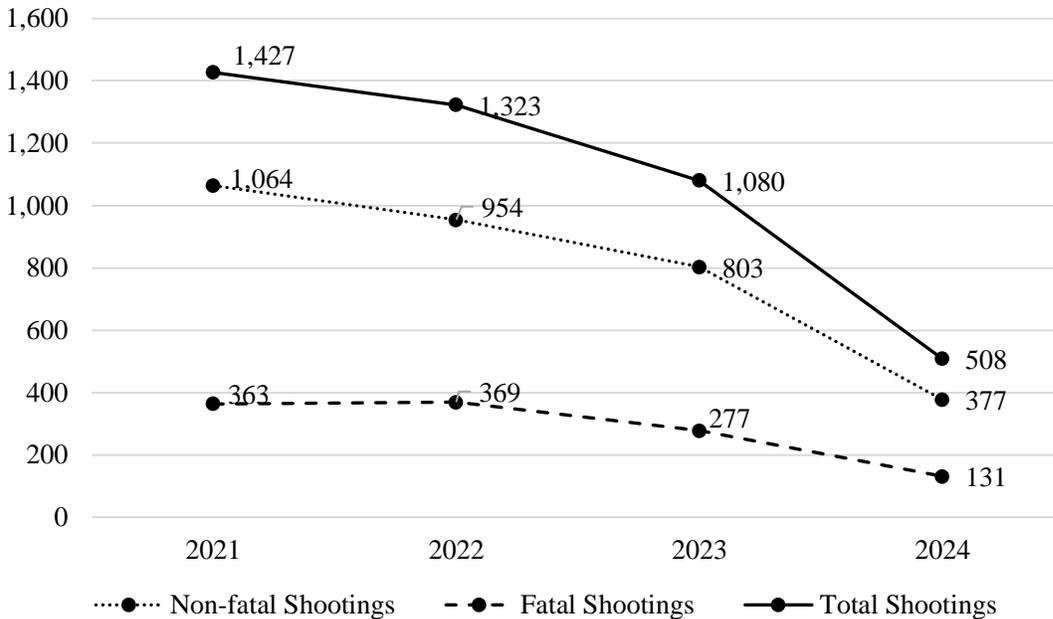**PROJECT NARRATIVE**
FY 24 BJA LOCAL LAW ENFORCEMENT CGIC INITIATIVE
DETROIT POLICE DEPARTMENT
CATEGORY 1: EXPANSION OF AN EXISTING CGIC

a. DESCRIPTION OF THE ISSUE

Fatal and non-fatal shootings in Detroit, Michigan, have declined since 2020, following a national post-pandemic trend in violent crime (see Table 1). Despite this progress, Detroit continues to rank among the most violent in the United States. Its violent crime rate was 2,015.7 (per 100,000 people) in 2023, which is over 5 times the most recent national rate reported in 2022 of 380.7 (per 100,000 people) (Federal Bureau of Investigation [FBI], 2022a). Furthermore, the city's nonfatal shooting rate has not returned to pre-pandemic levels, which was 114.4 (per 100,000 people) in 2019 and 126.8 (per 100,000 people) in 2023. And while 52% of homicides were cleared in 2023, comparatively less targeted attention has been devoted to clearing nonfatal shootings, with only 41% of these cases being cleared in the same year.

Figure 1
Fatal, Nonfatal and Total Shootings per Year.

Note. 2024 data is year to date as of 7/20/2024.

Even more, the establishment of the Detroit Crime Gun Intelligence Center (DCGIC) was associated with a 121% increase in NIBIN acquisitions (Rojek, De Biasi, & McGarrell, 2022). This surge may be reflective of the scope of unrecovered crime guns, which hold the potential for future violence and reveals a pressing need for law enforcement to prioritize their recovery. In addition, certain areas have experienced a resurgence of fatal and nonfatal shootings (see Table 2). Most notably, there have been 31 fatal and nonfatal shooting victimizations in scout car area (SCA) 902 so far this year (as of 7/20/24), which is approximately 1.7 times the total number of shooting victimizations in 2023 and 2022. Furthermore, while the number of fatal and nonfatal shooting victimizations decreased in SCA 906 from 2022, it is on track to increase by the end of the year, with 15 shooting victimizations reported so far, just one less than the total number reported in 2023. Both SCAs are located in the 9th precinct, which is in northeast Detroit (see Figure 1). Per 2020 US Census data, the population of the City of Detroit is 639,111. The estimated residential population of SCA 902 is 5,739, and the estimated residential population of SCA 906 is 4,958.

