streets Task Force. Lieutenant Clark is also a member of the Colorado Homicide Investigators Association and actively participates on the Colorado Bureau of Investigations Cold Case Task Force.

The following is excerpted from Lieutenant Clark's presentation at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

Background on DPD's Cold Case Unit

Denver's Cold Case Unit falls under the Major Crimes Division. When the Cold Case Unit was first established in 2004, there were nine detectives and one sergeant assigned to the unit. However, over time the unit has been pared down to five detectives and one sergeant, as a review of the cases – and the solvability of each case – determined that nine detectives were no longer needed.

The Cold Case Unit **works closely with the Homicide Unit**. The two units are physically located next to one another, which allows detectives to work side by side. Additionally, the same lieutenant oversees both the Cold Case Unit and Homicide Unit, which helps to ensure continuity of investigations.

When selecting detectives for the Cold Case Unit, we are focused on identifying **individuals who are tenacious, self-motivated, and who have been successful in prior investigative assignments, both in terms of case clearance and successful prosecutions**. The number of years of service can be an important consideration, but to us it is secondary to the individual's work ethic and investigative skill. The average number of years of police service for the detectives assigned to the Cold Case Unit is currently 15.5 years. Detectives seeking a position in the Cold Case Unit submit a packet including a resume, letter of interest and performance history. Interviews are conducted by the supervisors in the Cold Case and Homicide Units to identify the best candidate.

Cold Case Unit detectives receive much of the same **training** that is made available to the Homicide Unit. The detectives attend the two-week SPI Homicide Investigator's School and attend ongoing cold case training that is offered through the Colorado Bureau of Investigation or the Colorado Homicide Investigators Association (CoHIA). Beyond this training, detectives are given the opportunity to attend homicide/cold case conferences that are hosted in other states to increase their knowledge base.

The Cold Case Unit was **initially funded solely through grants**, which is one reason that DPD was able to allocate so many people to the unit. After several years, the department funded the detectives and they were no longer funded with grants. However, we did not stop seeking or receiving grant funds. The grant funds allowed us to bring in additional detectives in an overtime capacity to review cases, identify leads, and complete investigations. The grants also provided funding for the Crime Lab Unit's technicians to perform forensic testing outside of normal hours. This resulted in a significant amount of additional work being generated. The ability to pay detectives outside of the Cold Case Unit overtime to follow up on leads supplemented the on-duty resources and made the work load manageable.

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Selecting and Investigating Cold Cases

Whether a cold case will be assigned for additional follow-up comes down to the presence of **viable solvability factors**. The detectives who were assigned to the Cold Case Unit when it was first established scoured through hundreds of cold cases to identify those with unfollowed leads and untested biological evidence. This work provided some of the best evidence and greatest leads for detectives to work. Reverse AFIS hits and new CODIS hits from offenders who were not previously in the database provide very strong evidence and give a cold case great momentum.

Beyond forensic evidence, **the supervisor of the Cold Case Unit reviews information regarding new leads whether through jail-house informants, former witnesses or families**. The Cold Case Unit supervisor conducts a thorough review of the case and determines whether the case will be reassigned based upon the credibility of the source and the viability of leads.

By statute, a case in our jurisdiction is deemed a cold case after one year. In practice, Homicide Unit investigators maintain control of their cases for three years. At the three-year mark, the detective must turn the complete investigative file over to the Cold Case Unit supervisor for review. The supervisor conducts a complete review of the case and meets with the assigned detective to determine what, if anything, can be done to identify and prosecute an offender. If there are unresolved leads or the CCU supervisor believes the case would benefit from a fresh detective's perspective, the case is assigned to a Cold Case Unit detective. Alternatively, if all actionable items have been resolved, the case is moved to an open-inactive status pending new leads, and no further investigative work is completed until something new develops.

From a management perspective, it can be difficult to evaluate the effectiveness of the detectives assigned to the Cold Case Unit. Traditional methods for evaluating performance, such as daily case averages and clearance rates, do not always apply because of the nature of the cases they are investigating. **To measure success, we have to look beyond just whether the detective closed the case.** For one thing, the fact that the case remains unsolved may reflect less on the cold case detective's abilities, and more on the fact that the case had limited solvability factors or wasn't investigated thoroughly the first time around. And even when detectives are unable to close a cold case, the work they are doing is important, because they are bringing the case up to today's prosecution standards in terms of documentation and evidence preservation. This work, along with the outreach that is provided to the family of the deceased victim, is important; and it demonstrates the agency's commitment to never forgetting a victim while also showing that the agency is focusing on ensuring that offenders are held accountable.

Recommendations and Lessons Learned

DPD's Cold Case Unit has been successful because **the correct people have been assigned to it**. The detectives are highly motivated and actively work the cases they are assigned. The supervisor does an excellent job of triaging cases to ensure that the appropriate cases are being worked and detectives are not being strapped reviewing cases that have no solvability factors.

Beyond this, the **relationships that have been established** and maintained have been critical to the success of the unit. The detectives have open dialogue with technicians from the Crime Lab Unit, and both entities work cooperatively towards a common goal. Similarly, the relationship with the District Attorney's office has been critical to our ability to consistently obtain convictions in the cases that are filed. The DA's office has a dedicated prosecutor and DA investigator who are assigned to prosecute the cases filed by the Cold Case Unit. The open communication and the availability of these people have been instrumental to the unit's success.

I'd also say that **training and support is paramount** for detectives in the Cold Case Unit. The cold cases that a newly-assigned detective may be assigned is like nothing else they have worked in the past. There is no other unit in which a detective is expected to pick up a file that was compiled by a detective 10, 20 or 30 years ago and continue where the detective left off. Cold Case detectives are often interpreting handwritten notes, dealing with issues related to older media formats, and addressing situations where critical witnesses, officers, and medical investigators are no longer alive to offer testimony.

We've also found that it is useful to treat cold case investigations much like active homicide investigations, in that a **primary and a secondary investigator are assigned**. This provides a partner who can offer an additional perspective, move the case forward during vacations, and provide assistance during interviews or travel. By doing this, a mentor relationship is informally established, because senior investigators can be paired with newly assigned detectives to work cases together.

CHAPTER 7.

Internal Coordination

Finding: Homicide investigations in many police agencies could be strengthened by improved coordination and collaboration among the various units within a police agency that are involved in homicide investigations. Even when individual units are dedicated and competent in completing their own missions, they also must have a cohesive mission, must communicate effectively, and must consider how their functions and goals intersect with respect to homicide investigations.

A homicide unit does not act in isolation when conducting a homicide investigation. These investigations often involve personnel from units throughout the entire agency, including patrol officers, gang and narcotics investigators, district detectives, forensic analysts, crime scene technicians, dispatchers and 911 call takers, and crime analysts, to name a few. Each of these units brings its own unique set of skills and perspectives to a case, so strengthening communication and collaboration between these units and is critical to strengthening homicide investigations.

This section first discusses strategies for improving overall coordination among the units that are typically involved in homicide investigations, with a particular focus on strengthening relationships between these units and the homicide unit. Then, this section presents findings and recommendations for strengthening the individual policies, practices, training, and resources for each separate unit (with the exception of units handling digital evidence and crime analysis, which will be discussed separately in Chapter 10).⁹⁶

Overall Coordination and Communication

The BJA guide on best practices for homicide investigations states: “The homicide unit should have an open and strong working relationship with other units within the agency . . . The most successful homicide investigators realize the value provided in a team approach to investigations and practice it regularly.”⁹⁷

According to the BJA best practices guide, homicide detectives should work as an investigative team alongside forensic scientists, crime analysts, prosecutors, patrol officers, and detectives from specialized units, such as gangs or narcotics.⁹⁸ The guide notes that in order to promote better collaboration, some police agencies, like the

96. The units selected for inclusion in this section are based on the units that were most involved in homicide investigations within the sites that were assessed as part of this project.

97. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

98. Ibid.

“I’m the person who is sitting in the lab, not the one actually going out and investigating homicides. So it is critical that I have an open line of communication with the homicide detectives, so we can talk about what evidence needs to be processed. We have worked hard to build those relationships in Denver, so that I can sit down and really talk to the homicide detectives, as well as the sergeants and lieutenants.”

– Eric Duvall, Forensic Science Supervisor and Local CODIS Administrator, Denver (CO) Police Department

Jacksonville (Florida) Police Department, have instituted formally-defined homicide investigations teams.⁹⁹

Challenges to Internal Coordination

There are several reasons why strong cross-agency coordination can be difficult to achieve. One common challenge is that, although members of the various units are generally talented and committed to their work, these units are largely insular and operate as independent entities. BJA’s 2013 publication, *10 Things Law Enforcement Executives Can Do To Positively Impact Homicide Investigations*, notes: “Collaboration can improve success throughout the agency, but it may require serious efforts to overcome entrenched subcultures of guarding information, isolation, and insulation. The benefits of collaboration are limitless, including information that could prevent a homicide, such as in a case of retaliation.”¹⁰⁰

Additionally, police agencies sometimes have few formal communication or information-sharing mechanisms in place, and as a result, it can be difficult for investigators to share intelligence and identify important links between cases, suspects, victims, and witnesses.

In many police agencies, a lack of adequate staffing and resources in units throughout the agency can also be a barrier to strong internal coordination. When

“In Pittsburgh, we have something called a Homicide Collaboration Meeting that is geared at improving information sharing among stakeholders. The meeting takes place each week and is attended by homicide detectives, criminal intelligence personnel, and officers who are assigned to gather information throughout the city about what is going on in the neighborhoods – drugs, guns, etc. Representatives from outside law enforcement agencies are also invited to the table. These stakeholders come together and review cases and information that has been gathered. The important thing about these meetings is that they bring together all the pieces of information, so that everyone can really see the big picture about what is happening in the community.”

– Scott Schubert, Chief of Police, Pittsburgh (PA) Bureau of Police

99. Ibid.

100. IACP (2013), *10 Things Law Enforcement Executives Can Do To Positively Impact Homicide Investigation Outcomes*, Washington, DC: Bureau of Justice Assistance. http://www.iir.com/Documents/IACP_Homicide_Guide.pdf.

units lack the staffing and resources they need to perform their own tasks, it becomes less likely that they will be able to assist other units with investigations.

Recommendations: Improving Overall Coordination and Communication

Recommendation #43: Police agency officials and unit leaders must continuously emphasize the value of cross-department collaboration and a team approach to preventing and solving crimes. This is especially true for homicide investigations, which require the skills and expertise of a variety of units across the department.¹⁰¹

- This message should be reinforced in written policies, including the Homicide Unit Manual. Policies should include procedures for sharing information with patrol officers, all investigative units, analysts, and multi-jurisdictional task forces.¹⁰²
- Leaders from the various units should meet regularly to share ideas for strengthening the investigative process and improving cross-agency information sharing.

Recommendation #44: Police agencies should consider formalizing the team approach to homicide investigations. BJA's best practices guide notes that this is an effective way to encourage collaboration and communication, which can lead to more successful investigations.¹⁰³

- For example, according to the BJA best practices guide, the Jacksonville (Florida) Police Department has a defined investigations team for every homicide. The team includes homicide detectives, prosecutors, crime analysts, forensic analysts, patrol officers, and personnel from the department's Operation Safe Streets, Gun Buy Back, and Crime Stoppers programs.¹⁰⁴
- Police agencies could institute a similar approach that involves the following general steps:
 - For each case, the team would be led by the primary homicide detective assigned to the case, and would include other homicide detectives working the case, a crime analyst, the crime scene technician who worked the scene, the prosecutor assigned to the case, and a designated representative from the Patrol Unit (e.g., the responding officer), the medical examiner's office, the district detective unit, and any other units relevant to the case.

101. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

102. Ibid.

103. Ibid.

104. Ibid.

- At the beginning of the investigation, the team could meet to discuss the investigative plan, prioritize tasks, and discuss next steps.
- Throughout the investigation, the team members would be the points of contact for their respective units, ensuring that information is shared consistently.
- The team could meet at regular intervals throughout the investigation to provide updates and discuss any concerns.

Recommendation #45: Police agencies should take steps to improve the flow of information across all units within the department. These steps could include:

- Requiring all personnel to check their department email accounts at least once per shift.
- Coordinating regular training briefings to allow members of the various units within the agency to brief one another about their policies, protocols, capabilities, and missions. This would help units better understand how their missions, goals, and functions intersect.
- Developing an electronic information-sharing system that would allow all agency personnel to see and share information across the department.
- Ensuring that all personnel in investigative units receive access to a daily “items of interest” report, which outlines recent crimes that occurred throughout the city, to determine whether there are connections between crimes from different districts.
- Holding regular conference calls between agency command staff and lieutenants from investigative units to discuss critical incidents and deployments.
- Holding regular crime briefings attended by the chief of police, all district commanders, and lieutenants from investigative units to discuss specific crimes and trends.
- Holding regular in-person meetings between leaders from investigative units and district detective units to discuss specific crimes and trends.
- Holding quarterly briefings by the homicide unit to command officials. This will help the agency to stay abreast of investigations and determine what resources are needed to improve the investigative process.

Recommendation #46: Homicide unit detectives should be required to document any request they submit to another unit, whether those requests were followed up on, and the results of such requests. Supervisors should review this documentation to ensure that detectives are soliciting input and assistance on cases from others outside of the homicide unit.

Recommendation #47: Police agency leaders should strive to ensure that all units involved in homicide investigations have the staffing, training, equipment, and technology needed to successfully complete their missions. Recommendations for strengthening resources within the individual units are presented throughout the rest of this section.

Nonfatal Shooting Investigations

Homicide investigations generally are closely linked to investigations of nonfatal shootings. Often, the only thing that differentiates a nonfatal shooting from a homicide is poor marksmanship, good emergency medical care, or pure chance.¹⁰⁵ Victims who are critically wounded in a shooting may eventually succumb to their injuries, thus turning the case into a homicide. Many homicide and nonfatal shooting cases share a great deal of overlap in terms of victims, witnesses, and suspects. As a result, thorough investigations of nonfatal shootings may help to prevent future homicides. Someone who commits a nonfatal shooting may very well commit a homicide if not apprehended.

“When the bullet leaves the gun, there is a lot of luck and a lot of randomness in what happens. Police departments need to be investigating nonfatal shootings with almost as much urgency as they investigate homicides. They should be collecting data on nonfatal shootings and using this as a measure – not just because nonfatal shootings themselves are important, which they are, but also because understanding your nonfatal shootings can help you better understand your homicides.”

– Jeff Asher, former Crime Analyst, New Orleans Police Department

Responding to Nonfatal Shootings

The unit responsible for investigating nonfatal shootings varies from agency to agency. Some police departments in large cities have established a separate, specialized unit that focuses primarily on responding to and investigating nonfatal shootings. In these agencies, all shootings throughout the jurisdiction are investigated by detectives from this unit, which is often located at the police headquarters. Proponents of this centralized approach believe that it can help improve communication and collaboration between the nonfatal shooting detectives and other units, such as the homicide unit and intelligence unit, which are also typically located at main headquarters. Another potential benefit is that centralization may facilitate better information-sharing across districts regarding shooting incidents that occur throughout the city.

Other police agencies rely on detectives in the district detective units (often known as DDUs) to investigate nonfatal shooting cases. DDU detectives are typically

105. According to the U.S. Bureau of Justice Statistics, between 1993 and 2011 approximately 60% to 70% of all homicides were committed with a firearm. U.S. Department of Justice, Bureau of Justice Statistics (2013). *Firearm Violence, 1993 – 2011*. <https://www.bjs.gov/content/pub/pdf/fv9311.pdf>.

located in the district offices and are also responsible for investigating many other types of cases, such as felonious assaults, burglaries, auto thefts, etc. Some detectives believe that they are able to obtain better intelligence when they are working out of a district, as they can form relationships with people they encounter each day in the neighborhood. Proponents of this approach also contend that centralization is not necessary, arguing that most shootings are local in nature and do not involve witnesses or suspects who move across districts.

Regardless of who is responsible for investigating nonfatal shootings, it is absolutely critical that police agencies prioritize responding to and investigating these incidents. Anytime a shooting occurs, the detective unit that will be handling the case should be notified immediately. A detective should be assigned to the case and should immediately respond to the scene, regardless of whether the shooting resulted in an injury or death. The assigned detective should begin a prompt investigation into the incident. (See *Recommendations* 48-51 below for details.)

The protocols for responding to and investigating nonfatal shootings should be mandated in formal policy. Personnel – including patrol officers, who are typically the first on the scene – should be trained on these policies and held accountable for following them.

“You have to prioritize responding to nonfatal shootings. One problem is that staffing is always an issue, especially on the midnight shifts. It can be hard to have enough detectives in each district to quickly respond to each shooting that occurs. One way MPD handled this was to put all of the district detectives under the command of one centralized watch commander, even though they are working out of individual districts. This gives the watch commander, who is located in the Criminal Investigations Division (CID), access to resources across the city.

“For example, there may only be one detective working in the Third District on any given night, but when a shooting happens in the Third District, the CID watch commander can say, ‘Hey, I need a detective from the Fourth District to go over there and help.’ They can pool resources, because even though each individual district may be short, it’s unlikely that they are all going to have a shooting at the same time.”

