# Focus on Gun Violence: An Evaluation of Denver's CGIC and RAVEN Programs

**Craig D. Uchida, Marc l. Swatt, Allison Q. Land, Kyle Anderson, and Samantha Hock**

## Executive Summary

## Introduction

In January 2013, the Denver Police Department (DPD) established the first Crime Gun Intelligence Center (CGIC) in collaboration with the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). The goal of CGIC is to reduce gun violence by using forensic science and data analysis to identify, investigate, and prosecute shooters and their sources of crime guns. One key feature of CGIC is its use of the National Integrated Ballistic Information Network (NIBIN). NIBIN involves the use of digital images of fired cartridge casings which law enforcement agencies can utilize to share and compare to collected casings from other crime scenes.

The Denver CGIC included a coalition of law enforcement agencies (police departments, prosecutors and Federal agencies) that worked together to reduce gun-related crime. The collaboration provided law enforcement with evidence beyond jurisdiction lines to help them disrupt gun violence by identifying shooters, linking them to additional crimes, and creating stronger cases. Further, the DPD and ATF expanded their program and created the Regional Anti-Violence Enforcement Network (RAVEN) in 2019. The goal of the expansion was to increase regional networks for more robust evidence collection and cross-agency partnerships.

## *Research Questions, Data and Research Design*

This project evaluated CGIC and RAVEN. Research questions included:

- How was CGIC implemented and operationalized?
- What technologies were introduced and used?
- How did CGIC evolve over time?
- What were the challenges and limitations of CGIC?
- What were the impacts of CGIC and RAVEN on violent firearm crimes?

To answer these questions we interviewed 21 participants, obtained crime data and calls for service data from the police and additional data from the ATF. In order to analyze the impact of CGIC and RAVEN, an Interrupted Time Series (ITS) design was used, which examines whether establishing CGIC resulted in decreases in gun-related violent crime over time. In the analysis, four types of crimes were examined involving firearms: homicides, robberies, aggravated assaults, and serious violent crimes.

## *Results*

The study found that CGIC was implemented as planned. While there were some challenges to the original formation of CGIC, overall, DPD and ATF were able to accomplish many of the goals that they established. Technology in the form of NIBIN, ShotSpotter, and a new system to track cases were used effectively.

The impact of CGIC showed a decrease in overall serious violent crime with a firearm and a decrease in both the level and trend for robbery with a firearm. Regression models showed a statistically significant drop of about 23.7 percent of violent crimes with a firearm when CGIC began. When CGIC was implemented, there was a statistically significant drop of 38.1 percent of robberies with a firearm. Further, while robbery was increasing by about 2.0 percent per month before CGIC, this increase slowed to only a 0.5 percent increase per month after CGIC started. There was no significant effect of CGIC on the level of homicides nor aggravated assaults with a firearm.

Analysis shows that the implementation of RAVEN had no statistically significant impact on the level of violent crimes with a firearm. Importantly, since there were only a limited number of months to observe RAVEN after it started, these results are only preliminary. A longer time frame may find that RAVEN had some significant effects.

## Implications

The results from this evaluation provide evidence that CGIC can create significant reductions in gun-related violent crimes. We conclude with the following implications for future research and public policy.

### *Research Implications*

o   There is a clear need for additional process evaluations of CGIC sites.

o   Evaluations should identify common themes so consistent policies can be developed or improved, especially in early stages of these initiatives.

o   Evaluations should examine implementation obstacles and

o   Evaluations should collect and analyze investigation data and case dispositions.

o   Feedback information should be provided routinely to CGIC personnel, especially about the quality of evidence, time to clearance, quality of evidence, triaging procedures, and court dispositions.

### *Policy Implications*

o   Evidence suggests that Crime Gun Intelligence Centers are associate with tangible reductions in firearm-related violent crime. Thus, policymakers should consider establishing a CGIC as part of a coordinated response to violent crime.

o   There is considerable variation in types of crime affected by CGIC and the neighborhoods where CGIC may be effective. Therefore, policymakers should pay close attention to the nature and location of firearm crime during the development of CGIC.

o   CGIC operations should focus on identifying and targeting chronic offenders for arrest and prosecution.

o   A broad, comprehensive strategy should be developed that combines enforcement efforts with social service and community interventions. While CGIC focuses on major offenders, other programs should focus on steering lesser offenders away from violent crime.