Table 2
Scout Car Area: Fatal, Nonfatal and Total Shootings per Year.

Scout Car Area	2022	2023	2024-YTD
902	20	18	31
906	23	16	15

Note. 2024 data is year to date as of 7/20/2024.

Figure 1
Scout Car Areas 902 and 906.

The Detroit Police Department (DPD) aims to optimize the tactical and strategic uses of the National Integrated Ballistic Information Network (NIBIN) to prevent future firearm violence and enhance clearance rates for fatal and nonfatal shootings. Securing funding is essential for the Detroit CGIC to meet critical needs and maximize the strategic and tactical potential of NIBIN. Strategically, NIBIN aids in preventing future firearm violence by improving our understanding of patterns in firearm-related criminal activities, which is aided by its integration with firearm ownership records in eTrace. Tactically, by expanding the network of crime scenes contributing to intelligence gathering, NIBIN assists in identifying suspects and witnesses, thereby supporting criminal convictions and enhancing case clearance rates.

DPD's DCGIC needs funding to support critical needs in three areas: (1) NIBIN Processing, (2) Investigations, and (3) Crime Gun Intelligence.

NIBIN Processing: The city of Detroit has a gunshot detection system that covers approximately 40 square miles. According to a recent study, NIBIN acquisitions have increased by over 87.2% following the initial launch of the system in March of 2021 (De Biasi, Rojek, & McGarrell, 2024). The timely processing of ballistic evidence using NIBIN is paramount to allowing investigators to be able to quickly connect crime scene investigations and act on the evidence that is discovered. In light of the influx of NIBIN acquisitions, more resources are needed to support their timely processing, which ultimately aids in investigative efforts through the identification of NIBIN leads.

Investigations: By identifying NIBIN leads, NIBIN contributes to the mission of CGICs by widening the network of crime scenes from which investigators can gather critical intelligence supporting arrests and criminal convictions. Research indicates that dedicating resources to advance investigations of fatal *and* nonfatal shootings can improve clearance rates (see Braga & Dusseault, 2018; Braga, Turchan, & Barao, 2018; Cook, Braga, Turchan, & Barao, 2019). In response to increases in firearm violence in Detroit communities, prioritizing actionable intelligence in a targeted approach to investigating NIBIN-related incidents is not only a cost-efficient strategy, but also holds substantial potential for reducing firearm violence and preventing future shootings by focusing attention on prolific shooters.

Crime Gun Intelligence: The value of NIBIN intelligence is well-established for criminal investigations (among others, see De Biasi, 2024). This intelligence has proven instrumental in

tracing the origins of firearms, identifying suspects, and connecting seemingly unrelated cases. However, there has been less emphasis and exploration on leveraging NIBIN intelligence to inform proactive enforcement initiatives at the local level. Proactive enforcement initiatives could greatly benefit from the insights provided by NIBIN. For instance, by identifying patterns in ballistic evidence, law enforcement agencies could anticipate potential hotspots for gun violence and deploy resources more strategically to prevent incidents before they occur. By harnessing the full potential of NIBIN for proactive measures, local law enforcement can not only solve crimes more efficiently but also prevent them, ultimately contributing to safer communities.

b. PROJECT DESIGN AND IMPLEMENTATION

Broadly, the purpose of DPD's National Integrated Ballistic Information Network (NIBIN) and Detroit Crime Gun Intelligence Center (DCGIC) is to establish potential links, also known as 'Leads', between multiple crime scenes where the same firearm was used. Detroit Police Department NIBIN Leads are currently being used by local (DPD), State and Federal Law Enforcement agencies to assist in the investigation of multiple shooting incidents. This practice provides the necessary procedure for the effective usage of the Integrated Ballistic Identification System (IBIS-BRASSTRAX^{TM}) which is utilized as an investigative tool to link crimes one to another through the use of firearms.