– George Kucik, Deputy Chief (Ret.), Washington, DC Metropolitan Police Department

Coordination with Homicide Unit

In addition to requiring a prompt and thorough response to nonfatal shootings, police agencies should encourage greater cooperation between nonfatal shooting detectives and detectives in the homicide unit. Poor coordination between these groups can result in critical information falling through the cracks, which is problematic because nonfatal shootings often involve suspects, victims, and witnesses who may also be involved in homicide cases. **Sharing information helps homicide and nonfatal shooting detectives to identify patterns and connections between their cases, enabling them to more effectively prevent and respond to crime throughout the jurisdiction.**

Often there are barriers that undermine this kind of effective coordination. For example, many police agencies lack the kind of strong, formal communication channels that would facilitate better cooperation between units (e.g., regular briefings between units, dissemination of reports showing connections between homicide and nonfatal shootings). Additionally, there is a tendency in many police agencies for separate units to act independently and focus exclusively on their own missions. Often, various units do not even fully understand one another's capabilities and needs.

Recommendations 48-51 below discuss strategies for improving coordination between homicide and nonfatal shooting detectives, with a particular focus on promoting ongoing collaboration, follow-up, and discussion of case strategy.

“In Baltimore, we saw a need to improve coordination between the nonfatal shooting detectives and our homicide detectives. So our first step was to centralize the nonfatal shooting detectives into a single unit located at department headquarters, rather than have them be spread out within the districts. This puts them in close physical proximity with the homicide detectives, who are also located at headquarters. We also put all of the nonfatal shooting detectives under the same command that exists in the homicide unit, so that they are all reporting up the same chain.

“We’ve found these steps to be helpful for encouraging communication and coordination between the units, which can improve both homicide and nonfatal shooting investigations. Coordination between the units can also provide detectives in the nonfatal shooting with the types of experiences that will help them if they go on to join the homicide unit, which many eventually do.”

– Kevin Davis, Former Police Commissioner, Baltimore Police Department

Recommendations: Nonfatal Shooting Investigations

Recommendation #48: Police agencies should require that all shootings, regardless of whether they result in injuries or deaths, are responded to and investigated immediately by a detective. Ensuring that all shootings are treated with a sense of urgency should be a top priority for police leaders.

- First, agency leaders should review whether the department's organizational structure facilitates a prompt response to all nonfatal shootings. Some agencies use a special, centralized unit to investigate all shootings, while in other agencies shootings are investigated by district detectives. PERF does not recommend one approach over another, as long as the chosen method allows for thorough investigations of all shootings. Agencies should take into account their resources and needs when choosing which approach to take.
- Second, agencies should institute a formal policy that requires:
 - The appropriate detective unit to be notified immediately when any shooting occurs

- A detective to be assigned to the case and respond to the scene of the shooting
- The assigned detective to begin a prompt investigation into the incident.
- Finally, personnel should be trained on these policies and held accountable for following them.

Recommendation #49: Regardless of whether nonfatal shootings are investigated by a special unit, district detectives, or some other group of detectives, police agencies should ensure that these detectives have the staffing, equipment, and technology necessary to thoroughly respond to and investigate all shootings.

- **Staffing:** Police agencies should review staffing levels to determine whether additional detectives are needed in order to meet this goal.
- **Equipment:** Police agencies should consider equipping detectives who investigate nonfatal shootings with computers that they can use while in the field to access databases and other tools to assist them with investigations. For example, many police agencies give district detectives access to laptops or tablets that can connect to the agency’s databases via cellular capabilities or through wireless hotspots created by agency-issued smartphones.
- **Technology:** Police agencies should also explore using gunshot detection technology, which a tool used by many police departments to detect when and where shots are fired, so that police may immediately respond, even if no one calls the police to report shots being fired.

Recommendation #50: Police agencies should ensure that all detectives who handle nonfatal shootings receive a formal training course in basic investigations.

- This training should include the topics outlined in *Recommendation 13* and should be provided to detectives upon joining the unit.

Recommendation #51: Police agencies should take steps to improve coordination between the homicide unit and the detectives who investigate nonfatal shootings. Leaders must emphasize the importance of coordination to all personnel. There is often a great deal of overlap between the cases investigated by these two groups of detectives, and detectives must be aware of any relationships between their cases, suspects, victims, and witnesses.

- Police agencies should ensure that there are formal information-sharing protocols in place to improve communication between homicide detectives and nonfatal shooting detectives. Some suggested options are outlined above in *Recommendations 43-47*.

- Homicide detectives should routinely follow up with district detectives to determine whether district detectives have relevant information on homicide cases. This step should be included as a step in the homicide unit investigation checklist (see *Recommendation 32*). Homicide unit supervisors should hold detectives accountable for completing this step.
- In addition to formal information-sharing protocols, homicide detectives and detectives investigating nonfatal shootings should be instructed to informally contact each another and share information on a regular basis through email, telephone calls, and text messages.

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Innovative Strategies and Analytical Tools for Preventing and Responding to Gun Violence

According to FBI data, in 2016 more than 11,000 homicides – or 73% of all homicides that occurred the U.S. – were committed using a firearm.¹⁰⁶ Gun violence results in more than 10,000 deaths and more than 100,000 injuries each year, and many of these injuries would also have been fatal if not for good medical care, poor marksmanship by the shooter, or pure chance.¹⁰⁷

It is therefore critical that police agencies place a priority on investigating *all* shootings, regardless of whether they result in death. Recognizing this, in recent years police agencies have begun adopting innovative strategies for investigating shootings, with a particular focus on utilizing tools and technologies to analyze firearms-related evidence; link shooting incidents; connect suspects, victims, and witnesses across cases; and target the most violent offenders.¹⁰⁸

This sidebar examines three of these strategies and analytical tools: Crime Gun Intelligence Centers, the National Integrated Ballistic Information Network (NIBIN), and eTrace.

Crime Gun Intelligence Centers

One promising model for investigating gun violence is the **Crime Gun Intelligence Center (CGIC)**, a joint BJA and U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) initiative that promotes “interagency collaboration focused on the immediate collection, management, and analysis of crime gun evidence, such as shell casings, in real time, in an effort to identify shooters, disrupt criminal activity, and to prevent future violence.”¹⁰⁹ The CGIC team includes the ATF, local crime laboratories, probation and parole offices, federal and local prosecutors, crime analysts, community groups, and academic organizations.¹¹⁰

106. FBI UCR Data, <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/expanded-offense>. These figures were calculated using the weapon type reported by state. The FBI notes that some of the states reported limited data, thus these figures are subject to change as additional data is reported.

107. Police Executive Research Forum (2017), *The “Crime Gun Intelligence Center” Model: Case Studies of the Denver, Milwaukee, and Chicago Approaches to Investigating Gun Crime*, <http://www.policeforum.org/assets/crimegunintelligencecenter.pdf>.

108. Ibid.

109. Crime Gun Intelligence Centers website, <https://crimegunintelcenters.org/>.

110. Ibid.

CGICs use cutting-edge tools and technologies to analyze crime gun evidence in an effort to identify armed violent offenders and crime gun sources, generate real-time investigative leads, strengthen the accuracy of crime data, improve firearms-related investigations and prosecutions, effectively manage resources, and, most importantly, to prevent future gun violence.¹¹¹

The following are considered “essential elements” of a CGIC:¹¹²

- **Utilization of Effective Gun Investigation Teams and Contractor Support:** CGICs involve a team approach to accomplishing daily operations such as collecting and analyzing gun crime evidence, investigating firearms incidents, gun crime tracing, trafficking interdiction, and apprehending and prosecuting offenders.
- **Comprehensive Gun Crime and Forensics Tracing:** Under the CGIC model, local law enforcement agencies respond to *all* crimes involving a firearm within a specific area. They recover ballistics evidence from the scene and within 24 hours enter the evidence into the National Integrated Ballistic Information Network (NIBIN). They also document all crime gun recoveries and within 48 hours send trace requests to the ATF Tracing Center through eTrace. (NIBIN and eTrace are discussed in more detail below.) NIBIN hits are identified by crime laboratory staff and are assigned to be investigated by a CGIC detective or ATF special agent.
- **Comprehensive Collection and Management of Crime Gun Intelligence:** Crime gun data generated by NIBIN and eTrace are collected, examined, and investigated by CGIC partners to ensure that all information is shared with all CGIC stakeholders.
- **Crime Gun Intelligence Analysis:** CGIC partners analyze all crime gun data collected from eTrace and NIBIN or other forensic analysis, and then analyze and disseminate the data to ensure appropriate linkage of crimes, guns, and, suspects. One example of this step is the dissemination of Crime Gun Intelligence Center Bulletins, which provide valuable information to law enforcement officers.
- **Investigative Follow-Up:** Actionable gun crime intelligence generated by the CGIC is disseminated to all partners and pursued using all available resources in conjunction with state and federal prosecutors.
- **Prevention and Community Engagement:** CGIC partners also utilize effective community engagement practices and evidence-based programming, such as focused deterrence and procedural justice, to improve public trust and confidence in the justice system and to prevent community members from participating in gun crimes.
- **Performance Management:** The CGIC uses data to measure outcomes, which include a decrease in the number of shootings, more effective deployment of resources, and an increase in successful gun crime prosecution.
- **Training and Policy Development:** CGIC stakeholders receive ongoing training regarding effective gun crime investigation and prosecution strategies. The CGIC also develops policies that govern the response to gun crimes by the participating local police departments and crime laboratories.

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111. Ibid.

112. Crime Gun Intelligence Centers website, <https://crimegunintelcenters.org/cgic-concept/>.

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The figure below, which is replicated from the CGIC website, illustrates the workflow of a CGIC:¹¹³



The national CGIC website provides a list of resources that may be useful to police agencies interested in adopting the CGIC model.¹¹⁴ Additionally, in 2017 PERF released a report that includes case studies of the CGICs in three cities: Denver, Milwaukee, and Chicago.¹¹⁵

National Integrated Ballistic Information Network (NIBIN)

The National Integrated Ballistic Information Network (NIBIN) is a “national database of digital images of spent bullets and cartridge cases that were found at crime scenes or test-fired from confiscated weapons.”¹¹⁶ NIBIN is managed by the U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), which also provides NIBIN equipment to local crime labs throughout the United States.¹¹⁷

The use of NIBIN generally involves the following steps:¹¹⁸

- 1. Collecting and Submitting Evidence:** Once ballistics evidence is collected from a crime scene, a firearms examiner or technician uses ballistic imaging to convert the evidence into digital images that are then uploaded into the database. This evidence may include cartridge cases recovered from both crime scenes and test fires from recovered crime guns. For the system to be effective, law enforcement agencies throughout the country must collect and submit *all* evidence that is suitable for entry into NIBIN, and entries should be made as quickly as possible to prevent leads from going cold.

113. Ibid.

114. Crime Gun Intelligence Centers, <https://crimegunintelcenters.org/resources-and-publications/>.

115. Police Executive Research Forum (2017), The “Crime Gun Intelligence Center” Model: Case Studies of the Denver, Milwaukee, and Chicago Approaches to Investigating Gun Crime, <http://www.policeforum.org/assets/crimegunintelligencecenter.pdf>. The Milwaukee CGIC is also further discussed in this current report (see “Chapter 10: The Future of Homicide Investigations: Digital Evidence, Crime Analysis, and Beyond”).

116. National Institute of Justice, <https://www.nij.gov/topics/law-enforcement/investigations/Pages/nibin.aspx>.

117. Ibid.

118. Bureau of Alcohol, Tobacco, Firearms, and Explosives, <https://www.atf.gov/firearms/national-integrated-ballistic-information-network-nibin> and <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>; National Institute of Justice, <https://www.nij.gov/topics/law-enforcement/investigations/Pages/nibin.aspx>; Crime Gun Intelligence Centers, <https://crimegunintelcenters.org/wp-content/uploads/2017/07/Using-NIBIN-to-Target-Shooters-and-Solve-Crime.pdf>.

2. **Searching the Database to Identify Matches:** Firearms examiners and forensic technicians can then use the database to compare the images against those entered from other cases from around the country. When the spent rounds collected in one case share similar markings with those collected in another case, it is considered a “hit” or a “match,” indicating that the rounds were fired from the same weapon.
3. **Investigative Follow Up:** Once a potential match is identified and confirmed through a physical examination of the actual spent rounds, the information is passed along to the case investigator. Investigators can use the information to generate leads, link cases, identify suspects, and understand larger patterns of gun crime in their own jurisdictions and beyond.

NIBIN can be a very important analytical tool for strengthening the investigation of gun crimes, particularly when it is integrated into a comprehensive response to gun violence (such as a Crime Gun Intelligence Center). Since NIBIN was launched in 1999, NIBIN partners have captured approximately 2.8 million images of ballistic evidence and confirmed more than 74,000 NIBIN hits.¹¹⁹ A 2013 evaluation of NIBIN conducted by the National Institute of Justice (NIJ) found that the usefulness of the tool could be improved by reducing delays in evidence processing, creating opportunities for training and professional development, and ensuring that investigators and prosecutors provided feedback to crime labs regarding how useful the hits were to their investigations.¹²⁰

The National Training Center (NTC) and eTrace

Another important analytical tool for strengthening the investigation of gun crimes is the use of firearms tracing. The U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) defines firearms tracing as “the systematic tracking of the movement of a firearm recovered by law enforcement officials from its first sale by the manufacturer or importer through the distribution chain (wholesaler/retailer) to the first retail purchaser.”¹²¹

Firearms tracing can offer several investigative benefits. These include linking suspects to firearms used in crimes, identifying potential firearms traffickers, and detecting patterns in the sources and kinds of guns used for criminal purposes.¹²²

In the United States, the **ATF National Tracing Center (NTC)** is the only organization that is authorized to trace firearms upon request from federal, state, and local law enforcement agencies.¹²³ NTC utilizes an online submission system called **eTrace**, which allows law enforcement officers to electronically submit requests, monitor the progress of their traces, and retrieve trace results in real time.¹²⁴

The eTrace system also enables law enforcement agencies to obtain all firearms trace information related to their specific agency; for example, statistical reports regarding the number of traces the agency has submitted over time, the top firearms traced, the time-to-crime rates for firearms, and information about the firearms possessors.¹²⁵ This information can be critical to agencies as they look to strengthen their investigative processes and better understand the firearms issues within their jurisdictions.

119. Bureau of Alcohol, Tobacco, Firearms, and Explosives, <https://www.atf.gov/resource-center/fact-sheet/fact-sheet-national-integrated-ballistic-information-network>.

120. William King, William Wells, Charles Katz, Edward Maguire, and James Frank (2013). *Opening the Black Box of NIBIN: A Descriptive Process and Outcome Evaluation of the Use of NIBIN and its Effects on Criminal Investigations, Final Report*. <https://www.ncjrs.gov/pdffiles1/nij/grants/243875.pdf>.

121. U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives, <https://www.atf.gov/firearms/national-tracing-center>.

122. U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives, <https://www.atf.gov/firearms/docs/guide/national-tracing-center-%E2%80%93-ettrace-%E2%80%93-internet-based-firearms-tracing-and-analysis/download>.

123. U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives, <https://www.atf.gov/firearms/national-tracing-center>.

124. U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives, <https://www.atf.gov/firearms/docs/guide/national-tracing-center-%E2%80%93-ettrace-%E2%80%93-internet-based-firearms-tracing-and-analysis/download>.

125. Ibid.

Other Investigative Units

In addition to coordinating with detectives who investigate nonfatal shootings, it is also critical that homicide detectives work closely with investigators in other specialized units, such as those that handle gang and narcotics cases. Coordination between homicide detectives and gang units is particularly important, because research has shown that the majority of homicides, shootings, and other violent acts are committed by “readily identifiable groups of individuals,” such as gangs and loose neighborhood drug crews.¹²⁶ Members of these same groups are also often *victims* of homicide and violent crime. For example, research in Cincinnati, Ohio identified 60 criminal groups composed of 1,500 people (representing less than 0.5% of Cincinnati’s population) who were associated with 75% of the city’s homicides as a victim, perpetrator, or both.¹²⁷

Given this overlap between gangs, drugs, shootings, and homicides, gang and narcotics investigators can be a valuable resource for homicide investigations.¹²⁸ For example, these specialized units often use social media, contacts within the community, and confidential informants to gather intelligence about gangs and gang members’ involvement in crimes, and this information is often useful for homicide detectives.

Coordination between homicide detectives and specialized units can be challenging due to a lack of formal information-sharing protocols, a tendency for units to “stay in their own lanes” and focus on their own missions, and a lack of resources that would allow for greater collaboration.

Recommendations: Other Investigative Units

Recommendation #52: Police agencies should take steps to improve overall coordination between the homicide unit and other investigative units, such as those that investigate gang and narcotics cases. There is often overlap between the cases that these units investigate, and improving coordination could help investigators solve current cases and prevent future crimes.

- Police agencies should institute formal information-sharing protocols among these units, as outlined in *Recommendations 43-47*.
- In addition to formal information-sharing protocols, homicide detectives and investigators in other units should be instructed to informally contact each another and share information on a regular basis through email, telephone calls, and text messages.

126. National Network for Safe Communities. 2016. *Group Violence Prevention: An Implementation Guide*. Washington, DC: Office of Community Oriented Policing Services. https://nnscommunities.org/uploads/GVI_Guide_2016.pdf.

127. Ibid.

128. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

Recommendation #53: Homicide detectives should work closely with gang investigators to share intelligence about criminal networks and groups that are involved in violent crime. This includes intelligence gathered through social media analysis, confidential informants, and community contacts.

- Homicide detectives should routinely follow up with gang investigators to determine whether they have relevant information on homicide cases. For example, it is protocol in some agencies for homicide detectives to contact gang unit detectives to respond immediately to the scene of any homicide involving a young victim or suspect.
- Following up with gang investigators should be included as a step in the homicide unit investigation checklist (see *Recommendation 31*). Homicide unit supervisors should hold detectives accountable for completing this step.

