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**Assessing the Long-Term Impact of Focused Deterrence in New Orleans: A Documentation
of Changes in Homicides and Firearm Recoveries**

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EXECUTIVE SUMMARY

Although violent crime in the United States has declined significantly over the last three decades, there are particular cities – and specific neighborhoods, street segments, and places within those cities – that have demonstrated stubborn resistance to this downward trend.

Violence in these areas continues to plague residents, disrupting their opportunities to establish healthy, vibrant neighborhoods. One such troubled city is New Orleans, Louisiana, where the homicide rates reported for 2010 – 2016 were more than double the national average, ranging from 50 to 60 homicides per 100,000 residents. The number of homicides in the city of New Orleans has been a chronic problem with long history. Since the mid-1970s, the citywide homicide rate trajectory has remained significantly higher than over 90% of all U.S. cities.

These figures suggest that the City of New Orleans has a complex and long-term history of lethal gun violence.

Across multiple decades, different initiatives have been implemented in New Orleans to reduce violence, and specifically homicides, with mixed success. In 2012, the International Association of Chiefs of Police (IACP) received a grant from the National Institute of Justice (NIJ) to study Research on Firearms and Violence. This research project focused on the shifting nature and consequences of gun violence in the wake of a strategic gun violence intervention. The purpose of this study was to assess the static and dynamic factors associated with firearms violence in New Orleans since the turn of decade. We specifically examined patterns in gun violence between 2010 and 2016 drawing upon a variety of data sources available to the city and the New Orleans Police Department (NOPD). During this period of study, government officials in New Orleans including the Mayor’s Office, the NOPD, federal and local prosecutors, and federal law enforcement drew upon promising strategies such as the focused deterrence policing

intervention. Specifically in 2012, the city adopted and implemented the Group Violence Reduction Strategy (GVRS), which draws upon the focused deterrence theoretical framework to reduce gang and gun-related homicides. The GVRS is designed as a collaborative problem solving initiative that relies on data collection and strategic intelligence to administer a deterrence-based message and to individuals and gangs that are most prone to gun violence. A previously published evaluation of the GVRS reported that the city experienced a statistically significant reduction in firearms violence (homicides, firearm homicides, gang homicides, and overall shooting incidents) in the two-year (2013-2014) post-implementation period (Corsaro and Engel, 2015).

This report examines the long-term impact of GVRS and other efforts in the City of New Orleans to reduce violence by examining overall violence patterns from 2010-2016, and extends previous analyses by examining firearm recovery data. Specifically, the outcome analyses in this report include: 1) the longer term (i.e., up to roughly four years) impact of the intervention on firearms related violence in New Orleans, and 2) whether guns seized (measured through firearms recovered), offender risk, offender (and firearm recovery) social networks, and geographic crime patterns were consistent predictors of firearms violence over time. The goal of this study is to enhance understanding of the long-term characteristics and consequences of firearms violence after an objectively successful strategic intervention was implemented.

Multiple data sources and analytical methodologies were employed including a process assessment, phone interviews, site visits to New Orleans, the use of geographic information systems to model changes in the locality of crime patterns, the use of offender criminal histories, ATF tracing and firearms recovered data, social network analysis, and interrupted time series modeling of crime outcomes.

Key Findings

- 1. Firearm related violence was highly concentrated and chronic, consistently occurring in the same hot spot locations within the City of New Orleans during the 2010-2016 time period.**

Kernel density estimation (KDE) was used in a series of analyses to examine the extent of shooting incident concentration and temporal stability within firearm hot spots over the study period. Yearly maps were visually compared to assess the extent to which the shooting hot spots remained in the same areas over time. Additional figures were created at smaller map scales for three high shooting density areas to make comparing the yearly hot spots easier. For the top-decile hot spot classification, all grid cells identified as hot spots represent about only 1% of all grid cells but approximately 50% of shooting incidents for any given year of the study period. When the top-quartile classification is used, the grid cells identified as hot spots encompass anywhere from about 2.5% to 3.0% of study area's grid cells yet capture between 82% and 100% of the year's shooting incidents.

