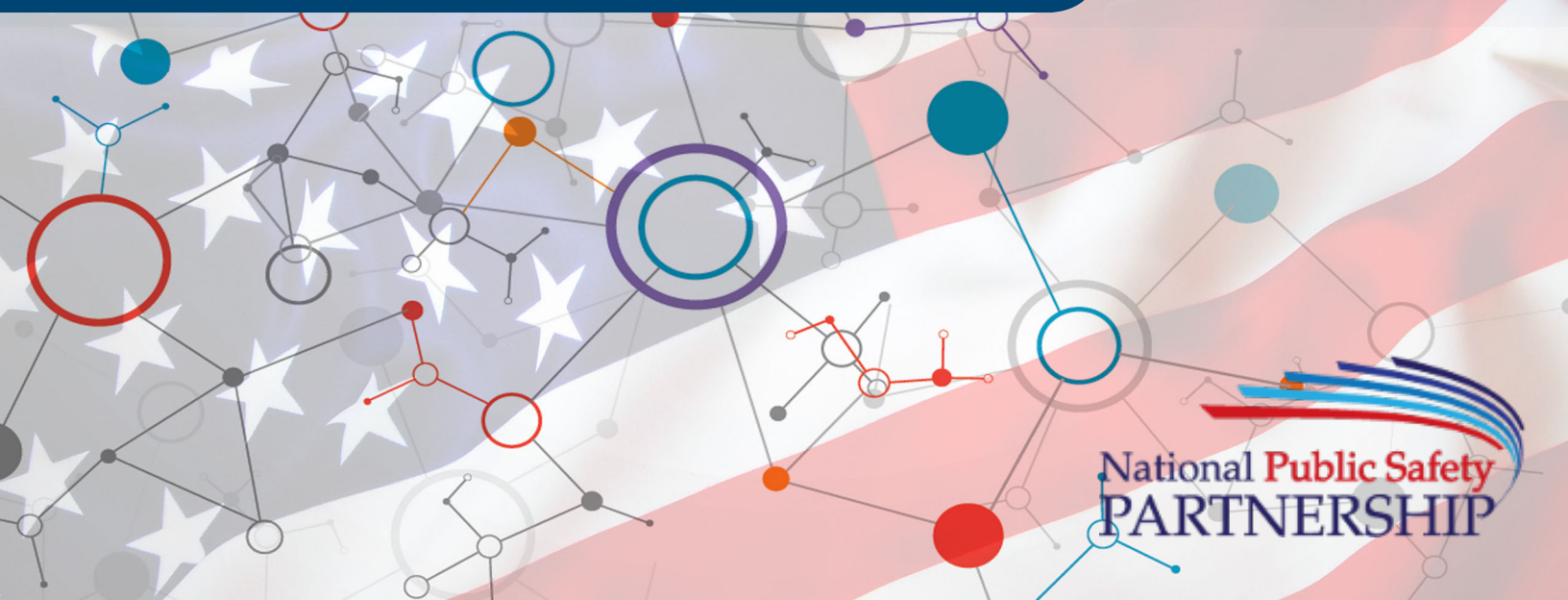




# National Public Safety Partnership (PSP)

## Crime Analysis Case Study



Crime analysis provides law enforcement with place-based, person-based, and real-time analytics that drive the crime fighting mission at both the law enforcement and prosecutors' offices. The data obtained from crime analysis allows law enforcement officials to make informed decisions, respond effectively, and focus their violence-reduction strategies. Because of these important considerations, law enforcement agencies across the nation are focusing on building crime analysis capabilities to enhance their crime-fighting strategies.

Since the inception of the Bureau of Justice Assistance (BJA) National Public Safety Partnership (PSP), which built upon lessons learned from a pilot concept known as the Violence Reduction Network (VRN), crime analysis has been a core focus area. One of the goals of the PSP is to enhance the crime analysis capabilities of each PSP site during their engagement, so that all core crime analysis competencies are obtained. To achieve this goal, the PSP provides sites with various Training and Technical Assistance (TTA) opportunities and resources. This document provides an overview of the TTA opportunities available to the PSP sites, case study summaries of PSP sites that have focused on crime analysis and a discussion of the path forward as it relates to crime analysis within the PSP.

### **Crime Analysis TTA**

The BJA PSP provides several crime analysis training and technical assistance (TTA) resources to each participating site. Examples of resources include assessments, peer exchanges, subject matter expert (SME) assistance, training opportunities, and webinars.