Patrol Units

Patrol officers serve a critical role in homicide investigations. They are typically the first officers on the scene of a homicide; they are responsible for preserving and managing the crime scene; they often conduct the initial witness canvasses; and they may have contacts in their districts who can provide valuable information about a case.¹²⁹ Research has shown that certain actions taken by patrol officers – such as securing the crime scene and attempting to locate witnesses – can lead to higher homicide case closure rates.¹³⁰

Crime Scene Security and Management

Securing and managing the crime scene are among the key tasks for patrol officers in a homicide investigation. For example, patrol officers are often responsible for securing the perimeters of the crime scene. Typically, only certain necessary personnel, such as homicide detectives and crime scene technicians, are allowed into the inner perimeter. A failure to properly secure and preserve the scene inside the perimeter can jeopardize evidence and make it difficult for detectives and technicians to focus on processing the scene.

Patrol officers are also often responsible for maintaining a crime scene log, which records information about everyone who enters and exits the scene. This documentation is important for determining who was at the scene and for what purpose, and for identifying which personnel will need to fill out a report about their role at the scene. This information is critical, especially during the prosecution phase.

129. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

130. Wellford, Charles and James Cronin, *Clearing Up Homicide Clearance Rates*, National Institute of Justice Journal (April 2000), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>. See also the full report for a more comprehensive look at this study: *An Analysis of Variables Affecting the Clearance of Homicides: A Multistate Study* (October 1999), http://www.jrsa.org/pubs/reports/homicides_report.pdf.

Witness Location and Management

At a homicide scene, patrol officers ideally will be available to help canvass the area for potential witnesses and evidence, to separate potential witnesses from the crowd, to accompany witnesses as they are transported to the homicide unit office for interviews, and to transport the witnesses back after the interview is over. These tasks are critical for ensuring that crucial evidence and witness testimony are not lost, for keeping witnesses safe, and for ensuring that potential witnesses are kept separate from friends and family members who may attempt to dissuade them from sharing information.

Coordination with the Homicide Unit

Regular, ongoing communication between homicide detectives and patrol officers can help strengthen homicide investigations. Officers who patrol neighborhoods on a daily basis often have contacts and sources who can provide them with vital information about homicide cases. Failing to use this information results in a lost opportunity for patrol officers to assist in investigations, deter further crimes, and keep communities safe.

To leverage patrol units as a resource, coordination between the homicide unit and patrol units must go beyond the initial crime scene and continue throughout the investigation. For example, it can be useful for homicide detectives to attend roll calls to personally provide information to patrol officers regarding homicide cases in the area. Additionally, when patrol officers receive information from the public related to a homicide, there must be clear channels for sharing that information with the homicide unit.

Recommendations: Patrol Units

Recommendation #54: To ensure that homicide crime scenes are consistently and thoroughly secured and managed, homicide unit detectives should develop a standardized worksheet for patrol officers to use when responding to all homicide scenes.

- The worksheet should include a checklist of all tasks that must be completed, notes regarding any essential information gathered (e.g., witnesses identified, evidence collected, etc.), and space to record information about the people, conditions, and circumstances at the scene.
- Officers would be responsible for submitting the worksheet to the Homicide detective before leaving the scene.
- The BJA best practices guide provides samples of similar worksheets used by police departments in Sacramento County and San Diego.¹³¹

131. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

Recommendation #55: Patrol officers should receive comprehensive formal training on their roles and responsibilities at a homicide scene, including how to properly secure, manage, and preserve the scene. Training topics should include:

- **Crime scene processing and management**, including securing and preserving a scene, maintaining a crime scene log, locating any surveillance cameras and evidence at the scene, conducting initial witness canvasses, and other aspects of initial case investigation and crime scene management.
- **Managing witnesses and victims' family members**, including how to identify and separate potential witnesses at the scene, how to respond to possible confrontations with members of the public at a crime scene, and protocols for transporting witnesses to and from the crime scene. It is important that patrol officers know how to protect a crime scene and handle witnesses without isolating the community, as this is crucial for maintaining positive police-community relationships and may lead to better cooperation from potential witnesses.¹³²
- **How to best contribute to a homicide investigation**, including what to look for at a homicide scene, what the investigative units need from patrol officers, and how patrol officers can provide assistance throughout an investigation. PERF recommends that officers receive ongoing training from the homicide unit and other investigative units on what they need from patrol officers.

Recommendation #56: Agency policies and procedures should specify that at a homicide scene, there should be only one entry point for all personnel, and that each person who enters the scene must check in with the patrol officer who is keeping the crime scene log. Police agencies should develop a standard crime scene log and require its use at all major crime scene.

- This requirement should be mandated by written policies, and the procedure for creating and maintaining the log should be outlined in the Homicide Unit Manual.
- The log should document who entered and exited the crime scene, the times they did so, and their roles at the scene.
- The use of the crime scene log should be incorporated into training provided to patrol units, the homicide unit, other investigative units, crime scene technicians, and other personnel who frequently respond to crime scenes.

132. Ibid.

Recommendation #57: All persons who enter a homicide scene should be required to submit a supplemental report detailing their actions at the scene. This requirement should be mandated by written policies and procedures.

- Supplemental reports should be maintained within the homicide case file. (*Recommendation 27*)

Recommendation #58: Police agencies should take steps to promote frequent, ongoing coordination between homicide detectives and patrol units, including:

- Encouraging homicide detectives to routinely attend patrol unit roll calls to share information about homicide incidents and investigations.
- Requiring homicide detectives to follow up with the patrol officers who submit a supplemental report for the case. This sharing of information could prove useful for the investigators, because patrol officers are “eyes and ears on the street” each day. This follow-up should be included as a formal step in the homicide detectives’ investigative plan. (*Recommendation 31*)

Crime Scene Processing and Forensic Analysis

The BJA guide on best practices for homicide investigations states that “a competent, well-equipped, and well-staffed crime laboratory that is responsive to investigators will have a significant effect on homicide clearances.”¹³³ It is critical that police agencies have strong systems in place for collecting, processing, testing, and analyzing physical evidence. This includes ensuring that the units that perform these functions have clear written policies and protocols, adequate staffing and equipment, and standardized procedures for communicating with one another and with investigative units.

Crime Scene Processing

Most police agencies have an in-house unit comprised of crime scene technicians who respond to crime scenes to collect, document, and process physical evidence. The names for this unit vary by agency (e.g., Mobile Crime Unit, Crime Scene Investigation Unit), and in smaller agencies, there may be only one or two crime scene technicians who respond to all cases. Crime scene technicians must work closely with investigators at the scene to identify evidence, determine which evidence to collect, and ensure that evidence is properly documented, collected, and transported.

133. Ibid.

Forensic Testing and Analysis

After evidence is collected and processed by crime scene technicians, it is typically submitted to the crime lab for testing and analysis. Some police agencies have in-house crime labs, while others work with an external lab that is typically operated by the state or county, often through the medical examiner's office. Typically, crime labs are comprised of individual units that specialize in testing and analyzing a variety of evidence, including DNA/serology, firearms, fingerprints, trace evidence, documents and photographs, vehicles, drugs, etc.

Coordination between the crime lab and homicide detectives can be challenging, regardless of whether the crime lab is located in-house or operated by an external agency. For example, investigators and forensic technicians often have differing perspectives regarding which evidence should be tested, and in what order. Investigators may believe that *all* evidence they submit to the crime lab should be tested, while forensic technicians may instead wish to prioritize testing the evidence that they believe is most likely to yield results.

There is also often a lack of communication between the homicide unit and crime lab regarding each other's functions, capabilities, limitations, and processes. For example, homicide detectives may not understand the crime lab's policy for prioritizing evidence to be tested, and forensic technicians may not understand the evidentiary value behind an item that a detective submitted for testing. This lack of communication can create tension between members of both units, especially regarding issues such as responsiveness and the turnaround time for processing test results.

There may be additional coordination challenges when the crime lab is operated by an external agency, such as the medical examiner's office. For example, the police agency and agency that operates the crime lab may have different policies, procedures, training, and expectations for how evidence should be submitted and tested. It may also be more difficult to coordinate the scheduling of things like case reviews to discuss cases and evidence.

Recommendations: Crime Scene Processing and Forensic Analysis

Recommendation #59: Police agencies should review the staffing, technology, and equipment available to any internal unit(s) responsible for collecting, processing, testing, and analyzing physical evidence. The goal of this review is to ensure that these units have the resources they need to respond to crime scenes and thoroughly process and test evidence in a timely fashion.

- The unit responsible for collecting and processing evidence from the crime scene (e.g., the Mobile Crime Unit) should be staffed so that there is always a trained crime scene technician available to respond to the scene. In some agencies that lack an adequate number of crime scene technicians, other investigators, including homicide detectives, have stepped in and performed the evidence collection role. This can create inconsistencies in how scenes are processed and generate additional work for detectives.

- In police agencies with an in-house crime lab, agency officials should research how the crime lab’s staffing impacts turnaround times. Officials should work with crime lab supervisors to determine the lab’s staffing needs.
- Police agency officials should also work with unit supervisors to determine the technology and equipment needs of these units. At a minimum, these units should have the resources necessary to ensure that physical evidence is stored in a secure facility, is protected from potential contamination, and does not create a biohazard (e.g., from blood or other bodily fluids). The “Biological Evidence Preservation Handbook,” written by members of the Technical Working Group for the National Institute of Justice (NIJ) and the Department of Commerce’s National Institute of Standards and Technology (NIST), provides police agencies with best practices for handling biological evidence.¹³⁴ Additionally, mobile crime units should have the basic tools and equipment necessary to process crime scenes, much of which is inexpensive and can be purchased at a hardware store.

Recommendation #60: Police agencies should ensure that all crime scene technicians receive comprehensive formal training on how to collect and process evidence from crime scenes.

- Mandatory training should cover topics such as crime scene reconstruction and photography, fingerprint collection, DNA collection, firearms trajectory analysis, and the legal issues surrounding evidence collection and processing.
- Training should be ongoing to reflect changes in science, technology, and the law.
- Training should be developed in collaboration with the crime lab, regardless of whether the lab is in-house or external.

Recommendation #61: Police agencies should also provide training to all officers and investigators on the recovery and processing of physical evidence. Although crime scene processing should be conducted by trained crime scene technicians, it is useful for other personnel who respond to crime scenes, including patrol officers and investigators, to have a basic understanding of how to identify and recover potential evidence.

- Crime scene technicians and crime lab personnel could help develop or identify existing training.
- Training should include topics such as:
 - Basic forensics
 - Evidence collection and processing, particularly how to avoid contaminating evidence at the crime scene.

134. National Institute of Health and National Institute of Standards and Technology, *The Biological Evidence Preservation Handbook*. 2013. <http://dx.doi.org/10.6028/NIST.IR.7928>.

- How to properly take DNA samples from suspects.
- The training could be delivered via roll-call videos, training bulletins, or in-service training.

Recommendation #62: Police agencies should ensure that personnel from investigative units, including the homicide unit, receive annual training regarding the crime lab's capabilities, limitations, services, and policies. This will help investigators better understand evidence analysis and how to most effectively work with the crime lab.

- Prosecutors should also be invited to attend this training. The training should include a tour of the forensics lab, especially if it is located outside of the police department.

Recommendation #63: Police agencies should consider the following strategies for improving direct communication between the homicide unit and the unit responsible for crime scene processing (e.g., the Mobile Crime Unit):

- Requiring homicide detectives and crime scene technicians to briefly confer after a homicide scene has been processed. They should discuss what evidence was collected, what is needed in terms of forensic testing, and next steps. This process has been used in several agencies with successful homicide units.¹³⁵
- Encouraging homicide detectives to be clear and descriptive about what they need from crime scene technicians, both before and after the scene is processed.
- Regularly briefing homicide detectives on new technologies and policies used by the crime scene unit. (See *Recommendation 45*)

Recommendation #64: In places where the crime lab is operated by an agency outside of the police department (e.g., the medical examiner's office), leaders from both agencies should coordinate on high-level policy decisions, such as how cases should be prioritized and when information about ongoing cases will be publicly released.

- The policies should reflect a unified mission and shared strategy for investigation and crime response.

135. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

Recommendation #65: Regardless of whether a crime lab is located in-house or externally, supervisors and other top representatives from the homicide unit and the crime lab should hold regular (e.g., monthly or twice-monthly) meetings to discuss cases, address any ongoing conflicts, discuss new protocols, and share ideas.

- During these meetings, there should be a strong emphasis on promoting mutual respect and understanding between personnel from the two units.
- Personnel should also work together to ensure that the case review and evidence submission protocols meet the needs of both the homicide unit and the crime lab. For example, personnel should agree upon the time frame for when evidence can be submitted to the lab, submission protocols, and the timing and structure of case reviews.

Recommendation #66: Police agencies should explore ways to streamline the system for submitting evidence for forensic testing and for communicating the results to detectives. This may include:

- Training detectives on how to access and use the databases that crime lab personnel use to file crime scene information and forensic analyses.
- Creating an automated system that documents whether forensic test results were sent to detectives, and whether the detective received the results.
- Taking steps to ensure that personnel read and respond to emails and other department communications. (See *Recommendation 45*)
- Requiring detectives who submit evidence to identify their supervisor and provide the supervisor's contact information. This will provide the crime lab personnel with multiple points of contact for obtaining follow-up information as necessary.
- Requiring that all evidence be submitted to the crime lab by a crime scene tech, rather than an investigator or a courier. Crime scene techs are in the best position to communicate information about the evidence being submitted, and to answer questions from crime lab personnel.

Recommendation #67: The homicide unit should maintain a log of what evidence was submitted to the crime lab, when it was submitted, and the status and findings of the submission. This should be part of the investigative checklist outlined in the Homicide Unit manual. (See *Recommendation 31*)

Strengthening Collaboration between the Homicide Unit and the Crime Lab: Denver, CO

Eric Duvall is the Forensic Science Supervisor and Local CODIS Administrator for the Denver Police Department Crime Laboratory. He is also a member of the NIJ Cold Case Best Practices Working Group, and he has worked on the NIJ-funded project “Solving Cold Cases with DNA.” Mr. Duvall, who has an M.S. in Forensic Science from the Oklahoma State University Center for Health Sciences, also serves as a local laboratory representative on the National DNA Index System (NDIS) Board.

The following is excerpted from Mr. Duvall’s presentation at the PERF/BJA Homicide Investigations meeting held on January 31, 2017.

The Denver Police Department Crime Lab

The Denver Police Department (DPD) Crime Lab is divided into several sections, including the Administrative Unit, which does quality assurance and receives all the lab requests; the Firearms Unit; the Forensic Biology & DNA Unit, which is comprised of 20 people who do DNA screening and/or analysis; Forensic Imaging; Forensic Chemistry, which handles drug analysis, trace evidence, and gunshot residue testing; Latent Prints; and the Crime Scene Unit, which processes evidence at crime scenes. We also have a computer forensic analyst who is located with the FBI, not in our lab.

The lab is led by a Director who reports to DPD’s Deputy Chief of Investigations. We have a Standard Operating Procedure (SOP) that governs the entire lab, and also separate SOPs for the various sections. Our lab has ISO 17025 accreditation and has access to the FBI’s Combined DNA Index System (CODIS).

Our DNA section receives about 45 cases per week, which ends up being about 2,500 cases each year. That breaks down to each DNA analyst working about 200 to 250 cases per year. We do DNA processing for both violent and property crimes. One requirement that we have in Colorado is a state law requiring us to process DNA for current sex assault kits within six months. We also do DNA testing for cold homicide cases, and at one point we were doing testing for cold sexual assault cases, but we completed all of those.

The Process for Testing and Analyzing DNA Evidence in Homicide Cases

When we talk about collaboration between the Crime Lab and the Homicide Unit, I think it is critical to have a strong, consistent process in place for submitting evidence to be tested, for communicating about how the evidence will be prioritized, and for exchanging information about test results.

Submitting the Evidence Request

At DPD, this process begins at the crime scene. Homicide detectives work with our crime scene technicians to collect evidence, and the detectives decide which evidence to submit for testing. The detectives are also the ones who actually submit the testing request to the Crime Lab. The submission is made through DPD’s Records Management System (RMS), which directly interfaces with the Lab Information Management System. **I think this is an important feature, because it ensures that all the test requests are consistent and automated.**

The submission goes directly to the Crime Lab’s Administrative Unit, and the request always includes the case number, case details, the property invoice for evidence, etc. There is a submission limit of five items to start, but that is always subject to discussion.

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Prioritizing Which Evidence to Test

We generally see two different types of homicide cases, and which type of case it is will help determine how we approach the evidence.

In one type of case, the detectives have already identified a suspect and often even have the suspect in custody. An example of this would be a domestic violence case. **For these cases, the Crime Lab's role is to understand what kinds of forensic questions the detectives are trying to answer in order to make the case suitable for filing in court.** We aren't looking to identify a suspect or solve the case – that has pretty much already been done.

We handle these cases fairly methodically. Within two weeks of receiving the request from the detective, we do an initial screening to decide which evidence we're going to test. We put the evidence into our DNA queue, and then our time frame for testing it will depend largely on court dates and filing decisions.

The second type of case is what we call a "whodunit," when detectives haven't identified a suspect and don't have many real leads. **These cases will involve more of a forensic-led investigation, and our goal will be to use DNA, fingerprints, and other physical evidence to identify a perpetrator, such as through getting a hit in CODIS.**

These cases are typically a bit more expedited, as there is a greater sense of urgency and often an immediate public safety threat. Within the Crime Lab, we have case teams that can expedite DNA test results in cases such as these. Depending on our staffing, the turnaround time in these cases can be as short as 48 hours.