- 2. Even when firearm violence was reduced in the City of New Orleans, the neighborhoods with the highest firearm related incidents continued to have the highest concentrations of gun violence.**

Spearman Rank correlations were used for an analysis of the 72 Neighborhood Statistical Areas (NSAs) in New Orleans. The results indicated that ten neighborhoods accounted for roughly half of all shooting incidents; and, perhaps most importantly these same ten neighborhoods accounted for the vast majority of shooting incidents throughout 2010-

2016. Thus, even during the focused deterrence call-in intervention period, shooting violence remained relatively stable in these highest risk locations.

3. Both gun violence offenders and the guns they use are highly networked in predictable patterns of co-offending and gun-sharing.

The use of social network analysis coupled with suspect offense histories and the National Integrated Ballistic Information Network (NIBIN) firearms data indicated that a pattern of chronic co-offending exists in New Orleans that centers on firearms usage and gun recoveries. Specifically, guns that were used in multiple firearms offenses (homicides and non-fatal shootings) were more likely to be recovered and traced by the ATF compared with single-usage firearms; moreover, the offenders associated with multiple offense firearms were significantly more likely to be linked to social networks (via co-offending police contacts) of chronic offenders within the city. Thus, a pattern of co-offending and gun-sharing seems to be present among New Orleans highest risk firearm offenders.

4. Repeat violent offenders and the firearms used in violent offenses are also directly correlated with hotspot locations; combining data sources to examine reported crimes, violent offenders, and firearms tracing, holds promise for violence reduction initiatives.

The NIBIN data used in New Orleans to identify high violent individuals in the city seems to be a robust approach because it directs the working group to focus on the most active violent individuals that are most at-risk for firearms violence. The geospatial overlap between firearm co-offenders and gun violence is evident in this study. By targeting co-offending groups identified with the help of NIBIN data more firearms could

potentially be recovered because these high violent individuals are more likely to share firearms with their criminally active co-offending networks.

5. Although the GVRS showed initial reductions in firearm related violence, these reductions were not sustained over time as the implementation of key components of the initiative withered.

A programmatic implementation assessment illustrates that the GVRS intervention conducted deterrence-based offender notification meetings with 329 group/gang identified offenders between October 2012 and March 2017. The frequency of offender notification sessions and number of offenders notified, however, varied over the course of the time period examined. The vast majority of the high-risk offenders were called-in to notification sessions within the first year and a half of implementation, with roughly 56% of all notified offenders attending sessions within the first 15 months of the intervention. The remaining 44% of offenders were called-in over the next 24-month period (which extended to a 36 month post-intervention period since no formal call-in sessions occurred in 2016). This demonstrates that although GVRS was sustained over a significant period of time, the specific tactics implemented to engage with offenders varied in intensity.

6. Although initially conducted, the creation and distribution of data analyses – which is the focal point of evidence-based strategies to reduce crime – changed over time.

A process assessment (based upon in-depth interviews with key project personnel) showed that the creation of a gang network database was developed at the onset of the project (specifically in 2012-2013). However, within a relatively short period of time (particularly after 2013) the dynamic nature of the gang networks in New Orleans were not consistently captured in the gang database. Based on discussions held in 2017, the

gang task force members stated that they remember the creation of the gang database but did not have access to it beyond the initial call-in sessions (and thus did not receive or update information in it) over time. Thus, the development of the gang database was informative to the law enforcement partners, but only in the first two years of operation and with less systematic information collected and used to direct the strategy over time.

7. Reductions in firearms violence were initially demonstrated in 2013 and 2014 after the implementation of GVRS, however were not sustained beyond that time period.