The goal of this initiative is to enhance the tactical and strategic capabilities of DCGIC to prevent firearm violence and enhance case clearance rates, targeting places where fatal and nonfatal shootings have increased.

To achieve this goal, we have identified three primary objectives:

- Objective 1: Support the timely acquisition of ballistic evidence into NIBIN.
- Objective 2: Support criminal investigations.
- Objective 3: Expand crime gun intelligence capabilities.

To achieve these objectives, several key activities will be undertaken:

Objective 1: Acquire an additional NIBIN terminal. An additional NIBIN terminal will increase capacity for timely processing of ballistic evidence into the system. The impact of the additional NIBIN terminal on NIBIN processing will be assessed by calculating the time between NIBIN Occurrence Date and NIBIN Acquisition Date.

Objective 2: Dedicate a detective (job description attached) to investigate NIBIN-related cases involving fatal and nonfatal shooting victimizations, focusing on places where fatal and nonfatal shootings have increased. By leveraging actionable intelligence derived from NIBIN leads, this objective aims to improve clearance rates and ultimately reduce firearm violence in targeted communities by incapacitating prolific shooters.

Objective 3: Support an academic researcher in the analysis of NIBIN data to identify opportunities to inform proactive initiatives, as well as to identify resource gaps and challenges in the investigation of NIBIN leads and the role of NIBIN intelligence in securing case outcomes. By analyzing NIBIN data, DPD can make more informed decisions based on empirical evidence, leading to more effective strategies for reducing gun violence. Furthermore, identifying resource gaps and challenges, along with analyzing how NIBIN intelligence (such as GunStat) is used to advance case outcomes, will create opportunities to allocate resources more effectively, enhance investigative processes, and ultimately improve overall public safety efforts. Key law enforcement partners for this initiative include the Bureau of Alcohol, Tobacco,

Firearms and Explosives (ATF), the U.S. Attorney's Office of Eastern District of Michigan (USAO-EDM), the Michigan Department of Corrections (MDOC), and the Wayne County Prosecutor's Office (WCPO), all of which will be essential in leveraging these insights to drive coordinated and impactful actions.

DPD will also partner with an academic researcher from Wayne State University (WSU) (Detroit, Michigan) to prepare a final report on the program's implementation and impact on firearm violence and clearance rates.

The academic researcher will assist in the following three areas:

1. Identify resources and intelligence needs to inform DCGIC business process:

    - Survey NIBIN personnel to understand challenges and resource gaps in firearm-related investigations involving NIBIN leads and how NIBIN intelligence is used to advance case outcomes.

    - Collaborate with crime analysts to determine the type of training and services that can improve the support provided to detectives.

2. Develop approaches for proactive enforcement using NIBIN intelligence:

    - Analyze NIBIN data to identify patterns and trends in firearm-related incidents, such as geographic hotspots and timeframes of increased activity.

3. Assessments:

    - Assess clearance rates before and after the implementation of enhanced NIBIN-related investigative practices.

    - Assess firearm violence before and after the implementation of enhanced enforcement efforts in hot spots.

    - Assess NIBIN processing time before and after the purchase of an additional NIBIN terminal.

DCGIC Project Timeline

Provided below is a timetable indicating roughly when the activities will be accomplished, which relate to the stated project goals and objectives.

Month 1-3: Initial Setup and Planning

- Acquire an additional NIBIN terminal

- Assign a dedicated detective to investigate NIBIN-related cases.

- Develop a detailed plan to capture performance metrics, with guidance provided by the WSU academic researcher.

Month 4-6: Baseline Assessment

- Begin processing and entering ballistic evidence with the new NIBIN terminal.

- Collect baseline data on clearance rates for NIBIN-related cases and NIBIN processing times.

- Conduct surveys with NIBIN personnel to understand current challenges and resource gaps.

- Collaborate with crime analysts to outline the necessary training and services.

- Begin analyzing NIBIN data to identify patterns and trends.

Month 7-12: Implementation

- Provide feedback to command staff on survey of detectives and identify opportunities to adjust investigative processes and improve its CGIC business process.

- Inform proactive violent crime enforcement strategies based on NIBIN intelligence.