Submitting Test Results to Detectives

If the case is expedited, we can send preliminary results to detectives informally via a reviewed email. We'll just tell them, "We got a CODIS hit in this case, and the person's name is John Smith." The email will go out to the detective, the detective's chain of command, and the Crime Lab supervisor.

In all cases, we'll also generate a formal report with our official conclusions. The formal reports have to be signed off on by two Crime Lab analysts, and this will be the official report of record that will be used in court. The formal report is submitted via the Crime Lab's Laboratory Information Management System, which communicates directly with the RMS that the detectives use. **This is another way that our process helps facilitate smoother communication between detectives and the Crime Lab.** Our lab reports are automatically uploaded as a PDF into the detective's RMS. We also send an email notification to the detective to let them know that the report has been uploaded into the RMS.

Following Up on Test Results

We've initiated some strategies to help make sure that everyone is accountable and on the same page when it comes to following up after forensic testing is complete. This is really important because you want your test results to be useful; you don't want them to be ignored to get lost in the shuffle.

One strategy we use is that, if the Crime Lab knows that a particular set of results are complicated, we'll try to follow up with detectives immediately after we submit our report. We can often anticipate when detectives will need more information or have additional questions.

Also, whenever we get a database hit through CODIS, NIBIN, AFIS, etc., we send an email with the results to the detective, the detective's chain of command, and the lab supervisor. DPD has a policy that requires detectives to respond within 24 hours of receiving this notice. They just have to acknowledge that they received the information and are following up.

Strategies for Improving Coordination between the Crime Lab and Homicide Unit

I know that a lot of police departments struggle with the relationship between the Crime Lab and Homicide Unit. There can be a natural tension there, because the two sides sometimes have different priorities and different perspectives on what approach to take. At DPD, we've tried hard to create a strong relationship based on trust, mutual respect, and an understanding that we are all ultimately serving the same mission.

Resolving Conflicts About Which Evidence to Test

One common source of tension between the Crime Lab and homicide detectives is the question of which evidence should be tested. This issue can come up when a detective thinks a piece of evidence should be tested, and a forensic analyst disagrees.

At our Crime Lab, we consider the detectives our customers. We try to do what is best for them, but also what is best for the evidence and the case. And the detectives trust that we know what is best in terms of the evidence. There are several reasons why the detectives have this trust in us.

One, there is not a lot of turnover in the Homicide Unit, so we've been able to build up a pretty good long-term working relationship with a lot of the detectives. We have a good rapport and can communicate informally, which makes it easier for us to resolve any issues about evidence.

Two, the Crime Lab uses data when making decisions about what evidence to test for DNA, fingerprints, etc. And we make sure to explain this data to the detectives and why it factored into our decision. This helps detectives understand our reasoning, and that we aren't resisting testing something because we don't want to or don't have time. For example, if we tested 10 of "Item X" last year, and only got profiles on one of them, we would use this to explain to detectives why it might not be useful for us to test Item X.

Additionally, we have earned credibility among the detectives, which goes a long way in earning their trust. This is partly because we have a history of effectively communicating with detectives and providing them with quality leads. It also helps that our Crime Lab Director and Deputy Director are both former DNA analysts, which gives them additional credibility.

If a difference of opinion does arise about what to test, we just talk it out. **It is truly a collaborative process.** We welcome input from the detectives based on their experiences. We won't make the final call about what to test without working with detectives.

Internal Trainings and Briefings

One way that we try to improve coordination is by offering trainings to units throughout the DPD, including the Homicide Unit. We talk about what the Crime Lab does, what we can provide, and what we've had success with in terms of tools and technology. We also use this opportunity to introduce the detectives to new analysts who have joined the Crime Lab, as well as any new policies and procedures that we've implemented. And when we bring new techniques or processes online, we train detectives on what those changes will be.

Evidence Presentations and Reviews

We regularly meet with investigators in different units to review the inventory of evidence on a case. This contributes to the collaborative process of deciding which evidence to test. We also started inviting investigators to come to our Crime Lab meetings, where they can fill us in on investigative factors such as the interviews, the case status – things we might not know about. These briefings help facilitate better information-sharing and communication.

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Informal Meetings and Communication

We also often meet informally with investigators and supervisors, passing each other on the plaza or at the courthouse. We use these opportunities to just chat about forensic updates, what works, what doesn't, etc.

It also helps that the Crime Lab is located on the same block as the DPD headquarters. Being in close proximity can help encourage in-person meetings and informal communication.

Internal Crime Lab Coordination

In addition to coordination with the Homicide Unit and other DPD units, it is also important to have internal coordination within the Crime Lab itself. We have cross-trainings within the lab, so that people in the Firearms Unit are trained to swab guns, or we have an analyst who can handle both latent prints and DNA. It is critical that the whole Crime Lab buys into the mission that we are trying to serve.

CHAPTER 8.

External Coordination

Finding: Persons outside of a police agency, such as prosecutors and members of the community, can have a significant impact on homicide investigations. Strong coordination and communication between these people and the homicide unit (and the police agency as a whole) are necessary in order to promote effective investigations.

Police agencies do not operate in a vacuum, and in general, it is important that they build strong relationships with external stakeholders, such as prosecutors, courts, medical examiners' offices, other law enforcement agencies in the area, and members of the community that they serve. In addition to strengthening police legitimacy and effectiveness of operations, these relationships can help promote better investigations of crimes.

This section discusses how police agencies can strengthen coordination with prosecutors and members of the community with respect to homicide investigations. (Recommendations for strengthening coordination with the crime lab are provided in the previous section, "Internal Coordination.")

The Role of Prosecutors in Homicide Investigations

Successful homicide investigations rely on strong relationships and respect between investigators and prosecutors.¹³⁶ Studies have shown that the keys to a successful relationship between investigators and prosecutors include delineating clear roles and responsibilities, demonstrating a respect for one another's expertise, viewing the relationship as reciprocal, and understanding that both organizations are working towards the same goal.¹³⁷

Challenges to Coordination in Homicide Investigations

Challenges to coordination in a homicide investigation can arise, even in places where there are strong relationships between police and prosecutors. Many of these challenges center on three broad issues:

- the role that prosecutors should play in the investigative process;

136. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

137. Ibid.

- differences in opinion regarding the strength of evidence needed to make an arrest; and
- a lack of formal and informal information-sharing protocols between prosecutors and homicide investigators.

Role of Prosecutors in Investigations: Regarding the role that prosecutors should play in the investigative process, jurisdictions have adopted a number of different approaches. In some places, prosecutors are very hands-on and respond to every crime scene, observe every witness interview, and participate in every briefing.¹³⁸ In other places, prosecutors respond to a scene and provide consultation only when requested by police investigators.¹³⁹

Regardless of the approach used, it is important that leaders from the police agency and the prosecutor's office reach an agreement on the role that prosecutors will play in investigations. Leaders should seek input from the prosecutors and investigators in the field on what would be best for investigations. The steps that a prosecutor is required or authorized to take during the investigation – e.g., responding to the crime scene, sitting in on witness interviews – should be formalized in agency policy and consistently followed. If it is agreed that prosecutors will take a hands-on approach to investigations, police investigators should be briefed on how to incorporate prosecutors into their work and how this approach can benefit their cases.

Decision-Making Authority over Arrests: In many jurisdictions, the prosecutor's office has final authority over decisions regarding arrests, especially in homicide cases. In practice, this means that a prosecutor must review and approve a police investigator's application for an arrest warrant prior to it being issued. If a prosecutor determines that there is not enough evidence to support the warrant, the prosecutor will instruct the investigator to conduct additional follow-up.

From the perspective of some police investigators, giving prosecutors authority over decisions regarding arrests makes it difficult to make arrests in homicide cases, because the prosecutor may require a degree of evidence that far exceeds probable cause before authorizing an arrest warrant. Some prosecutors have confirmed that when reviewing a case to determine whether an arrest is warranted, they typically do consider whether enough evidence exists to secure a conviction, not just to arrest the suspect.

For example, a prosecutor may decide to not authorize a warrant in case involving just one witness, especially if the witness's character is in question in any way (e.g., previous arrests, involvement in criminal activity, hesitancy to cooperate). However, some investigators believe that it is easier to secure witness cooperation *after* a suspect has been arrested, as the witnesses are less fearful of retaliation if the suspect is no longer on the streets.

These differences in opinion over how much evidence is needed to secure an arrest can create tension between police investigators and prosecutors. Recommendations for addressing this issue are discussed later in this section.

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138. Ibid.

139. Ibid.

Strengthening Collaboration between the Homicide Unit and the Medical Examiner's Office: Washington, DC

Dr. Jennifer Love is a forensic anthropologist and the ID Unit Supervisor for the Washington, DC Office of the Chief Medical Examiner (OCME). Prior to joining the DC OCME, Dr. Love spent eight years as the Forensic Anthropology Director in Houston, Texas. Dr. Love received her doctorate from the University of Tennessee in 2001.

The following is excerpted from Dr. Love's presentation at the PERF/BJA Homicide Investigations meeting held on January 31, 2017.

The Medical Examiner's Role in Homicide Investigations

The Medical Examiner determines the cause and manner of death for cases under our jurisdiction. We also serve the public safety function of monitoring diseases and other threats. Any homicidal death or suspected homicidal death that occurs in the District of Columbia is under our jurisdiction. For each of these cases, we do a full external examination, autopsy, and additional analysis such as toxicology screens.

When a homicide occurs, our office conducts an independent investigation at the crime scene, unless the victim has been taken to a hospital. Our investigators respond to the scene, take photographs to document the scene, and create a written report independent of the police report.

We also work directly with the Crime Scene Investigation Unit, which is a unit within the DC Department of Forensic Science. We work with them to ensure that all of the evidence associated with the victim's body is properly collected and transferred according to chain-of-custody rules.

My specific role as a forensic anthropologist is to consult on cases when bone trauma is involved. I'll help determine who the individual is, especially when working with skeletal remains, and also try to understand what occurred at the time of death by reconstructing bones and forces associated with the trauma.

Information-Sharing Protocols

One of the primary ways in which we share information with the police department is during the **autopsy process**. Homicide detectives often attend the autopsy, allowing real-time information sharing between the pathologist and detective. This benefits both sides by informing the pathologist of what specific questions are being asked and providing the detective an understanding of what is being found on the body. By attending the autopsy, the detective is given information that may be helpful when speaking to witnesses or searching for additional evidence.

Additionally, the OCME has a daily meeting to triage cases and determine what type of exam will be done on each case. Staff from the Department of Forensic Science attends the meeting and provides a list of evidence that they want collected during the exam. This interaction allows for a dialogue between the agencies ensuring that the approach to the case meets the needs of the various agencies. This dialogue provides the opportunity to gain the perspective of several individuals and develop a sound game plan before starting the exam.

The DC OCME also has taken the lead on developing a **Data Fusion Center**. The goal of the Data Fusion Center is to compile district wide data that is important in monitoring health risks to the community. An example is the recent increase opiate-related deaths. Being able to quickly report to the police and community leadership where concentrations of deaths are occurring is crucial to maintaining a healthy and safe city. In return, OCME is prepared to respond to the needs of the police and community leadership. The office staffs an epidemiologist whose role is to compile

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information and push it out to our partner agencies. OCME also oversees the Child Fatality Review Board and is initiating an Elderly Review Board. The information gathered through these boards speaks to the risks facing our vulnerable populations and is presented to the police, community leadership as well as the public.

Overall, we have a good relationship with the DC Metropolitan Police Department (MPD). We don't have a single database system; we share information, but we don't necessarily have easy access to each other's information. **This allows some independence between our two agencies, and I think that the OCME having an independent analysis from the police department is very important.** It's important for preserving the integrity of our investigations, which is ultimately good for the community.

Providing Training for Homicide Investigators

OCME provides training to police investigators, including detectives in MPD's Homicide Unit. Most recently, we offered a course on investigating child deaths that involved MPD. We also participate in MPD's "Homicide School," the two-week training that they provide to new homicide detectives. During the Homicide School, we share information about the medical examiner's capabilities, functions, policies, and limitations. We also talk about what kinds of results they can expect from us, what they may be looking for from the body during an investigation, and how we can help answer their questions.

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Information-Sharing Protocols: Another obstacle to coordination in many jurisdictions is a lack of informal and formal information-sharing protocols between homicide units and prosecutors. For example, although homicide detectives often engage in frequent communication with line prosecutors, there is often a need for stronger communication between homicide unit supervisors and supervisors in the units that prosecute homicide cases. This will help establish a more productive relationship, set a positive tone for the respective units, and help supervisors proactively address any potential problems that arise.

"I always liked working closely with prosecutors. They're going to have a different perspective and think of things that I hadn't thought of that can help build a strong case early on. For example, a prosecutor may tell me, 'This is a decent case, but if you do XYZ to corroborate this witness statement before you make an arrest, then it will be a better case.' This can save us a lot of time later on. Bringing prosecutors in at the ground level and getting their input usually makes for a better case in the long run."

– James Trainum, Detective (Ret.), Washington, DC Metropolitan Police Department

Recommendations: The Role of Prosecutors in Homicide Investigations

Recommendation #68: Top officials from the police agency and the prosecutor's office should strive to maintain a frequent and open dialogue about their goals, capabilities, limitations, and expectations for one another.

- Officials should strive to build a strong working relationship, built on respect and reciprocity, and emphasize the importance of this relationship throughout all levels of their organizations.¹⁴⁰

Recommendation #69: Leaders from the homicide unit and the prosecutor's office should explore strategies for improving communication and coordination on homicide investigations. Potential strategies may include:

- Providing homicide detectives with training on the prosecutor's office policies and relevant case law. Training should also include how to produce, document, and present evidence in a way that strengthens its value in court. Homicide detectives should be encouraged to attend any relevant trainings that the prosecutor's office holds for the police department.
- Promoting regular communication between Homicide Unit sergeants and prosecutors. Homicide Unit sergeants should also attend intelligence-sharing meetings hosted by prosecutors, and should host their own intelligence meetings to share information.
- Holding weekly meetings between prosecutors and homicide detectives to promote a positive relationship, facilitate information-sharing, and discuss ongoing cases. Homicide unit leaders may want to request that the prosecutor's office assign a prosecutor to meet with homicide detectives to review cases and determine what steps must be taken to enhance investigations. This strategy has been implemented in a number of agencies and has helped clarify for detectives what prosecutors need concerning investigations.

Recommendation #70: Homicide unit policies should outline a specific process for homicide detectives to follow when presenting a case to the prosecutor's office for an arrest warrant.

- The process should include the following general steps:
 - The detective completes a report that summarizes the investigation and details the probable cause justification. A copy of this report is added to the case file.

140. Ibid.

- The detective reviews the case and the probable cause justification with the detective's sergeant and lieutenant. If the reviewing supervisor believes that additional investigation is needed prior to submitting the case to the prosecutor, the supervisor should put the necessary tasks and updated investigative plan in writing. The list should be added to the case file.
- The detective should document all contacts with the prosecutor in an official contact log, which should be made part of the case file.
- After submitting the case to the prosecutor's office, the detective should document the prosecutor's response, including any follow-up investigative items requested by the prosecutor that must be completed before a warrant is authorized. This document should be added to the case file.
- Supervisors should review whether detectives follow this procedure, and it should be part of a detective's formal evaluation. (See *Recommendation 34*)
- If there are tensions between the homicide unit and prosecutors regarding how cases are reviewed or how arrest decisions are made, it might be helpful to bring in an outside reviewer, independent from both the police agency and the prosecutor's office, to conduct a systematic review of all homicide cases in which the prosecutor's office declined to authorize charges or an arrest warrant, despite the detective's belief that probable cause existed.
 - Ideally, this review would span multiple years and would use a set of objective evaluation measures to determine whether the cases were properly rejected.

Recommendation #71: Leaders from the police agency, including homicide unit supervisors, should work with officials from the prosecutor's office to implement a formal policy that details the prosecutor's role in homicide investigations and outlines the process for ongoing follow-up between detectives and prosecutors throughout the duration of a case.

- At a minimum, the policy should specify:
 - Whether and when prosecutors should respond to the scene of a homicide, and the role that the prosecutor will play while on the scene
 - Policies and procedures that prosecutors must follow in order to ensure that the crime scene is properly secured and preserved
 - Whether and when prosecutors should sit in on interviews/interrogations conducted by homicide detectives, and the role prosecutors should play during interviews
 - Guidelines for information that prosecutors and detectives should share while on the scene
 - Required follow-up communication throughout the case; e.g., meetings that should occur at regular intervals (in addition to any ongoing informal discussions)
 - The process for documenting ongoing follow-up regarding the case

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Strengthening Collaboration between the Homicide Unit and Prosecutors: Houston, TX

Lt. John McGalin has been with the Houston Police Department (HPD) for 21 years. He has served for 11 years on HPD's Homicide Unit, first as a sergeant and now as a lieutenant.

Matthew Peneguy is an Assistant District Attorney with the Harris County (TX) District Attorney's Office, where he worked for 10 years. For the last several years he has served as the District Court Felony Chief assigned to the Major Offender Division, which provides assistance to police on active investigations and participates in charging decisions on all HPD homicide cases. Mr. Peneguy has prosecuted more than 50 first-chair trials.