### **Crime Analysis Assessment**

A Crime Analysis Assessment is available to all sites. The goal of this assessment is to identify analytical gaps and opportunities for TTA. Crime analysts and law enforcement personnel can then use these identified areas to focus their efforts on enhancing their capacity to analyze and use data to make informed decisions, respond effectively, and prevent crime. An on-site visit is conducted by the SME(s) to assess the site's crime analysis capability during which the SME(s) meet with local personnel, may attend a CompStat or similar meeting, and may participate in a ride-along. After



the assessment is complete, a report listing recommendations regarding identified gaps and needs is provided to the site.

## Peer Exchanges

Peer exchanges allow sites to visit other cities and departments that demonstrate effective and innovative violent crime reduction strategies. These peer exchanges allow PSP site leaders to experience best practices being implemented across the nation firsthand, including those on crime analysis. Sites can conduct peer exchanges with cities that are within and outside of the PSP network. Each site is allotted nine peer exchanges per year during their PSP engagement.

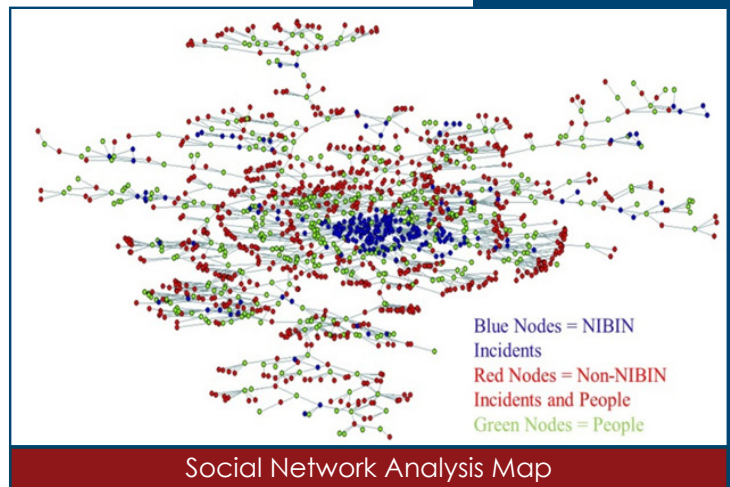
*25 Peer Exchanges have been conducted related to crime analysis across all PSP sites as of February 2018*

## SME Assistance

SME assistance provides sites with the opportunity to learn from the network of highly qualified experts supporting the PSP. Crime analysis subject matter assistance can include, but is not limited to, assistance related to enhancing geographic information system (GIS) and analytic capabilities, analysis of a site's crime trends, and establishing research partnerships with local universities. Each site is allotted 200 hours for SME assistance over their three year engagement with the PSP.

## Social Network Analysis (SNA) Initiative

The Social Network Analysis (SNA) Initiative is provided by SMEs Dr. Andrew Fox and Chief Joe McHale. This assistance includes an intensive training session and ongoing follow up support. Analysis activities and support are provided by Dr. Fox while operational activities and support are provided by Chief McHale.



Social Network Analysis Map

## Training Opportunities and Webinars

Various training opportunities and webinars are offered through the PSP. Sites can use peer exchanges or other funding mechanisms through the PSP to attend relevant crime analysis training opportunities. In addition to training opportunities, webinars are also offered on relevant topics in the PSP.

### Compton, California

At the onset of the PSP engagement, Compton identified crime analysis as an area for improvement. Compton began by securing crime analysis training for their executives, then focused on assessing departmental capabilities. The Compton PSP had very limited crime analysis capabilities at the beginning of their PSP engagement. Because of these challenges, Compton took advantage of the various training opportunities, peer exchanges, and TTA resources offered through the PSP.

Compton requested a Crime Analysis Assessment to help identify current gaps and challenges as well as to enhance internal crime analysis capacities. This assessment was conducted by SME Julie Wartell in March 2017. SME Wartell provided several recommendations to Compton, including providing robust training to analysts, increasing staffing and assistance through volunteers and interns, marketing crime analysis to other members of the department through communication and ride-alongs, automating regular maps and reports, increasing the types of data used, reevaluating the use of certain analysis tools, providing a variety of products for tactical and problem analysis, and delineating primary duties between analysts. Many of these recommendations are being addressed by the creation of the embedded analyst program discussed below.