Month 13-18: Evaluation and Adjustment

- Refine proactive violent crime enforcement strategies based on analysis and feedback.

Month 19-24: Final Analysis and Reporting

- Assess firearm violence before and after the implementation of targeted practices.

- Assess clearance rates and case resolution times before and after hiring a dedicated NIBIN detective.

- Assess NIBIN processing times before and after the purchase of an additional NIBIN terminal.

- Prepare final report.

c. CAPABILITIES AND COMPETENCIES

DPD partnered with ATF and other law enforcement partners to create its DCGIC in 2018 with funding support from the BJA. The DCGIC has become one of DPD's most critical, effective tool in reducing handgun violence. To ensure programmatic quality control and maximize the impact of the initiative, the DCGIC team also conducts regular NIBIN trainings for patrol officers in DPD's precincts. This training includes an overview of the evidence processing and lead generation process, and introduction to the national CGIC network and ATF's NIBIN National Correlation and Training Center (NNCTC).

Captain Heather Cameron is DPD's Commanding Officer of Investigative Operations, which includes DCGIC and NIBIN, and routinely reviews all compiled statistics for guns seized and glock switches. She also leads Data Quality Control, property and evidence control, crime scene services and all DPD precinct detective services. Captain Cameron is a 21-year DPD veteran, serving in increasingly responsible leadership roles throughout the department. She earned a Bachelor's Degree in Criminal Justice from the University of Detroit Mercy, an MBA from Wayne State University. Captain Cameron's resume is attached to this application.

Sergeant Michael Panackia oversees day-today operations of the DPD's CGIC. This includes supervising its crime analysts, NIBIN Techs, test shot officers and intel specialists. Sgt Panacka works closely with ATF and assists at assigning NIBIN lead cases throughout DPD. He convenes weekly citywide meetings with CGIC's partner agencies. He also conducts NIBIN training to specialized units and outside agencies at DPD's Academy.

Dr. Alaina De Biasi, an Assistant Professor in the Department of Criminology and Criminal Justice at Wayne State University located in Detroit, Michigan, will provide research services to the DCGIC for this grant. Dr. De Biasi supported the assessment of the Detroit Crime Gun Intelligence Center, as well as other department violence prevention initiatives. Dr. De Biasi also serves as an academic member of the National Firearms Commerce and Trafficking Assessment, a four-part Department of Justice initiative of commerce in firearms and the diversion of firearms to illegal markets. Her research delves into the dynamics of firearm violence, the effectiveness of violence prevention strategies, and the role of intelligence systems in enhancing law enforcement efforts. Her work is published in journals including the *Journal of Criminal Justice*, *Injury Epidemiology, Crime & Delinquency*, *Journal of Quantitative Criminology*, and *Journal of Crime and Justice.* Dr. DeBiasi's CV is attached.

d. PLAN FOR COLLECTING THE DATA REQUIRED FOR THIS SOLICITATION'S PERFORMANCE MEASURES

A Detroit CGIC team member will complete the performance metric reports. Their primary responsibility will be to collect the necessary data from various sources. These sources, which are responsible for recording the performance metric data, are organized by section of the performance metrics report:

- Analysis: Lead Administrator of NIBIN crime analysts.
- Police Response to Shots Fired: Lead NIBIN crime analyst.
- Firearm Recoveries: Property Management Division.
- Organizational Integration: Command Staff of Detroit CGIC.
- Partnerships: Command Staff of Detroit CGIC.
- Crime Gun Intelligence Center Case: NIBIN Investigative Team.
- Crime Gun Intelligence Center Case Outcomes: NIBIN Investigative Team.
- Semiannual Narrative Questions: Command Staff of Detroit CGIC

To assist in this process, DPD will partner with an academic researcher from Wayne State University. This collaboration will be instrumental in developing a comprehensive strategy for collecting data across multiple sources. The researcher's expertise and research resources will help us design a framework that integrates various data inputs, enhancing the richness and accuracy of our data collection efforts.

Throughout the duration of the project, the academic researcher will provide ongoing support and evaluation of our data collection processes. This includes conducting periodic reviews of our practices, offering feedback on methodology, and making recommendations for improvements. Her continued involvement will help ensure that our data collection efforts remain aligned with best practices and the project's goals.

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