The following is excerpted from a presentation given by Lt. McGalin and Mr. Peneguy at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

Lt. John McGalin, HPD Homicide Unit

We have a very close relationship with our prosecutors, and we usually involve them pretty early on in an investigation. We share the same primary goal, which is to get perpetrators off the street. If we have probable cause to make an arrest, then the prosecutor is usually going to tell us to go for it. They are always willing to work with us and give us advice on how to make a case better.

One of the key factors to our strong relationship is having a good dialogue. Several of the detectives in our unit have worked with this same group of prosecutors for years, and so there is definitely a level of trust that has been built up over years of trials and mutual decision-making.

It also helps that the prosecutors trust we aren't going to bring them cases unless we truly believe that we have probable cause. The prosecutors know that our team has a good understanding of what probable cause is. We train on probable cause, on how to corroborate one-witness cases, and on how to testify in court. This goes a long way in making prosecutors feel comfortable when we bring them cases.

Matthew Peneguy, Harris County (TX) District Attorney's Office

I'm lucky to have grown up in an office that's encouraged a culture of cooperation with the police department. I work with the Major Offenders Division, which is focused on assisting the police department on active investigations. We give them advice on warrants, and work with them on all charging decisions. We make ourselves available pretty much 24/7 to answer questions and give advice. I think this kind of service is important, because it builds better relationships and better cases.

One of the big questions in a lot of jurisdictions is whether the prosecutor should go out to the homicide scenes. I know it works well in some places, but our office doesn't really stress for us to go out to the scene. We feel that if HPD is doing its job, we don't really need to be there. We know that those detectives have investigated more crimes than we ever will, so me being at a scene isn't going to solve the case any faster.

It's more useful for me to be back at my office, working on search warrants to get into a house or get data from a cell phone. I'm focused on being responsive to legal questions, not reinventing the wheel on how to do a homicide investigation.

- The process for submitting the case to the prosecutor for review (See Recommendation 70)
- The benefits of having a prosecutor at the scene of a homicide may be best realized if the prosecutor who responds to the scene is also responsible for prosecuting that case. Prosecutors may consider implementing this assignment system in homicide cases.

The Role of the Community in Homicide Investigations

It is critical that police agencies – including homicide unit personnel – build strong relationships with members of the community. These relationships are important for promoting an agency’s overall community policing goals, and they can help ensure that members of the community feel comfortable coming forward to offer information or otherwise assist with a homicide investigation. Securing cooperation from family members and witnesses is often the difference between closing a homicide quickly and it remaining open for an extended period of time.

The importance of witness cooperation to solving homicide cases is supported by research, which has found that having a witness at the scene who is willing to provide valuable information is associated with higher rates of case closure.¹⁴¹ BJA’s best practices guide states: “If there is a barrier of distrust that precludes widespread substantive information-gathering, the investigation will be limited.”¹⁴² In reviewing homicide case files for this project, PERF found that in one site, cases with witness cooperation were more than 3.5 times more likely to be cleared than cases without cooperation.

In many places, however, it can be difficult to secure cooperation from members of the community on homicide investigations. Many potential witnesses may fear that coming forward will lead to retaliation from others in the neighborhood. People may also fear being labeled as a “snitch” or have a general distrust of the police.

“I think one of the things that has made us more effective in solving gang-related homicides is getting cooperation from people in the community. Most of the people we interact with on street-level murders don’t trust the police; they don’t want to be ‘snitches’; they don’t want to get involved with the criminal justice system. But our detectives have the ability to talk to people on the streets and get them to work with us. It also helps that the LAPD’s community support and involvement in the community has improved tremendously over the past 20 years. But really, it is the ability of the individual homicide detective to connect with people that makes the difference.”

– John Skaggs, Detective, Los Angeles Police Department

141. Wellford & Cronin (1999), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>.

142. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

Building strong overall relationships with members of the community can help improve public trust and encourage greater witness cooperation in homicide investigations. The recommendations below provide promising strategies for strengthening police-community relationships, with a focus on fostering greater community assistance in investigations.

Recommendations: The Role of the Community in Homicide Investigations

Recommendation #72: Police agencies should conduct a survey of witnesses, family members and associates of homicide victims from previous homicide cases to identify problem areas and determine possible solutions to improving relationships. Learning how to improve the process of working with witnesses, family members, and friends of homicide victims will improve the chances of identifying homicide suspects.

Recommendation #73: Police agencies should take steps to strengthen services offered to crime victims, and homicide unit personnel should be closely involved with the agency's victim advocacy efforts.

- Victim advocates can assist detectives in maintaining frequent contact with the family and can be advocates for the detectives, so the family will feel more comfortable bringing vital information forward to authorities. When a case is closed with an arrest, the victim advocate can keep the family informed about court proceedings. This will allow the detective to maintain a positive relationship with the family as the case moves through the court system, which is important, because additional information can come from the family after an arrest is made and the case proceeds to prosecution. Continuing this relationship with the family can also be beneficial in new cases that may involve the same family or associates of the family.
- One promising approach is to embed a victim advocate or social worker directly in the homicide unit to provide advocacy and assistance to homicide victims' families and friends. These services can be very valuable to the homicide unit, both in terms of victim advocacy and in freeing up detectives to focus on investigative tasks.
- The victim advocate, as well as the homicide detective and prosecutor assigned to the case, should regularly meet with a victim's family, starting as soon as possible after a homicide. Such an organized, comprehensive response often comforts the family by letting family members know that homicide cases are given the highest priority.

Recommendation #74: Police agencies should require all homicide detectives to receive training in death notifications. If possible, the primary detective assigned to the investigation should make the notification to the victim's family to establish a relationship in the early stages of the investigation.

- Although death notifications are emotionally challenging for the detective, this initial contact with the victim's family creates an opportunity for the detective to develop a strong and consistent relationship with the family that may continue throughout the investigation.
- Death notification training should be mandatory for all new homicide detectives, and experienced detectives should mentor new detectives in this area.

Recommendation #75: Police agencies should strengthen overall efforts to implement strong outreach programs and other community-wide initiatives aimed at improving the relationship between police and the community. Homicide unit personnel should be involved in these efforts.

- Strengthening the community's trust in police is a key step towards increasing the willingness of community members to cooperate with police investigations.¹⁴³
- Many police agencies effectively use social media (e.g., Facebook and Twitter) to share information with the community and solicit investigative tips. This is often done through the agency's Public Information Officer (PIO). The homicide unit should work with the PIO to disseminate information about cases and arrests via social media platforms.

Recommendation #76: Police agencies should strengthen protections for witnesses who come forward to provide information regarding a homicide investigation. These services can help address safety and retaliation concerns among potential witnesses, which will promote greater cooperation.

- Agencies should create and update written policies for the unit(s) dedicated to relocating/protecting witnesses. The policies need to contain the following:
 - Request for service information
 - Legal standards
 - The unit's capabilities and limitations
 - Protocols and requirements for monitoring witnesses
 - Standards and process for qualifying a witness for relocation
 - Duties and responsibilities of officers and supervisors.

143. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

- Agencies should also ensure that there are sufficient resources to provide safe housing and transportation for witnesses who are being monitored or relocated by the agency.

Recommendation #77: Police agencies should strengthen their systems for providing monetary rewards for tips and other information about homicides. Many successful homicide units have found that using a reward system, such as Crime Stoppers, can have a positive impact on homicide investigations.¹⁴⁴ These systems must be appropriately funded to provide adequate incentives for people to come forward.

- Agencies should continuously advertise the tip lines or reward services within the community and stress the fact that people who come forward with information can remain anonymous.
- Some reward systems, such as Crime Stoppers programs, have a formal public information plan that police agencies can use to share information with the community. These campaigns can include public service announcements, video re-enactments, printed materials, billboard messages, and a social media presence.

“Our department has a victim advocate who is embedded directly in the Homicide Unit. She has a desk in the Homicide Unit’s offices along with the detectives. We mandate that she be involved in every violent death. I can’t say enough positive things about this approach. It really bridges the gap between our detectives and victims’ families, and it helps provide care for the people who we serve. I would recommend adopting this service to any department in the country that doesn’t already do it.”

– Edward Tomba, Deputy Chief, Special Operations/Homeland Security, Cleveland (OH) Division of Police

144. Ibid.

Improving the Response to Victims and Loved Ones: The Chicago Survivors Program

In 2010, Joy McCormack founded Chicago's Citizens for Change, Inc. (CCC) after the tragic loss of her son, Francisco "Frankie" Valencia, in a random shooting. Frankie was a student at DePaul University and was dedicated to a life of service and civic engagement. CCC advocates for reforms in how the aftermath of violence is recognized and addressed. As part of this effort, CCC launched the Chicago Survivors program, which seeks to address the needs of surviving families who have been harmed by violence. This program offers crisis intervention services and support, advocacy for family members' rights, peer counseling and community events, and training for law enforcement agencies and other criminal justice stakeholders. More information about this program can be found at: <http://www.chicagosurvivors.org/>.

Eugene Roy retired from the Chicago Police Department (CPD) as the Chief of Detectives after a career of more than 33 years with the department. As Chief of Detectives, he was responsible for the operations of the Bureau of Detectives and oversaw the implementation of a number of innovative programs to improve the relationship between CPD and the many diverse communities it serves. Chief Roy has served in a number of assignments throughout his career, including patrol officer, narcotics investigator, homicide detective, and supervisory and leadership roles.

The following is excerpted from a presentation given by Ms. McCormack and Chief Roy at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

Joy McCormack, Founder and Board President, Chicago Survivors

We hear a lot about the divide between community and law enforcement, and we believe that services like ours can help bridge that divide. We do so by strengthening community cooperation with investigators, increasing transparency and police accountability, and reducing victim and witness intimidation and retaliatory violence.

The History of Chicago Survivors

I stand before you as a survivor. My son, Frankie Valencia, was a senior in college when he was senselessly murdered by gun violence in 2009. Like many people, we believed that gun violence was something that happened to other people. We couldn't imagine that it could happen to our son, who was a college student, who was nominated to intern at the White House, who was going to receive an award from the Governor of Illinois the weekend he was buried, and who wanted to be a role model for other young men of color. And yet it did happen.

My family went through two murder trials in two years. Two of the five prospective perpetrators were charged. The first of the two was sentenced to 90 years, and the second sentenced to 70 years. In the aftermath of this experience, I learned that most families in our country receive no crime victim services. And that's because those services are often only made available to them once cases are solved, and are usually limited to navigating the court process.

This gap is why we started this program in 2010. Since then, we have served more than 1,000 families. But we aren't just focused on providing crime victim services. **We know that we have to address the systems that the families confront in the aftermath of violence.** To do that, we've trained homicide detectives, prosecutors, medical examiners, and the staff at area trauma centers and hospitals.

When I met with Eugene Roy, who was the Chief of Detectives at CPD at the time, he welcomed us in and he said, "We want you to come in as survivors and start training our homicide detectives." And it was that innovation and that openness to change that really made this possible.

Understanding the Needs of Survivors of Violence

The grief that follows the loss of a loved one to violence isn't the same kind of grief that follows a loss due to illness or old age. We are talking about traumatic grief, which is not experienced in the same way. Traumatic grief has huge consequences on families who have to deal with the emotional, physical, and financial toll. It can be debilitating for surviving adults and youth, and debilitating for family dynamics. Then you multiply that and you can understand how it affects communities that are saturated with violence.

It's important to remember that immediate family members of homicide victims are considered crime victims under the law. Crime victim services usually fall into two categories: those that are designed to repair or lessen the harm caused by the crime, and those designed to affect the criminal justice agencies or other systems that crime victims experience. Our organization tries to do both.

We strive to ensure that victims and survivors are treated with dignity and respect. We also want to help families cope with PTSD and complicated grief. **One way we do that is by contracting with the Chicago Department of Public Health to provide crisis intervention services to survivors of violence during the first 48 hours.** That includes trying to help families through the initial chaos at a crime scene or hospital.

After 48 hours of crisis response and intervention, the survivors are transferred to a family support specialist who provides supportive counseling and case management for six months.

After six months, families are transferred to the Community of Survivors, where they receive peer support, advocacy opportunities, and community events. We also provide youth services, court accompaniment, and training on the systems they'll be facing. We also want to protect families from predatory practices by funeral homes, invasive or stigmatizing press coverage, and overall discriminatory treatment.

Bridging the Gap between Law Enforcement and Communities

We believe that because we are an independent victim services organization, we can liaise between the community and the criminal justice system. **In order to do this work, the most important relationship that we have is with the police department. And to have that relationship, we have to function with absolute integrity.** That means respecting each other's perspectives and having honest discussions about what works and what doesn't. It also means identifying the right people to be involved in the conversation, having an openness and creativity about how we resolve issues.

There are many barriers to obtaining community cooperation. **One of these barriers is of course a lack of trust in police.** When people don't trust the police to solve cases, or to keep them safe, they aren't going to come forward with information.

There are a lot of little things that homicide detectives can do to help build trust and promote community cooperation. **We think of this as turning low-priority tasks into low-hanging fruit.**

For example, last year we worked with a family whose son was murdered. He wasn't gang-affiliated, but no suspect had been arrested. The family was afraid, so they asked the police department to send a squad car to drive by during the funeral. The police were happy to do so, but seeing the squad car triggered a prejudicial response from the funeral director, who canceled the funeral and burial. This might be a normal fear response, but it is also discrimination and illegal.

The CPD homicide lieutenant stepped in and helped talk the funeral director into reversing the decision. And because of the lieutenant's actions, a relationship was established, and so the family – and the community that surrounds the family – is going to be more willing to be cooperative with the police.

Another example of how police can turn low-priority tasks into low-hanging fruit is by helping families gain access to their loved one's possessions. This might be a low-priority task on the

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detective's to-do list, but it can have a real impact on the family and can make a huge difference in terms of community-police relationships.

Sometimes, all a family needs is to be updated on the status of an investigation. Even if you can't talk about the details of the investigation, you can still talk about the progress. It truly is the little things that can mean the world to a family going through this trauma.

Eugene Roy, Chief of Detectives (Ret.), Chicago Police Department

The most important thing to remember as law enforcement officers is that we have a responsibility to the families who have lost loved ones to violence. And by meeting that responsibility, we're going to be able to earn their trust and cooperation and ultimately do our jobs better.

Working with groups like Chicago Survivors to serve the needs of families isn't just effective; it is also the right thing to do.

As Joy said, families who have lost loved ones are experiencing the very worst moment of their lives. And to compound that, they are often being revictimized by the people who are supposed to help them – funeral homes, insurance companies, their own friends in the community. And often, the homicide detective becomes the lightning rod for everything bad that the family has gone through. So we often have to work harder to build those relationships and earn that trust.

Strategies for Building Community Relationships

When I was at CPD, our detectives utilized both formal and informal strategies for building community trust and relationships.

For example, families will inevitably become frustrated and angry at times over the course of a lengthy investigation. This often happens when we aren't able to successfully test physical evidence. This is known as the "CSI Effect," when people have perhaps unrealistic expectations about what detectives can do during investigations. **We tried to formalize and institutionalize the lines of communication in an effort to have an honest, open dialogue with families about our capabilities and limitations.** This helped ease that frustration and rebuild some of the trust we may have lost.

Sometimes our **detectives participate in community vigils** for victims of violence. Often these are impromptu memorials set up by the families with balloons, candles, and stuffed animals. These vigils are critical to the healing process of families.

Something that is also very important is **flyer distribution**. We may have a picture, or a sketch, or a video, and we want to get that out to the community face-to-face. But we have to do that the right way, and it is better if we can do that in conjunction with the survivors.

We've also found that it is critical to **de-escalate interactions with family members** that may get too tense or emotionally charged. We need to fix the damage before it becomes worse, and to respond rather than react. Bring that tension down and have an open line of communication.

Joy talked about the importance of helping families get back the victim's possessions – we've found that this is particularly important when that possession is the family vehicle. That car might be critical to the family's economic livelihood, so we need to do what we can to help them get it back.

Working with Chicago Survivors

I think that working with Chicago Survivors has changed how our detectives relate to victims' families and survivors of violence. That organization has really helped us understand the needs of survivors and has been an important liaison between the CPD and the community.

I talked about the importance of de-escalating interactions with family members. The Chicago Survivors staff is trained in this area, so this is another way they are a valuable resource. **They also**

know how to de-escalate community tensions, such as at crime scenes. Often when you go to a crime scene, it isn't just the family who is there, but also 30 people from the community, and the outrage is starting to build. When community members see Chicago Survivors on the scene, they know that they are there to support the family, and it has helped ease tensions quite a bit.

We also collaborated with Chicago Survivors to set up **unsolved case reviews**. In conjunction with the Chicago Survivors we identified cases that had been unsolved for more than a year, and set up a process where families could sign up with Chicago Survivors to join the detectives in a quiet, private room in a safe, neutral location such as a school or church to have a frank discussion about the progress of the case. The meeting is a safe space where no one feels threatened or put on the spot. This approach helped address one of the biggest sources of frustration among families, which is the belief that because a case is unsolved, detectives aren't giving it 100%.

Chicago Survivors also works with the police on **anti-retaliation efforts**. During the first 48 hours after an incident, the organization's crisis responders conduct a retaliation assessment. The assessment looks at the victims' loved ones and determines whether there has been any plan for retaliation, and if so, who is being recruited, whether the involved individual(s) have access to guns, and if the individuals are using drugs or alcohol.

If the assessment indicates a high risk of retaliation, then the crisis responders will step in and try to bring down the level of emotion. The crisis responder will also notify his or her supervisor, who notifies the CPD Patrol Bureau, detectives, and the felony crime desk. It is then in our hands to exercise an intervention.