In addition to the assessment, Compton has conducted peer exchanges with the Oakland and Richmond Police Departments as well as the Camden County Police Department. Compton has also received SME assistance from Julie Wartell, in collaboration with a Federal Bureau of Investigation (FBI) analyst. Officials from Compton have also attended multiple trainings and webinars, including the Crime Analysis for Executives Symposium, the Naval Postgraduate School Social Network Analysis Symposium, and the International Association of Crime Analysts (IACA) Training Conference. Compton also plans to attend the Innovations Academy in early 2018.

As a result of these endeavors, Compton has established a crime analysis reporting sheet which was developed to track crime statistics and operation data. In addition to this, the Compton PSP is currently working to establish a crime analyst field placement program in partnership with two

local universities (the University of Southern California and California State University- Long Beach), and the partners are currently developing a letter of agreement detailing roles, responsibilities, duties, training, background checks, and other details regarding this police-university collaboration. The site aims to have students embedded at the police department in early 2018.

## Flint, Michigan

The Flint PSP site had very little crime analysis capacity at the onset of their PSP engagement. Due to lack of resources within the police department, crime analysis had not historically been a priority.

Flint has taken advantage of several PSP crime analysis resources during their PSP engagement. Officials from the Flint Police Department (FPD) visited the Charlotte-Mecklenburg Police Department (CMPD) in September 2016 to learn about the real-time crime center, CompStat, and to gain an understanding of CMPD's crime analysis capability and the information that is used to drive operations. This visit inspired Flint's interest in other assistance related to crime analysis and technology, including attending the Tampa Crime Reduction Symposium. Other assistance utilized by Flint includes assistance from a Detroit analyst in the Field Analyst Placement Program, IACA Training Conference attendance, and webinar participation. Flint also plans to attend the Innovations Academy in early 2018.

Flint also participated in the first cohort of the SNA Initiative with Milwaukee, WI. This

program is provided by Dr. Andrew Fox and Chief Joseph McHale. This assistance included an intensive subject matter expert training session, held in conjunction with the Milwaukee Police Department (MPD). It also included ongoing follow up support with analysis activities from Dr. Fox and support for operational activities (including additional site visits) from Chief McHale.

*“The Flint Police Department aims to be the anchor resource in a collaborative effort with the community, businesses, and visitors to the City of Flint...providing model law enforcement services with an emphasis on innovation and technology.”*  
– Flint Vision Statement

As a result of these endeavors, Flint completed a SURGE operation that targeted individuals identified as central to violent crime networks using social network analysis. The SURGE action plan consisted of three days of tightly scheduled assignments including, drug raids, parole and probation checks, warrant sweeps, Crime Prevention through Environmental Design (CPTED) actions, and general enforcement. Throughout the operation, officers conducted data collection activities; officers completed Field Information Forms (FIFs) and submitted daily activity reports to broaden the content of FPD's database, expanding its utility as a future resource. When it was over, the SURGE operation had resulted in the execution of 20 arrests, 11 felony warrants, 50 new felony charges, 16 new misdemeanor charges, and 6 search warrants. Officers had completed 29 new FIFs.

### Little Rock, Arkansas

At the onset of their PSP engagement, the Little Rock site had a cadre of well-trained crime analysts operating out of each of the patrol divisions and organized under a supervisory analyst. While these analysts had robust crime analysis skills, technology gaps were a challenge for completing analysis tasks and the police department identified the identification and implementation of best practices in crime analysis technology as a focus area.

The Little Rock Police Department (LRPD) requested a Crime Analysis Assessment to help identify current gaps and challenges as well as to enhance internal crime analysis capacities. This assessment was conducted by SME Chris Bruce in March 2017. SME Bruce provided several recommendations to Little Rock including providing analysts formal, modern, and regular training in the field, allowing analysts flexible schedules and greater communication with officers, increasing the number of sources of data available and creating a master name sheet, creating a CompStat

dashboard which is up-to-the-minute, and creating a CompStat process with metrics that are most relevant to the police department and predictive of future patterns. Several of these recommendations to

*"Our experience in PSP has been nothing but positive. The training our analysts have received has vastly improved our analytical capacity, and the Crime Analysis Assessment really showed us the way forward. Christopher Bruce spent several days at the Department and met with more than a dozen analysts and command staff members. His report was a roadmap for us. We have implemented almost all one of the recommendations he made or we are making progress on the remaining ones."*

*– Jim Brooks, Crime Analyst Supervisor  
Little Rock Police Department*

strengthen analysts' abilities and analytical responsiveness to officers have been implemented, as discussed below.

