Measuring the Impact of

Kansas City's No Violence Alliance

Prepared by
Andrew M. Fox, Ph.D.
Kenneth J. Novak, Ph.D.
Majid Bani Yaghoub, Ph.D

Department of Criminal Justice and Criminology
University of Missouri - Kansas City

August 2015

Executive Summary

In 2013 and 2014, focused deterrence / lever pulling strategies were developed and deployed in Kansas City. Stakeholders involved in this strategy included the KCPD, Jackson County Prosecutor's Office, US Attorney's Office (WD-MO), Missouri Probation and Parole, Mayor's Office and federal law enforcement. Groups involved with violence were identified utilizing street-level intelligence and analysis, and stakeholders communicated directly and repeatedly to groups the consequences of future violence and opportunities to avoid violence by leveraging social services. Community members complemented this message by challenging the violent norms of the street code of retaliatory violence. Successive Interrupted Time Series analyses indicate that homicide and gun-related aggravated assaults were significantly reduced at 1, 2, 6-month intervals. However evidence also suggests that the deterrent value waned around the 12-month post-intervention period; while homicides continued to decline modestly there was indications that gun-related aggravated assaults began to regress to the mean, raising questions about the long-term effectiveness of focused deterrence.

Introduction

Kansas City's No Violence Alliance (KC NoVA) is an effort to address Kansas City's stubbornly high violent crime rates, including averaging between 2010-2014 approximately 22 homicides per 100,000 residents, 528 aggravated assaults per 100,000 and 361 robberies per 100,000. The majority of homicides were committed with firearms, and violent crime was generally concentrated geographically within the city.

Kansas City's population was approximately 30% African American and 10% Hispanic; 12% of households were single parents with children under age 18, and almost a fifth of its citizens lived below the poverty line. Concentrated in the urban center, the city had a serious violent crime problem that overwhelmingly involved guns. From 2010 through 2013, Kansas City ranked among the worst of the 50 largest cities in the United States for homicide, averaging more than 100 per year. In 2012, 106 homicides were committed, averaging 22.8 per hundred thousand people. This was truly disconcerting when compared with previous years. In 2010, Kansas City suffered 102 homicides (22.1 per hundred thousand population), and in 2011, 111 homicides were reported (24 per hundred thousand population). According to the 2014 Annual Report issued by the KCPD in 2015, the city began to fare better in 2013 and 2014 with 100 homicides (21.4 per hundred thousand population) and 78 homicides (17.3 per hundred thousand population) respectively.

Not including homicide, Kansas City's violent crime rate in 2012 was equally dismal— 2,476 aggravated assaults were reported, a significant increase from 2010 (n=2,371) and 2011 (n=2,274). The year 2013 was nearly identical, with 2,467 aggravated assaults reported, and then in 2014 the total sharply increased to 2,574, bringing Kansas City's violent crime rate from 2010

through 2014 to an average of 2,432.4 aggravated assaults per year. There were 1,617 robberies in 2010, but in 2011, 2012 and 2013, totals rose to 1,673, 1,645 and 1,716 respectively.[1]

More to the point, from 2010 through 2014, Kansas City averaged 85.6 firearm-related homicides and 1,025.5 aggravated assaults with a firearm per year; in other words, 86.3% of all homicides and nearly half (42.1%) of all aggravated assaults in Kansas City over the five-year period were gun related. Of equally great concern, those homicides were happening in a geographically concentrated area. Of the 394 homicides in Kansas City from 2011 through 2014, 85.5% (337) had occurred in the Central, Metro and East regions of the city. The violence in Kansas City was gun related and concentrated in the urban center. One positive finding has been that in these urban areas police have been recovering a large number of handguns per year. On average, between 2010 and 2014, according to the KCPD 2014 Annual Report, the department has recovered an average of 984.4 handguns per year in the Central, Metro and East divisions combined.

In 2012, incumbents left the three offices of police chief, county prosecutor and mayor. With new officials in those key places, the ground became fertile for attempting more ambitious and collaborative initiatives for reducing violence. Those three officials along with several others formed KC NoVA to plan and execute a focused deterrence strategy specifically to reduce *group-related* violence.