One important point is that Chicago Survivors is funded by the Chicago Department of Public Health and is *not* part of the CPD. **This strengthens their ability to be independent, which is critical in the eyes of the community.** So for police agencies that are thinking about entering into these kinds of partnerships, know that it doesn't have to be a drain on your budget. You can coordinate with your local public health organizations or social service providers to support these services.

CHAPTER 9.

Homicide Unit Equipment and Technology

Finding: Many homicide units lack the tools and technologies necessary to perform basic investigative functions. Addressing these needs would improve the efficiency and effectiveness of homicide investigations.

In many police agencies, the equipment and technology provided to the homicide unit are outdated, or the unit does not have technologies that are available in other agencies. When a homicide unit does not have the tools to meet the needs of a modern homicide investigation, it can limit detectives' abilities to perform their jobs effectively and efficiently.

Police leaders should review the resource needs of the homicide unit, as well as other investigative and support units within the department, and should place a high priority on investing in updated tools to assist with investigations.

The recommendations below are specific to homicide units. Recommendations for improving the resources in other units within a police agency are discussed in *Recommendations 48-67 and 80-89* of this report.

“As a police chief, you often have to make tough decisions about how to allocate resources. You have to balance putting resources into uniform patrol and curbing street crime on one hand, with investing in investigative resources that will be used after crimes are committed on the other hand. This is one reason it is good to participate in projects like this with PERF and BJA – it allows us to bring in a fresh set of eyes to look at these decisions and help us improve how we manage our processes. The impetus for change has to come from within, but it can be helpful to get ideas from the outside about what you can be doing better. Anytime we can endeavor to learn from each other and improve, I think it’s a great thing.”

– Rodolfo Llanes, Chief of Police (ret.), Miami (FL) Police Department

Recommendations: Homicide Unit Equipment and Technology

Recommendation #78: Police agencies should invest in technological tools that greatly improve the efficiency and effectiveness of homicide investigations. These include:

- **Tools to expand the field capabilities of homicide unit detectives, such as tablets, smartphones, or other mobile devices.** These tools can allow detectives to perform important tasks while at the scene of an investigation or otherwise out of the office, including recording witness statements, searching agency databases, and accessing emails and the internet. Having the ability to perform these functions can help improve the efficiency of investigations, reduce the workload for detectives carrying heavy caseloads, and help detectives communicate with one another and with other agency personnel.
- **Tools to analyze social media communications.** The ability to analyze communications conducted via social media (e.g., Facebook, Twitter, Instagram) is increasingly important for criminal investigators. While social media analysis is sometimes conducted by an agency's crime analysts, it is helpful for homicide detectives to also have access to and training on tools that allow them to perform this function.
- **Tools to improve information sharing.** Technologies that can improve the flow of information in homicide cases include: crime-scene drawing software; technology to allow agency communications personnel to immediately email recordings of 911 calls to detectives; and access to databases that allow detectives to immediately verify the locations of suspects who are on court-ordered GPS monitoring.

Recommendation #79: Police agencies should invest in upgrades to homicide unit facilities and vehicles.

- For example, police agencies should ensure that homicide detectives have access to enough interview rooms, in order to avoid requiring witnesses to wait in line to be interviewed. Interview rooms should be equipped with upgraded video equipment to ensure that interrogations are accurately and consistently recorded.
- Police agencies should also ensure that homicide detectives have access to a sufficient number of reliable vehicles, to avoid delays in how quickly detectives can respond to a homicide scene. Research shows that there is a relationship between case clearance and whether detectives arrive at a crime scene within 30 minutes of the initial call.¹⁴⁵

145. Wellford & Cronin (1999), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>.

CHAPTER 10:

The Future of Homicide Investigations: Digital Evidence, Crime Analysis, and Beyond

Finding: Because of the prevalence of technology such as smartphones, social media, body-worn cameras, and ubiquitous video cameras, today's homicide investigations are much more complex and require new skill sets for detectives. Police agencies must adapt to these changing needs by expanding their digital evidence and crime analysis capabilities, which includes ensuring that these units have the proper training, staffing, and resources.

Today's homicide investigations increasingly rely on tools and technologies that did not exist two decades ago. In most cases, homicide victims and suspects have generated a great deal of personal information on their computers, smartphones, and social media accounts, all of which can yield a wealth of evidence to investigators. Investigators must also often sift through mountains of video footage collected from a variety of sources – including public and private security cameras, officers' body-worn cameras, and cell phone videos taken by private citizens – to determine if it contains relevant evidence. Additionally, advances in crime analysis technology are now allowing investigators to identify crime patterns and draw critical links between victims, suspects, and witnesses that can help not just solve crimes, but also *prevent* future killings and non-fatal shootings.

Unfortunately, many police agencies do not yet have the capabilities and training to fully leverage these new technologies. Collecting and analyzing digital evidence, along with performing comprehensive crime analysis, requires an investment in staffing, training, and equipment that goes beyond what was required for a traditional homicide investigation. And while it is still important for investigators to be skilled at soliciting information from people in face-to-face encounters, it is now also critical that homicide investigators have a whole new set of skills – namely, the ability to understand a variety of technologies and the part they play in solving crimes.

This chapter discusses the increasingly important role that digital evidence and crime analysis are playing in modern homicide investigations, as well as the challenges that these tools can present. This chapter also provides recommendations for overcoming these challenges to ensure that police agencies adapt to the changing nature of investigations.

“The way homicide cases are conducted now is completely different than when I was a homicide detective. Back then, the main task of a homicide investigator was to go out and talk to people in person – potential witnesses, the victim’s family and friends, the victim’s coworkers. You had to be good at talking to people and getting information from people face-to-face. Now, a typical homicide victim or witness will have multiple personal technology devices – like an iPad or a smart phone – and so detectives will have to download cell records, get subpoenas for text messages, go through phone logs. This has created a lot of challenges – how do we filter through all the data? How do we balance evidence with privacy? How do we protect the data? But on the flip side, this data allows us to almost immediately establish a timeline of the victim’s or suspect’s movements, which is incredibly helpful. There is a lot of information there, but you need layers of expertise and technical support in order to build the case.”

– Richard Perez, Commander, Fairfax County (VA) Police Department

The findings and recommendations presented in this section are drawn from existing research and information gathered during PERF’s site assessments and the January 2017 project site convening. They also reflect discussions held during a PERF meeting held on August 9, 2017, in Washington, DC. This meeting brought together nearly 200 police executives, investigators, federal officials, researchers, and other experts to examine the changing nature of crimes and investigations in light of these technological advancements.

Digital Evidence

Digital evidence, including video footage and forensic evidence from computers and cell phones, is increasingly valuable to criminal investigators.¹⁴⁶ The public’s growing reliance on smartphones and other personal electronics means that these devices contain a wealth of personal information,¹⁴⁷ and the proliferation of public and private security cameras – as well as video features on personal smartphones – means that more and more criminal incidents are being captured on video. As a result, investigators are increasingly relying on digital evidence to provide critical information about crime victims and suspects.¹⁴⁸

The personnel responsible for collecting, extracting, and analyzing digital evidence varies among police agencies. Many larger agencies have specialized units dedicated to collecting and analyzing digital evidence, while other agencies assign this responsibility to a handful of trained detectives from various investigative units, such as the homicide or gang unit. Some agencies also receive assistance from digital evidence experts who work out of regional fusion centers.

146. Goodison, Sean E., Robert C. Davis, and Brian A. Jackson (2015), *Digital Evidence and the U.S. Criminal Justice System: Identifying Technology and Other Needs to More Effectively Acquire and Utilize Digital Evidence*, Washington, DC: RAND Corporation, the Police Executive Research Forum, RTI International, and the University of Denver, available at http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR890/RAND_RR890.pdf.

147. Ibid.

148. Ibid.

Challenges with Digital Evidence

In 2015, PERF, along with the RAND Corporation, RTI International, and the University of Denver, released *Digital Evidence and the Criminal Justice System*, a comprehensive report that examined the use of digital evidence by police and others in the criminal justice system.¹⁴⁹ This report reviewed the various types of digital evidence, how digital evidence is extracted and analyzed, and the challenges presented by digital evidence, including privacy and legal concerns.¹⁵⁰

Many of the challenges identified in the 2015 PERF report were also experienced by the agencies that PERF assessed as part of this Homicide Investigations project. Many of these challenges revolve around the fact that, as compared to regular physical evidence (e.g., DNA or fingerprint evidence), digital evidence “has a wider scope, can be more personally sensitive, is mobile, and requires different training and tools.”¹⁵¹

First, processing and analyzing digital evidence requires specialized skills, training, and equipment that are beyond the capabilities of many police agencies. Additionally, there are often complicated legal requirements surrounding the collection of digital evidence, such as privacy concerns associated with information obtained from cell phones and computers. And because CCTV cameras are typically operated by a wide range of private businesses or government agencies, it is sometimes difficult for police agencies to obtain video footage quickly after a crime occurs, especially if it is not immediately clear who owns particular cameras or who can facilitate the downloading of video files.

It is critical that police agencies take steps to address these challenges and prioritize the use of digital evidence in criminal investigations, including homicide cases. Specialized units that handle digital evidence should have the staffing, training, and equipment needed to perform their duties, and agencies should promote strong coordination between these units and the case investigators. It is also helpful for homicide detectives and other investigators to be trained on basic digital evidence collection and analysis, particularly the legal requirements for obtaining search warrants for this type of evidence.

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149. Ibid. This report documents the discussions held during a 2014 workshop held by PERF and the RAND Corporation, with support from the National Institute of Justice, that brought together digital evidence experts, prosecutors, privacy advocates, NIJ officials, and industry representatives. This workshop was part of a larger ongoing NIJ project between PERF and RAND Corporation that looks at technology needs among law enforcement agencies.

150. Ibid.

151. Ibid.

The Role of Digital Evidence in Homicide Investigations: Milwaukee, WI

Detective Sean Lips has been with the Milwaukee Police Department (MPD) since 1995 and is currently assigned to the Intelligence Fusion Center – High Technology Unit. Over the past 13 years, he has had extensive training and experience with the seizure and forensic examination of computers, cell phones, and other digital evidence. Detective Lips is a member of the FBI Child Exploitation Task Force and the Wisconsin Internet Crimes Against Children (ICAC) Task Force.

The following is excerpted from Detective Lips' presentation at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

MPD's High Technology Unit

The High Technology Unit was started in 2004 and is now housed under the Intelligence Fusion Center. We provide support services for the entire Milwaukee Police Department (MPD), but our largest workload comes from homicide cases. The detectives working in the High Technology Unit were all hand-picked from our divisions, based on our knowledge of digital media and evidence.

My unit, as well as the Intelligence Fusion Center as a whole, utilize a variety of tools and technologies to assist with homicide investigations.

Real-Time Watch Center: We have a real-time watch center that operates each day from 5 a.m. through midnight. So if a homicide occurs, detectives can contact our watch center almost around the clock and ask with help looking up a phone number or tracking down information on a suspect. Homicide detectives also have access to all of the databases at MPD, and to the analysts who work out of the Fusion Center.

Social Media: Social media has really added a new layer to criminal investigations, including homicide investigations. Our unit has three people who are dedicated to monitoring accounts on Facebook and other social media sites. This can yield a lot of information about suspects and witnesses that you wouldn't have had before.

For example, we recently had a subject who was a witness in a homicide, and he gave us a story about the incident that we suspected was false. We were able to find one of his social media accounts and see that just before the shooting, he had posted something that completely contradicted the story he had given to us. We were able to confront him with the lie, which helped moved the case forward.

Cell Phone Data Extraction and Analysis: Cellebrite is a tool that extracts data from cell phones. You essentially just plug the phone into the **Cellebrite** device, and it spits the information out. It is good for extracting basic information, but sometimes you need to dig deeper. So we are also utilizing a tool called JTAG, which involves breaking open the phone and putting connectors on certain solder points to extract the information. The most advanced technology for extracting cell phone data is **Chip-Off**, which is good for getting past some of the password and encryption issues.

We also use **PenLink**, a technology that allows us to analyze cell phone data. When we do a data dump of a cell phone, the information automatically gets put into PenLink and we are able to run comparisons against other data to find the suspect's associates and connections. Our PenLink database is also tied to databases from our sheriff's office and the regional High Intensity Drug Trafficking Areas (HIDTA) office.

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The Crime Gun Intelligence Center (CGIC),¹⁵² ShotSpotter, and NIBIN: My unit works closely with MPD's Crime Gun Intelligence Center,¹⁵³ which is funded through BJA and is also located in the Intelligence Fusion Center. The CGIC is made up of ATF agents and MPD officers and detectives. Their mission is to implement strategies for preventing and responding to gun violence, especially through identification of gun violence hot spots.

One of the key tools used by the CGIC is **ShotSpotter** technology. With ShotSpotter, sensors are placed throughout a certain geographical area. The sensors can pick up on gunshots being fired and can almost immediately identify the time and location of the gunshots. This can really help improve the response to shootings, which is so important to preventing and solving violent crimes.

The CGIC has also allowed MPD to expand our ballistics testing and analysis capabilities, which are critical to solving many homicide cases. In the past, we would have to send all ballistics evidence to the state crime lab in order to see if there were any hits on the **National Integrated Ballistic Information Network (NIBIN)**.¹⁵⁴ That created delays, and so the ATF helped the MPD get our own NIBIN equipment. Now we can test our own evidence, which has really helped with turnaround time.

High Technology Unit Training

For those of us in the High Technology Unit, a lot of what we know comes from on-the-job training. But we also have received formal training from a few places. One is NW3C,¹⁵⁵ which is the National White Collar Crime Center. NW3C does trainings on things like cyber investigations and processing digital evidence. Another training resource that we've used is the National Computer Forensic Institute (NCFI),¹⁵⁶ which provides equipment, training, and other support for computer and cell phone forensics.

High Technology Unit Resources

One of the biggest challenges for police agencies is paying for the licensing and equipment that you need to work with digital evidence. For MPD, the licensing alone for the software we use could add up to probably \$40,000 to \$50,000 per year.

And we have to constantly upgrade our software and equipment to keep up with advances in cell phone and computer technology. When I first started doing this, we were mostly dealing with flip phones. A suspect's phone would have maybe four contacts and 20 text messages, and we could just take photographs of the data we needed. Now we've got to hook up wires

152. PERF, with support from the Joyce Foundation, published a case study of the Milwaukee Police Department's Crime Gun Intelligence Center. This case study includes more details about Milwaukee's CGIC. Police Executive Research Forum (2017), *The "Crime Gun Intelligence Center" Model: Case Studies of the Denver, Milwaukee, and Chicago Approaches to Investigating Gun Crime*, <http://www.policeforum.org/assets/crimegunintelligencecenter.pdf>.

153. A Crime Gun Intelligence Center is defined as: "An interagency collaboration focused on the immediate collection, management, and analysis of crime gun evidence, such as shell casings, in real-time to identify shooters, disrupt criminal activity, and prevent future violence. The primary goal of these centers is to identify armed violent offenders and suspects for investigation and prosecution. Other outcomes include: the identification of crime gun sources, efficient resource allocation, providing decision-makers with the most accurate crime data available, and increasing case closure rates, public safety, and prevention of gun crimes." BJA, <https://www.bja.gov/funding/NationalCrimeGun16.pdf>.

154. NIBIN is "A national network of ballistic imaging systems used to acquire, transmit, store, and compare digital images of ballistic evidence (spent bullets or cartridge casings), for the purpose of identifying evidence fired from the same firearm. This database is managed by the ATF." <http://www.policeforum.org/assets/crimegunintelligencecenter.pdf>.

155. National White Collar Crime Center, <https://www.nw3c.org/>.

156. National Computer Forensic Institute, <https://www.ncfi.usss.gov/ncfi/>.

to the motherboard of the phone in order to extract all of the data. It has gotten increasingly complicated and expensive. Just the machine alone for a Chip-Off is \$10,000, and that doesn't include the software and training that you constantly have to update.

Where does this money come from? It is a huge question that a lot of police agencies really struggle with. We get a lot of grant funding because we are part of the Internet Crimes Against Children Task Force, which helps. We also have utilized forfeiture money to keep our unit going.

Back in 2014 we participated in the digital evidence study with RAND and PERF,¹⁵⁷ and that really helped us articulate the equipment, software, and training that we needed. Since then, we've been able to work with our department leaders to create a budget that accounts for what we need each year to sustain.

In the end, we have to make sure that we are getting the evidence we need, and that we are also doing it in a way that will hold up in court. The only way to do that is to have the right equipment and to have the necessary training and certifications.

Working with the Homicide Unit

When my unit works with homicide detectives, one of our key tasks is to educate them on what we can and cannot do. Unfortunately, we aren't always able to extract data from a smartphone that a detective collects from a homicide scene. We may not have the right tools, or there may be legal obstacles. Homicide detectives need to have that information and understand what our limitations are.

That being said, one thing we do is try to educate officers and detectives on the steps they can take to increase the chances that we'll be able to pull evidence from a cell phone or other electronic device. For example, **we tell homicide detectives to be sure to get a fingerprint read from the victim** either at the scene or at the morgue, because we can often use that print to access locked smartphones through the phone's fingerprint scanner.

We also tell officers that when they get a phone from a suspect, they need to put it in airplane mode. This can help prevent someone from remotely wiping the data from the phone. With some phones, you can also wrap them in tin foil to prevent remote data wiping. Taking these steps can help ensure that the data is preserved for us to extract and analyze.