In addition to the Crime Analysis Assessment, Little Rock also received SME Assistance from Geoff

*Crime analysts in Little Rock successfully identified two priority districts in each precinct. These six districts receive additional patrol deployment, weekly monitoring of crime, and a dedicated PSP team.*

Alpert on establishing research partnerships with local universities. LRPD has also participated in multiple trainings including the Naval Postgraduate School Social Network Symposium, Crime Analysis for Chief Executives Training, U.S. Marshal's Service (USMS) Joint Criminal Intelligence Analyst Training, and the IACA Training Conference. LRPD also intends to participate in the Innovations Academy in early 2018.

As a result of these endeavors, Little Rock has re-invigorated research partnerships with the University of Arkansas at Little Rock. LRPD has also hired additional crime analysts, elevated the crime analysis unit within the organizational structure, and established weekly meetings with analysts to shift their focus from data collection to crime analysis. Little Rock has restructured their CompStat meetings to include additional personnel and refocus on geographic-based policing response. LRPD also created a pre-CompStat meeting to include federal law enforcement partners in developing, implementing, and tracking crime prevention efforts in high-crime areas. LRPD is a recipient of the 2017 Technology Innovation for Public Safety (TIPS) grant, which will focus on building technologies to support crime gun intelligence.

## Milwaukee, Wisconsin

The Milwaukee PSP site had extremely robust crime analysis capabilities at the onset of their PSP engagement and emerged as a peer resource for other PSP sites in developing strategic approaches to PSP and crime analysis engagement.



Analysts participate in Milwaukee PSP CompStat meeting

Milwaukee has taken advantage of several PSP crime analysis resources during their PSP engagement. Officials from the Milwaukee Police



Department (MPD) have attended multiple trainings including the Naval Postgraduate School Social Network Analysis Symposium, the Analytic Seminar on Social Media and Open Source Homeland Security, and the IACA Training Conference. Milwaukee intends to attend the Innovations Academy in early 2018.

Milwaukee also participated in the first cohort of the SNA Initiative with Flint, Michigan. This program is provided by Dr. Andrew Fox and Chief Joseph McHale with a goal of assisting the site in customizing their SNA approach. This assistance included an intensive subject matter expert training session. It also included ongoing follow up support with analysis activities from Dr. Fox and support for operational activities (including additional site visits) from Chief McHale. As a result of their participation in the SNA Initiative, MPD conducted a SURGE operation in September 2017 that targeted individuals identified as central to violent crime networks using social network analysis. This use of SNA identified eight targets, resulted in the recovery of a fully automatic Glock handgun, and resulted in 40 probation and parole checks completed. The Milwaukee project also included elements intended to encourage community participation in “stopping the violence.”

As a result of these endeavors, Milwaukee has developed and implemented a Milwaukee PSP CompStat model. Milwaukee's PSP CompStat approach started in an area known as the “Center Street Corridor” and has since been expanded to a new geographic area known as the “Capitol East Corridor”. In 2017 Milwaukee has realized significant impacts in violent crime reductions: Homicides are down 73 percent, non-fatal shootings are down 30 percent, and property crimes are down 60 percent.

### **New Orleans, Louisiana**

Improving crime analysis was identified as a primary focus area for the New Orleans PSP site at the onset of their engagement with PSP. The site noted the need for increased capabilities among their analysts as well as assistance identifying technology gaps.

The New Orleans Police Department (NOPD) requested a Crime Analysis Assessment to help identify current

*New Orleans joined PSP with only one dedicated crime analyst but has since hired three additional analysts to build their capacity.*



gaps and challenges and to enhance internal crime analysis capacities as well as assistance with a Crime Analysis Implementation Plan to prepare for expansion of their capabilities. This assessment was conducted by SME Chris Bruce in April 2017. SME Bruce provided several recommendations to New Orleans including an implementation plan for NOPD to increase their crime analysis capacity efficiently and effectively, including an on-boarding process and training for new analysts.

In addition to the Crime Analysis Assessment, New Orleans also participated in peer exchanges with both the Camden County Police Department and the Milwaukee Police Department. NOPD officials have also attended multiple trainings, including the Naval Postgraduate School Social Network Analysis Symposium, Crime Analysis on Demand, the IACA Training Conference, and the Tampa Crime Symposium. New Orleans also intends to attend the Innovations Academy in early 2018.