Maximum Likelihood Interrupted Time Series Analysis relying on Poisson and Negative Binomial Regressions models with sensitivity tests for coefficient estimates indicated that, similar to the observed changes in implementation and deterrence-based dosage (i.e., number of offenders called-in to notification sessions), the greatest impact on firearms violence (homicides, firearm homicides, and firearm assaults) occurred by the end of December 2013 (i.e., roughly one year in the post-intervention period) with a continued impact on violence with diminished returns that steadily became less apparent post-2014 and post-2015.

Conclusions and Recommendations

The current study provided an extensive review of the patterns in firearms violence in New Orleans during the previous decade. In terms of the intervention approach, the New Orleans focused deterrence strategy, or group violence reduction strategy (GVRS), had a statistically significant and sustained association with reduced firearms violence within the city relying on a lengthier follow-up period compared to prior research. Ultimately, the findings here affirm that firearms violence in New Orleans declined in the post-intervention period. However, unique to this study was evidence of an erosion of benefits or diminished returns related to the continuation

of the intervention, and how the diminished firearm violence decline was likely calibrated with the change in the mechanisms supporting the overall strategy.

Broader lessons learned regarding longevity issues from an objectively successful intervention are particularly important for future implementation settings and policy implications. First, the pooling of resources in New Orleans to focus on the most violent groups of offenders at the intervention onset seemingly had the largest impact on firearms violence. The use of incident reviews, NIBIN recovery data, and the broader information sharing across gang and homicide task forces was critical to programmatic onset. Also, the gang task force developed and relied on a gang database early in the strategy. Second, the largest proportion of high risk offenders were notified within the first twelve to fifteen months of the post-intervention period with fewer offenders being included in the strategy over time. While the deterrent message was relayed to high risk groups and offenders, the message became narrower in scope and reached fewer individuals and groups over time. Third, the interrupted time series models indicated that firearms violence experienced a substantive and statistically significant reduction early in the post-intervention period, with diminished returns over time. Thus, the initial synergy of the intervention likely had the most imperative effect on firearms violence; however, maintenance of this synergy seemingly became more difficult and less focused over time.

The geographic locations of most firearms violence remained relatively stable throughout the post-intervention period. In short, a detailed analysis showed that firearm violence places were very much the same over time. Firearm recovery locations via the NIBIN data and co-offender geospatial overlap also illustrates that gun violence in New Orleans involves chronic places and chronic offenders, and this pattern is persistent. Interestingly, a review of the offender and victim demographics suggested that offenders and victims became significantly older (by

roughly two years) in the latter post-intervention period. Thus, the locations of gun violence remained the same, the highest risk groups were targeted less systematically and consistently over time, and the profiles of offenders and victims seemingly shifted after two years of the intervention.

The focused deterrence intervention consistently has had two key issues and constraints related to crime reduction longevity. First, the approach is based upon a deterrence-based model where high risk offenders are notified of the enhanced sanctions that await individuals and groups that do not desist from violence. The current study illustrates that focused deterrence in New Orleans was consistent with an initial deterrent effect, but that decayed deterrence became more commonplace after 2013-2014. Second, prior studies show that programmatic sustainability (particularly networks of capacity responsible for the synergy of the intervention) in focused deterrence settings is particularly cumbersome to sustain. The findings here highlight the challenge of programmatic process sustainability (in particular the timely collection and use of relevant data).

The results of this study coupled with the findings in similar focused deterrence gun violence intervention settings suggest two possible approaches to the intervention strategy that we believe will benefit future sites and help overcome issues with implementation longevity: 1) develop a shorter-term focused deterrence intervention approach, implement (for roughly 12 to 18 months), move on (and revisit firearm violence networks at a later date, as needed); and/or 2) develop or utilize an integrated data management system that accounts for the social networks of recent firearm victims and offenders, firearm recovery data, and offense histories to classify individuals into risk categories and center efforts where there is overlap in terms of intelligence from homicide and gang task force members for a longer-term approach. Both sets of

recommendations are discussed and linked to the previous lessons learned from prior focused deterrence interventions that similarly concentrated on firearms violence.