We also do our best to **give homicide detectives tools** to make it easier for them to sift through and get pertinent information from the data we give them. Sometimes we'll do an extraction and end up with 3,000 pages of evidence, just from one phone. We can't expect a detective to go through 3,000 pages of raw data – they just don't have the time. So we try to educate them on what to look for, and how to pinpoint what they need.

157. Goodison, Sean E., Robert C. Davis, and Brian A. Jackson (2015), http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR890/RAND_RR890.pdf.

Recommendations: Digital Evidence

Recommendation #80: Police agencies should develop written policies and procedures to govern the collection and processing of all cell phones, computers, video footage, and other electronic devices that are recovered as evidence.

- These policies should be applicable to any agency personnel who seize and analyze digital evidence, including patrol officers, investigators, and forensic technicians. Policies should direct personnel how to handle electronic devices prior to submitting them for analysis, and personnel should be trained on this topic.¹⁵⁸
- Written policies should include:
 - Directives on who within the agency is responsible for digital evidence collection, processing, and analysis. If there is a specialized unit dedicated to handling digital evidence, the agency should develop written policies and procedures to govern the unit.
 - The procedure for requesting digital evidence extraction/processing services
 - Standard departmental policies for collecting electronic devices recovered as evidence
 - Standard departmental policies for extracting data from electronic devices, including evidence located in a cloud database
 - Standard department policies and protocols for identifying security cameras at crime scenes and for requesting video footage from public and private operators of security cameras
 - Legal standards for searching and seizing evidence collected from electronic devices.
- When developing policies governing the recovery and processing of digital evidence, police agencies should consult best practices guides and policies from other police agencies. (See Appendix C for a list of resources.)
- All protocols for handling digital evidence, and for requesting digital evidence processing/analysis from other agency units, should also be included in homicide unit policies and procedures.

Recommendation #81: Police agencies should ensure that the unit(s) responsible for handling digital evidence have the staffing necessary to process and analyze this evidence in a timely and thorough fashion.

- To determine the appropriate staffing levels needed, agencies should review current caseloads and turnaround time for the various types of digital evidence.

158. Ibid.

Digital evidence should be processed and analyzed quickly enough so as not to delay investigations or run afoul of legal requirements.

- Police agencies should also consider training investigators in other units and patrol officers on how to perform basic digital evidence tasks.¹⁵⁹ This will help free up digital evidence experts to perform more complicated extraction and analysis.
- Some police agencies hire civilian personnel to assist with the collection, review, and analysis of digital evidence. Civilian personnel could also assist investigators with completing the documentation required to obtain evidence, including warrants and subpoenas.

Recommendation #82: Police agencies should ensure that personnel in the unit(s) responsible for collecting, processing, and analyzing digital evidence receive updated training and certifications.

- Training should include:
 - How to properly use the specialized equipment for digital evidence collection, processing, and analysis (see *Recommendation 58* below for more details about this equipment). Trainings should lead to certification when applicable.
 - Constitutional law and the legal standards for obtaining and analyzing digital evidence.
- Potential training sources include the U.S. Secret Service, which offers training for computer and cell phone analysis, along with the companies that manufactured the equipment used by the agency. Police agencies should consider exploring grant funding and other alternative funding sources so that personnel do not have to pay for their own training.

Recommendation #83: All investigators in the police agency, including homicide detectives, should receive training to understand the technical and legal issues surrounding digital evidence collection, extraction, and analysis, regardless of whether they routinely perform these functions.

- Training should include the protocols and legal standards for requesting extraction services, obtaining search warrants or court orders for digital evidence, and steps that should be taken to preserve cell phone evidence.
- Trainings could be conducted by trained personnel from the units that are primarily responsible for handling digital evidence (if a separate unit) and the local prosecutor's office.

159. Ibid.

Recommendation #84: Police agencies should ensure that they have the equipment to collect, process, and analyze digital evidence in a timely and thorough fashion.

- Processing digital evidence often requires specialized equipment that must be regularly updated as technology changes. For example, many police agencies use a Cellebrite machine to extract data from cell phones, but outdated Cellebrite machines may not be capable of extracting data from newer phone models. Agencies must invest in updated equipment to keep pace with technological advances.
- In addition to regularly updating equipment, police agencies must also ensure that they have enough equipment to handle the volume of digital evidence that is processed. A lack of adequate equipment can cause significant backlogs in evidence processing, which can greatly harm investigations.
- Police agencies must also ensure that personnel are trained on how to properly use the equipment and receive the necessary certifications when applicable. (See Recommendation 82 above.)

Recommendation #85: If digital evidence is handled by a specialized unit(s), police agencies should ensure that all other investigators throughout the agency receive training to understand that unit's capabilities, limitations, services, policies, and technologies.

Crime Analysis

Crime analysis, which is central to data-driven crime control strategies and tactics, involves using data, digital evidence, and other intelligence to identify patterns of crime, evaluate actions to address crime, anticipate emerging crime trends, and solve crimes.

According to the BJA's best practices guide, crime analysis can play an important role in effective homicide investigations.¹⁶⁰ Successful homicide units use crime analysis for "investigative support, ongoing threat definition, and/or pattern analysis of homicide trends."¹⁶¹ Crime analysts can perform many functions as part of the homicide investigation process, including: providing real-time operational and investigative intelligence to homicide detectives; analyzing modus operandi and other crime characteristics to identify investigative leads; identifying criminal networks, such as gangs, so that detectives can work to prevent retaliation killings when a homicide occurs; conducting analyses of gun and drug markets; and proactively identifying repeat violent offenders and individuals most at risk for committing violent crime.

Some police agencies assign a crime analyst directly to the homicide unit to work primarily on homicide investigations, and this is considered a best practice according

160. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

161. Ibid.

to the BJA best practices guide.¹⁶² In other agencies, homicide detectives closely coordinate with crime analysts from other units; for example, through attending regular intelligence meetings to learn of new crime trends and patterns. Crime analysts also frequently generate regular crime reports that are used by personnel throughout the agency.

Strengthening Crime Analysis Capabilities

It is important that police leaders put the systems in place to ensure that the agency's crime analysis capabilities are fully realized.

Staffing: Given the increasing flow of data and intelligence, many police agencies find it challenging to employ enough trained crime analysts to provide their investigative units with up-to-date, comprehensive information. Ideally, a crime analyst should be assigned to the homicide unit full time to work primarily on homicide investigations.¹⁶³ If this is not possible, at a minimum an analyst should be designated to a homicide investigation team each time a homicide occurs. (See *Recommendation 87* below for staffing recommendations.)

Training & Technology: Crime analysts use various tools to collect and analyze data. Although some tools are as basic and low-cost as Microsoft Excel, others require more sophisticated technology and training. For example, techniques such as crime mapping can be difficult if a police agency does not maintain a strong electronic records management system and other databases that can communicate with the software used by crime analysts. (See *Recommendation 28* for more on electronic records management.)

Another form of crime analysis that requires more advanced training and technology is social networking analysis, which is playing an increasingly critical role in homicide investigations.¹⁶⁴ Social networking analysis involves applying a mathematical method to analyze existing law enforcement data, such as arrests and field stops, in order to identify the structures, dynamics, and linkages between people in criminal street groups, and to develop more effective and targeted interventions.¹⁶⁵

Additionally, analyzing communications that are conducted via social media (e.g., Facebook, Twitter, Instagram) is increasingly important for criminal investigations. However, often there are few people in a police agency who are properly trained to conduct this type of analysis.

162. Ibid.

163. Ibid.

164. See National Network for Safe Communities at John Jay College, <https://nnscommunities.org/our-work/innovation/social-network-analysis>; Papachristos, Andrew V., David Hureau, and Anthony A. Braga (2013), *The Corner and the Crew: The Influence of Geography and Social Networks on Gang Violence*, *American Sociological Review*, v.78 n.3:417-447; McGloin, Jean Marie & David Kirk (2010), *An Overview of Social Network Analysis*, *Journal of Criminal Justice Education* 21 (2): 169-181.

165. Ibid.

Integrating Crime Analysis into Investigations

Many police agencies have found it challenging to fully integrate crime analysis into investigations, despite the many benefits that crime analysis can provide. One common reason for this lack of integration is that detectives may not be fully aware of crime analysis capabilities and how analysts can assist them with their investigations.

Another challenge is a lack of formal information-sharing protocols between detectives and crime analysts. Detectives may not know how and when to request information from crime analysts, while analysts may not be aware of the operational needs of investigative units. This can contribute to another barrier to integration, which occurs when the information produced by crime analysts is not fully operationalized before it is given to detectives. Detectives who are not trained analysts – and who are already burdened with heavy caseloads – may not have the time or expertise to understand raw, unanalyzed data. For example, a report that displays crime incidents geographically, rather than in a spreadsheet of data, is more immediately actionable for detectives.

Given the increasing importance of crime analysis in investigations, including homicide investigations, police agencies should take steps to address these challenges and better integrate crime analysis into investigative operations.

Recommendations: Crime Analysis

Recommendation #86: Police agencies should prioritize developing or expanding their crime analysis capabilities. Research has shown that crime analysis is an extremely valuable tool for preventing and solving violent crimes.¹⁶⁶ Putting the mechanisms in place to better understand connections between crimes, suspects, victims, witnesses, locations, etc. could strengthen the investigative process.

Recommendation #87: Crime analysis units should be staffed with enough trained crime analysts to provide a police agency's investigative units with up-to-date, comprehensive information.

- Agencies should consider assigning a crime analyst to the homicide unit to work on homicide investigations, which is considered a best practice by BJA.¹⁶⁷ In many agencies, the crime analyst assigned to the homicide unit responds to crime scenes, observes interviews, and prepares threat assessments, information reports, analysis of linkages between multiple crimes or offenders, pattern analyses, and other items that may be useful to an investigation.¹⁶⁸

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166. Carter, David L. (2013), http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

167. Ibid.

168. Ibid.

The Role of Crime Analysis in Homicide Investigations: New Orleans, LA

Kirk Bouyelas retired from the New Orleans Police Department (NOPD) in 2014 after serving 32 years with the department, including six years as the Deputy Chief of Investigations. Since retiring from NOPD, he has served as the Chief Investigator for the Orleans Parish District Attorney's Office. Commander Bouyelas continues to work with NOPD, and currently serves as an adjunct instructor with NOPD's Academy.

Jeff Asher served as a crime analyst with NOPD's Multi-Agency Gang Unit from 2013-2015. Prior to joining NOPD, Mr. Asher worked for several years as an analyst for the CIA. He now does independent consulting and runs the NOLA Crime News blog. Mr. Asher's work has been featured in national news media; he writes about crime analysis for the website <http://fivethirtyeight.com/>, Slate, The New York Times, and other publications.

The following is excerpted from a presentation given by Commander Bouyelas and Mr. Asher at the PERF/BJA Homicide Investigations conference held on January 31, 2017.

Jeff Asher, former NOPD Crime Analyst

The objective of crime analysis is to drive policy and tactics. Our purpose is to identify ways to improve tasks, or measure policies to determine whether or not they're effective. So one of the most important things I can say to detectives and police leaders is to listen to your crime analysts – we are there to help.

When I came on board at NOPD, the city had never before had a citizen crime analyst. Of the problems facing New Orleans, I'd say that gun violence is probably near the top of the list. So as I was figuring out what my role should be, I looked for ways to that I could have an impact on gun violence. This meant that my focus was largely on assisting detectives who were working homicides and nonfatal shooting cases.

Looking at the Right Data

One of the most important points to emphasize is that police departments must be in tune with what data they should be collecting and measuring. A prime example of this is nonfatal shootings. Generally, cities and police departments like to look at murders as the primary measure of violence, but they really need to also be looking at nonfatal shootings. A nonfatal shooting is just a failed murder. **Police departments need to be investigating nonfatal shootings with almost as much urgency as they investigate homicides. They should be collecting data on nonfatal shootings and using this as a measure of the police department's effectiveness** – not just because nonfatal shootings are important in themselves, which they are, but also because understanding your nonfatal shootings can help you better understand your homicides.

Social Network Analysis

Another important thing we focused on at NOPD was social network analysis (SNA). **SNA has huge implications for how cities fight gun violence and for assisting in homicide reduction and clearance.** SNA shouldn't be confused with social media, which is Facebook, Twitter, and other digital platforms. SNA is a tool that looks at someone's connections – their family, friends, etc. – to build a web of everyone that they know.

Here is how SNA worked at NOPD. Every time a person was shot, whether it was a fatal or nonfatal shooting, I built a social network analysis chart for that person. We took all of the person's criminal records, arrest history, information from any field interviews they'd ever given – even if it

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was for something minor, like a traffic violation – and put that into the software program. Then we would expand out a layer and enter in information regarding things like the names of the people whom the person called from jail.

Using this information to build a social network analysis chart, we were able to identify whether each shooting victim was identified as a gang member, or whether they had first- or second-level gang connections. Are their friends being arrested with gang members? Is there a gang nexus that we can identify that maybe the detectives weren't previously aware of? Detectives could use this information to help build leads and identify suspects and witnesses. Sometimes we even had cases where a dying victim's last words included a name, and we could bring up the SNA chart and that name would be mentioned there.

Strategic Implications of Social Network Analysis

I've been discussing the tactical implications of SNA. But the strategic implications are also exciting. **SNA allows you to understand the big picture of violence in your city.** You can take all of your homicide and nonfatal shooting victims, identify their associates and contacts, and then essentially build a "population of risk." When we did this in New Orleans, I was able to create a network of about 3,000 people – essentially three-quarters of 1% of the city's population – who were present at 45 to 50 percent of all the shootings in the city. We were able to build a list of high-risk individuals who had gang connections, who had been shot, who had previous gun arrests, or whose associates had been shot.

Using a list like this can help law enforcement agencies create interventions that focus deterrent efforts at the people who are at substantially higher risk for involvement in gun violence. You can also use this list to help develop social programs and interventions, as we are looking at it from the perspective of a higher risk of being a *victim* of gun violence, not a higher risk of being a *perpetrator*.

The best way to drive up homicide clearance rates is to drive down the number of murders.

By using SNA in this strategic way, I believe that the likelihood of gun violence reduction goes up significantly.

Kirk Bouyelas, former NOPD Deputy Chief of Investigations

I was the Chief of Detectives at NOPD when we implemented SNA. Police officials may be skeptical about whether SNA can really impact homicide clearances, but I can tell you first hand that in New Orleans it was a very powerful tool, because there is such a close connection between homicide victims and suspects, not just in murder cases, but also in shooting cases.

For example, we ended up finding out that the overwhelming majority of our homicide victims were known to the perpetrators. We weren't surprised to find that around 86% of our homicide perpetrators had prior felony arrest records, but we also found that 65% of our homicide *victims* had prior arrest records, and 50% had prior felony arrest records. SNA allowed us to understand these links and connect the dots, which was a huge help to homicide investigators.

One of the key things we found was that detectives need more than just raw data. They need an interpretation of the data, so that they know what they are looking for. So when our crime analysts gave detectives the social network analysis chart, they also gave detectives an interpretation of the data. That played a very important role in what we did, and it was a very successful approach for us in New Orleans.

In addition to helping us identify and apprehend homicide perpetrators, SNA also helped us *prevent* violence. Although New Orleans doesn't have a lot of formal gangs, we do have a lot of informal "groups" who share many of the same characteristics as a gang. We know that when a

group is involved in a homicide or a shooting, there is likely to be a retaliatory shooting. Using SNA, we can identify these connections and then deploy resources proactively to try to prevent retaliation.

Jeff talked about the list of high-risk individuals. That is another important piece that we used to try and proactively prevent violence. Working with Dr. David Kennedy from the John Jay College of Criminal Justice, we started doing custom notifications to people on the list. If someone was in close proximity to a nonfatal shooting or a homicide, detectives would knock on their door and talk to them in person, one-on-one. We also did call-ins where we'd bring in members of these groups, and there would be the district attorney, the police superintendent, the mayor, the FBI, and the attorney general's office. These officials would tell them, "Look, we know what you're doing, and if you keep it up we're coming after you with everything we have." That is a very powerful message.

>> *continued from page 126*

- If an agency does not have the resources to appoint a full-time crime analyst to the homicide unit, a crime analyst should be assigned to a homicide investigation team each time a homicide occurs. (See *Recommendation 44*)
- Additionally, it could be useful to assign a crime analyst to each patrol district.

Recommendation #88: Police agencies should invest in the tools and technology necessary for conducting crime analysis, social network analysis, and other up-to-date analytical functions. Agency personnel should receive formal training on how to use these tools and how to capture information in an actionable product for investigators.

- Police agencies should ensure that their electronic records management systems and databases are up-to-date and can effectively communicate with the software used by crime analysts.
- Agencies should also consider utilizing technology to conduct social networking analysis, which is playing an increasingly critical role in homicide investigations.
- Analyzing communications that are conducted via social media (e.g., Facebook, Twitter, Instagram) is also increasingly important for criminal investigations. Crime analysts should be trained on how to conduct this type of analysis. Homicide unit detectives and other investigators should also have access to and training on these tools, particularly if a police agency is unable to hire additional crime analysts to perform these functions. (See *Recommendations 13-14*)

Recommendation #89: Police agencies should take steps to improve coordination between crime analysts and the homicide unit in order to ensure that crime analysis is being fully utilized in homicide investigations. These steps may include:

- Revising the Homicide Unit Manual to include protocols for utilizing crime analysis during homicide investigations.