As a result of these early endeavors, New Orleans has experienced several positive outcomes. New Orleans has hired three additional crime analysts and each received on-site training. NOPD has also identified and drafted a location-based CompStat model for targeting violent crime following the Milwaukee model. The first revised CompStat meeting was held in November 2017 with participation from all federal partners and the U.S. Attorney's Office. As New Orleans continues to focus on increasing their crime analysis capabilities, many more positive outcomes are anticipated.

### **West Memphis, Arkansas**

At the beginning of their PSP engagement, West Memphis did not have any formal crime analysis capacity. No individuals within the police department were designated to perform crime analysis tasks or reporting. During their initial PSP Summit, the West Memphis site team identified the development of crime analysis capacity as a high priority focus area.



New Orleans Police Department  
Crime Analyst presenting

*West Memphis received PSP support to implement Operation DETER, which resulted in a 16% decrease in violent crime.*

The West Memphis Police Department (WMPD) requested a Crime Analysis Assessment to help identify current gaps and challenges as well as to enhance internal crime analysis capacities. PSP team Larry Larimore and Jessica Herbert conducted this assessment from November 2015 to March 2016 with the goal of assessing both violent crime in West Memphis and crime analysis capacity. Their subsequent assistance focused on three areas: personnel development, technical platform and data quality development, and organization processes and procedures. TTA activities included providing samples of crime or intelligence analyst job announcements to WMPD to identify key knowledge, skills and abilities, and providing subject matter expertise on expectations of personnel to perform routine tactical analysis based on industry standards. The PSP team also conducted a three-year crime assessment to assist WMPD and PSP in developing a crime reduction strategy for data-identified priority offenses and to identify data processes and data quality to further support the crime analysis capacity for WMPD.

In addition to the Crime Analysis Assessment, West Memphis participated in a peer exchange with the Arvada, Colorado Police Department to receive assistance on the new crime analysis system, Lumen, which West Memphis had recently implemented. West Memphis has also attended multiple trainings, including the IACA Tactical Crime Analysis Training, the Crime Analysis for Executives Symposium, the IACA Training Conference, the Criminal Intelligence Systems Online Training, and the Naval Postgraduate School Social Network Symposium. WMPD has also received SME assistance from Dr. Craig Uchida and Officer David Gamero of the Los Angeles Police Department in creating the foundations for Operation DETER by providing expertise on violent-crime reduction strategies and place- and person-based problem-oriented policing. West Memphis is also provided ongoing crime analysis support from PSP Analyst Jessica Herbert on data evaluation and tactical analysis for response development.

As a result of these endeavors, West Memphis has experienced several positive outcomes. West Memphis has established Operation DETER which focuses on chronic hot spot locations, chronic offenders, and neighborhood restoration. In 2017, West Memphis received a \$450,000 BJA Technology Innovation for Public Safety (TIPS) grant to purchase technology

for Operation DETER, allowing the department to better analyze and share information to reduce crime. Post-implementation of Operation DETER, West Memphis has experienced a 16 percent decrease in violent crime. WMPD also continues to make organizational changes, including a modification of patrol shift schedule and identification of personnel for an analytical position, to support progressive and data-driven and problem-oriented policing. West Memphis has also implemented field contact cards and purchased a new analytical platform, Lumen. In addition to these achievements, WMPD has also purchased additional case management software and now produces daily and weekly information reports for patrol officers, investigators, command staff, and the Mayor's Office.

## Conclusion

Moving forward, PSP will continue to highlight crime analysis as a core focus area due to its numerous benefits to law enforcement and the communities they serve. Crime analysis allows law enforcement officials to focus their violence-reduction strategies. PSP is moving forward with establishing a crime analysis community of practice. The SNA Initiative will also continue and expand, with Nashville, Tennessee, Newark, New Jersey and Little Rock, Arkansas serving as the next cohort of sites. Several PSP sites have realized positive outcomes as they build their crime analysis capabilities through the PSP program, with sites, such as Milwaukee, serving as a mentor to other cities and departments. PSP sites have recognized significant gains in executing arrests, building cases, and reducing crime as a result of strengthening their crime analysis capabilities. Continuing to increase the crime analysis capacity of PSP sites will benefit not only those departments and cities, but the crime analysis community of practice as a whole.





**National Public Safety**  
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