- Making homicide unit detectives aware of how crime analysts can contribute to homicide investigations, including the importance of crime analysis, crime analysts' capabilities and functions, and the crime analysis tools available.
- Holding regular briefings between the homicide unit and crime analysis unit(s) to share information and discuss new tools and technologies.
- Ensuring that the intelligence produced by crime analysts is current, fully analyzed, and operationalized before it is presented to homicide detectives. Crime analysts and their supervisors should seek input from homicide unit to understand what types of information would be most useful for homicide investigations.
- Producing a daily crime report, generated by the crime analysis unit(s), which summarizes the crimes that occurred each day (e.g., date, time, location, and a brief description for each incident). The report should be distributed to all agency personnel. Crime analysts should also produce regular crime analysis reports that identify crime trends and crime "hot spots" and distribute these reports throughout the agency.

How Digital Evidence Helped to Identify an International Online Drug Trafficker Believed to be Responsible for Multiple Overdose Deaths

On August 9, 2017, PERF hosted a meeting to discuss the changing nature of crime and investigations. During this meeting, officials with the Portland (OR) Police Bureau (PBP), Immigration and Customs Enforcement/Homeland Security Investigations (ICE/HSI), the U.S. Postal Inspection Service, and other partners presented a case study in using digital evidence in complex criminal investigations.

The following is a summary of the information provided by those officials at the PERF meeting.

When there is a fatal drug overdose in Portland, Oregon, the Police Bureau immediately initiates an investigation into the circumstances surrounding the death. If detectives can determine who supplied the drugs and the evidence is strong enough, prosecutors may seek so-called "Len Bias charges" against the supplier. Named after the University of Maryland basketball star who died of a cocaine overdose in 1986, the Len Bias Act is a federal law which provides for a 20-year minimum prison term for dealers convicted of supplying drugs that result in a person's death. Pursuant to this law, when a local police department investigates an overdose death, the U.S. Attorney's Office in that jurisdiction may adopt the case for federal prosecution if sufficient evidence is present and certain requirements are met. In Portland, the PBP works with the U.S. Attorney's Office and federal law enforcement to determine whether a case warrants prosecution under the Len Bias Act.

A recent opioid overdose case in Portland illustrates the important role that digital evidence, in combination with traditional investigative work, plays in supporting these types of often complex cases.

Combining Digital and Physical Evidence

On February 16, 2017, 18-year-old Aisha Zughbieh-Collins was found dead in her apartment from an overdose of a synthetic opioid called U-47700 (or simply U4). Aisha's mother, suspecting that her daughter was purchasing the drugs online, provided detectives with Aisha's email address. At the scene, detectives uncovered important physical evidence indicating that the drugs were shipped through the mail. This evidence included a distinctive brand of pregnancy kit (sold only at Dollar Tree

stores) that was likely used to hide the drugs, and a shipping envelope that U.S. postal inspectors determined was purchased at a post office in Greenville, South Carolina. They also found a notepad with an alphanumeric code written on it.

Next, Portland police turned to an ICE/HSI expert in the so-called “dark web” marketplaces where synthetic opioids are often sold and shipped through the mail. This expert, who is assigned full-time to the High Intensity Drug Trafficking Area (HIDTA) interdiction team, is housed in the PBP office and can therefore work directly with PBP investigators at the outset on cases involving the dark web. Investigators learned that the alphanumeric code was Aisha’s PGP key. PGP, or Pretty Good Privacy, is an encryption program designed to increase the security of email communications and other online transactions.

Using the email address and PGP key, investigators determined that just five days before her death, Aisha had purchased U-4 on a dark web marketplace called AlphaBay, corroborating the physical evidence recovered inside Aisha’s apartment. The alleged online seller’s name was “Peter the Great.” Data from AlphaBay reportedly indicated he had made nearly 10,000 transactions on the site.

In April, detectives purchased U4 from Peter the Great. The drugs arrived wrapped in the same pregnancy kits and containing the same type of shipping labels found in Aisha’s apartment. Postal inspectors determined that the shipping labels originated from an online company that accepts only the digital currency, Bitcoin. Further investigation revealed that the online shipping label purchases were tied to two email addresses, which in turn led investigators to Ted Khleborod, a person of interest living in Greenville, South Carolina. Detectives reportedly determined that Khleborod had received numerous international packages from China (where much of the U4 is made). Through social media postings, they also found out that Khleborod was in a relationship with a woman named Ana Barrero.

Next, investigators were able to retrieve sales information showing a spike in pregnancy kit purchases at a Dollar Tree store in Greenville, as well as store video showing Barrero making several purchases. Portland officials traveled to Greenville and, assisted by local and federal authorities there, began surveillance of both Khleborod and Barrero. They reportedly saw Barrero mailing large numbers of parcels, which were intercepted and found to match the other packages, including the one in Aisha’s apartment.

In late April, officers arrested Khleborod and Barrero. They face federal drug distribution charges in both South Carolina and Oregon, and Oregon officials are considering “Len Bias charges” as well. Investigators believe Peter the Great may be connected to more than a dozen other overdose deaths across the country.

Lessons Learned

While not a traditional homicide case, Peter the Great illustrates some key lessons learned that can apply to homicide investigations:

- To further their investigations, police and prosecutors need to develop a working knowledge of the dark web and the use of crypto-currency (such as Bitcoin). These investigative elements can be present not only in drug cases, but also gun sales, human trafficking, and financial fraud used by gangs and other criminals to fund their operations.
- To effectively collect and analyze digital evidence from the dark web, local, state and federal agencies should have a close working relationship with one another and be willing to share information, resources and expertise.
- To support “Len Bias” prosecutions in drug overdose deaths, police need to focus on developing both physical and digital evidence.
- New, technology-based approaches to criminal investigations are important, but they must be combined with traditional investigative work that is thorough and detailed.

Conclusion

At the core of policing is the idea that protecting human life is paramount. When homicide rates begin to rise – as they have in many cities, suburbs, and small towns throughout the country – it is more important than ever that police agencies take all possible steps to reduce killings, investigate homicide cases thoroughly, and bring perpetrators to justice.

Homicide units across the country face many common challenges to completing this mission. Many agencies lack the staffing and resources to adequately respond to homicides, and detectives are watching their clearance rates fall as their caseloads rise to unsustainable levels. Additionally, outdated equipment and technology make it difficult for police agencies to take advantage of innovations, such as crime analysis, digital evidence extraction and analysis, and cutting-edge forensics, that are valuable to modern homicide investigations.

To perform their jobs effectively, homicide detectives need proper training, direction, and supervision. This means updating policies to reflect evidence-based investigative practices, implementing thorough investigative plans and supervisory case reviews, having rigorous selection processes to staff homicide units, and holding personnel accountable through strong evaluation processes. It also means providing detectives with ongoing, comprehensive training in how to conduct effective investigations using modern tools and techniques.

Another key element of homicide investigations is coordination between the various units within a police agency that are involved in conducting these investigations. Each of these units must understand how its work contributes to the overall investigation, and police leaders must ensure that these units work effectively with one another.

Many of the recommendations in this report require long-term planning and implementation, as well as additional resources that might not be immediately feasible in some agencies. Steps that police agencies can take to immediately strengthen their homicide investigation processes include the following:

- **Creating a homicide investigations team:** Police leaders should develop a team to provide input on policy development, share ideas for implementing these recommendations, and discuss strategies and next steps. Members of the team can include leaders from the agency units that are involved in homicide investigations, as well as representatives from the prosecutor's office, the medical examiner's office, regional crime labs and fusion centers (when applicable), and crime victim advocacy groups. (See *Recommendation 5*)
- **Developing a Homicide Unit Manual:** Agencies should revise their homicide units' written policies and procedures to reflect current research and promising strategies used by police agencies that have built effective homicide units.

Policies should be compiled into a user-friendly Homicide Unit Manual, which should include policies and protocols that personnel must follow, a standard investigative checklist, investigative plans, and a supervisory case review process. As a starting point, Appendix C to this report includes a list of research resources and national guides for homicide investigations. (See *Recommendations 1-6*)

- **Reviewing homicide case assignment and distribution:** Homicide unit leaders should review crime data and the homicide unit staffing/scheduling structures to find ways to ease detectives' workloads and share caseloads fairly. This may involve revising the shift schedules, moving some functions out of the homicide unit, hiring a civilian administrative aide, or modifying the case assignment process. (See *Recommendations 18-23*)
- **Exploring training opportunities:** Agencies should research low-cost training opportunities that are provided by local prosecutors' offices, medical examiners' offices, and other criminal justice agencies in the state or region. Agencies can also consult examples of in-house training programs from other police departments to develop their own internal training course for investigators. (See *Recommendations 13-17*)
- **Strengthening internal coordination:** Police agency leaders can take steps to improve communication and coordination among units that are involved in homicide investigations. Strategies include establishing regular meetings of leaders from the various units, requiring personnel to check their department emails at certain times, establishing protocols for making requests from other units, and holding briefings at which members of various units brief other personnel about their unit's policies, protocols, capabilities, and missions. (See *Recommendations 43-67 and 80-89*)
- **Expanding digital evidence and crime analysis capabilities:** As homicide investigations continue to evolve, police agencies will increasingly rely on digital evidence and crime analysis to identify and apprehend suspects. Although expanding the use of these tools can require a long-term investment, steps that agencies can take in the short term include selecting detectives for the homicide unit who are skilled in using technology in investigations; providing training to homicide detectives on how to collect and analyze digital evidence; encouraging better coordination between the homicide unit and the units that handle digital evidence and crime analysis; and assigning a crime analyst to each homicide case. (See *Recommendations 80-89*)

Police agencies must ensure that preventing and solving homicides is a top priority for the department. Implementing the reforms outlined in this report is a step toward demonstrating a commitment to this goal. This commitment should also be shown by providing agency personnel with the policies, training, staffing, and other tools they need to conduct thorough homicide investigations and better serve the community.

APPENDIX A:

PERF Case Review Metrics

For the Baltimore, Cleveland, and Houston sites, PERF reviewed the files of homicide incidents that occurred for a certain time frame (e.g., 10-12 months) preceding this review. The purpose of the review was to collect additional data elements to further understand the challenges in clearing cases.

PERF used the following metrics to analyze each of the case files. These metrics have been found to be associated with homicide case clearance:¹⁶⁹

- Were multiple victims injured during the incident?
- Did detectives arrive within 30 minutes of being dispatched?
- Were there initial witnesses to the incident identified?
- Were multiple witnesses developed over the course of the investigation?
- Was there witness cooperation beyond generic information?
- Did the case have traceable physical evidence documented and sent for analysis?
- Was a weapon left at the scene?
- Were there initial leads regarding motive?
- Was the victim's body found quickly after death?
- Did confidential informants come forward with information?
- Did the suspect confess to the crime, either to police or to a witness/informant?
- Is there a named suspect documented but not yet arrested?
- Is there documentation of a formal supervisory review?
- Was a copy of the victim's autopsy report from the medical examiner included in the file?
- What was the level of organization/completeness in the case jacket (low, medium, or high)?
- What seemed to be the potential motivational factors documented in the case?
- How many days did it take to clear a case (when closed)?
- Time period of case documentation (i.e. number of days between the incident and the most recent dated document in the case jacket).

169. Wellford, Charles and James Cronin, *Clearing Up Homicide Clearance Rates*, National Institute of Justice Journal (April 2000), <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>. See also the full report for a more comprehensive look at this study: *An Analysis of Variables Affecting the Clearance of Homicides: A Multistate Study* (October 1999), http://www.jrsa.org/pubs/reports/homicides_report.pdf.

Note that the findings from the case file review reflect only what is *documented* in the file. Without more information, it is difficult to know whether the results measure the variable in question, the degree of documentation, or both. PERF also examined the demographic characteristics of victims (e.g., race, age, gender), as well as the time to case clearance.

APPENDIX B:

Homicide Assessment Project Team

*This list reflects the team members' titles and organizations at the time they participated in this project

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APPENDIX C:

Resources

Braga, Anthony A. & Desiree Dusseault (2017), Boston, Massachusetts, Smart Policing Initiative II, *Improving Homicide Clearance Rates: The Value of Analysis to Guide Investments in Investigative Policies and Practices*, <http://www.smartpolicinginitiative.com/sites/default/files/Boston%20SPI%20Spotlight%20%282017%29%20FINAL.pdf>. For a complete review of the Boston Smart Policing Initiative II, see A. A. Braga and D. Dusseault, *Can Homicide Detectives Improve Homicide Clearance Rates? Final Report* (Boston: Northeastern University and Boston Police Department, 2016).

Carter, David L. (2013), *Homicide Process Mapping: Best Practices for Increasing Homicide Clearances*, Washington, DC: Bureau of Justice Assistance, available at: http://www.iir.com/Documents/Homicide_Process_Mapping_September_email.pdf.

Cronin, James M., Gerard R. Murphy, Lisa L. Spahr, et al. (2007) *Promoting Effective Homicide Investigations*, Washington, DC: The U.S. Department of Justice's Office of Community Oriented Policing Services and the Police Executive Research Forum, available at http://www.policeforum.org/assets/docs/Free_Online_Documents/Homicide/promoting%20effective%20homicide%20investigations%202007.pdf.

Davis, Robert C., Carl Jensen, and Karin E. Kitchens (2011), *Cold-Case Investigations: An Analysis of Current Practices and Factors Associated with Successful Outcomes*, Washington, DC: RAND Corporation & the National Institute of Justice, available at http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR948.pdf.

Goodison, Sean E., Robert C. Davis, and Brian A. Jackson (2015), *Digital Evidence and the U.S. Criminal Justice System: Identifying Technology and Other Needs to More Effectively Acquire and Utilize Digital Evidence*, Washington, DC: RAND Corporation, the Police Executive Research Forum, RTI International, and the University of Denver, available at http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR890/RAND_RR890.pdf.

International Association of Chiefs of Police (2013), *10 Things Law Enforcement Executives Can Do To Positively Impact Homicide Investigation Outcome*, Washington, DC: Bureau of Justice Assistance, available at http://www.iir.com/Documents/IACP_Homicide_Guide.pdf.

Jill Leovy, *Ghettoside: A True Story of Murder in America*, Spiegel & Grau, 2015.

McGloin, Jean Marie & David Kirk (2010), An Overview of Social Network Analysis, *Journal of Criminal Justice Education* 21 (2): 169-181.

National Clearinghouse for Science, Technology and the Law at Stetson University College of Law, NIJ/DOJ Resources, available at <http://www.ncstl.org/education/Cold%20Case%20NIJ%20Resources>.

National Center for Missing & Exploited Children (2016), *Long-term missing child guide for law enforcement: Strategies for finding long-term missing children*, Washington, DC: Office of Juvenile Justice and Delinquency Prevention, http://www.missingkids.org/content/dam/ncmec/en_us/publications/ncmeclongtermmissingguide2016.pdf.

National Institute of Health and National Institute of Standards and Technology, *The Biological Evidence Preservation Handbook*. 2013. <http://dx.doi.org/10.6028/NIST.IR.7928>.

National Network for Safe Communities at John Jay College, <https://nnscommunities.org/our-work/innovation/social-network-analysis>.

National Network for Safe Communities (2016). *Group Violence Prevention: An Implementation Guide*. Washington, DC: Office of Community Oriented Policing Services. https://nnscommunities.org/uploads/GVI_Guide_2016.pdf.

Papachristos, Andrew V., David Hureau, and Anthony A. Braga (2013), The Corner and the Crew: The Influence of Geography and Social Networks on Gang Violence, *American Sociological Review*, v.78 n3:417-447.

Police Executive Research Forum (2017). *The "Crime Gun Intelligence Center" Model: Case Studies of the Denver, Milwaukee, and Chicago Approaches to Investigating Gun Crime*, <http://www.policeforum.org/assets/crimegunintelligencecenter.pdf>.

Police Executive Research Forum (2015). *Implementing a Comprehensive Performance Management Approach in Community Policing Organizations: An Executive Guidebook*. Washington, DC: Office of Community Oriented Policing Services, <https://ric-zai-inc.com/Publications/cops-p331-pub.pdf>.

Police Executive Research Forum (2015). *Critical Response Technical Assessment Review: Police Accountability – Findings and National Implications of an Assessment of the San Diego Police Department*, <https://www.sandiego.gov/sites/default/files/legacy/police/pdf/perfrpt.pdf>.

Police Executive Research Forum (2013). *A National Survey of Eyewitness Identification Procedures in Law Enforcement Agencies*. https://www.policeforum.org/assets/docs/Free_Online_Documents/Eyewitness_Identification/a%20national%20survey%20of%20eyewitness%20identification%20procedures%20in%20law%20enforcement%20agencies%202013.pdf.

Police Executive Research Forum (2009). *The Stop Snitching Phenomenon: Breaking the Code of Silence*. Washington, DC: Office of Community Oriented Policing Services, http://www.policeforum.org/assets/docs/Free_Online_Documents/Crime/the%20stop%20snitching%20phenomenon%20-%20breaking%20the%20code%20of%20silence%202009.pdf.

Wellford, Charles and James Cronin, *Clearing Up Homicide Clearance Rates*, National Institute of Justice Journal (April 2000), available at <https://www.ncjrs.gov/pdffiles1/jr000243b.pdf>. See also the full report for a more comprehensive look at this study: *An Analysis of Variables Affecting the Clearance of Homicides: A Multistate Study* (October 1999), available at: http://www.jrsa.org/pubs/reports/homicides_report.pdf.

APPENDIX D:

Homicide Investigations Project Site Convening – January 31, 2017 – List of Participants

*This list reflects the participants' titles and organizations at the time of the convening.

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