---

[1] See KCPD Annual Report for 2014, issued in 2015.

Focused Deterrence

In the words of David Kennedy (2006), "focused deterrence strategies deploy enforcement, [social] services, the moral voices of the communities, and deliberate communication in order to create a powerful deterrent to particular behaviors by particular offenders." Focused deterrence attempts neither to clear an area of offenders nor to transform them into model citizens. Instead, using a variety of analytical and communication techniques, peer pressure, consistent and stringent sanctions, and practical support for nonviolent behavior, focused deterrence gives potential offenders good reasons to cooperate in the effort to end the killing—in other words, it strives to change the behaviors and norms of chronically violent criminals (Braga et al. 2001). The strategy, consistently and properly implemented, has delivered measurable results and "lessons learned" in several U.S. cities.

Focused deterrence has been implemented in various ways and under a variety of names, but in nearly every one of its iterations the ultimate goal is to reduce crime at its source (Braga et al. 2001; Braga 2008; Tillyer and Kennedy 2008; Corsaro and McGarrell 2009; Tillyer, Engel, and Lovins 2010; Corsaro et al. 2012; Rivers, Norris, and McGarrell 2012; Engel, Tillyer, and Corsaro 2013). Cities such as Boston, Minneapolis, Indianapolis, Stockton and Cincinnati have applied the focused deterrence model in an attempt to reduce group-involved and gun-related violence (Tillyer and Kennedy 2008).

Focused deterrence in the innovation known as "pulling levers" acknowledges that policing alone cannot achieve such change, and so it recruits key players to form multiagency alliances. The partners may vary from city to city, but typically they include the police department, the

county prosecuting attorney's office, political and community leaders, community social services, parole and probation agents, and members of a local university (Tillyer and Kennedy 2008). Those individuals and agencies collaborate to identify the specific crime problem to be addressed and to develop an implementation plan. The planning period involves considerable time and effort spent mining criminal and social justice data and the experiential knowledge of the partners—in other words, systematically reaching consensus on the identity, definition, and priority of the violence issue most in need of attention, and then analyzing that problem in an attempt to coordinate the best possible multifaceted response (Braga et al. 2001).

In many U.S. cities, focused deterrence strategies, including pulling levers, has delivered results. For example, in High Point, North Carolina, a reduction in violence was accomplished in the target area without displacement of violence to surrounding areas (Corsaro et al. 2012). In Rockford, Illinois, violent and nonviolent crimes were reduced in the target area, with 80% of targeted criminals not reoffending (Corsaro and McGarrell 2009). In Boston, Ceasefire was determined to be responsible for reducing monthly youth homicides by two thirds, as well as for decreasing the number of citywide gun assaults and shots fired, and gun trafficking (Braga et al. 2001). In Indianapolis, a "pulling levers" intervention reduced gang homicides by 45.5%; drug and weapon-related homicides declined, as well (Corsaro and McGarrell 2009). Minneapolis and Lowell, Massachusetts, also found the strategy effective; Minneapolis achieved annual reductions in numbers of homicides, and Lowell documented a 24% reduction in Asian gang assaults and a 50% reduction in Asian gang homicides (Tillyer, Engel, and Lovins 2010).

Reviews of studies reporting such results have had both critics (see, for example, Fagan 2002; Rosenfeld, Fornango, and Baumer 2005; Wellford, Pepper, and Petrie 2005) and supporters (see, for example, Cook and Ludwig 2006; Morgan and Winship 2007). One possible

indicator that such programs have had an impact on violence rates, however, is that when they end, most often due to a shortage of funding or other resources, violence slowly and steadily increases, again becoming the norm among violence-prone gangs and other groups and individuals (UCPI 2009).

Offender perceptions of the certainty and severity of sanctions are suggested to be a key factor in focused deterrence's impact (Nagin 1998). According to Braga and Weisburd (2012), focused deterrence often relies on confronting a fairly small number of sanction-vulnerable chronic offenders with the message that violent behavior will not be tolerated and specifying exactly what sanctions they will face if they persist. Such communication can only be effective, however, if backed up the next time a violation occurs, and consistently thereafter, with swift and highly visible law enforcement actions that deliver the exact consequences promised (Durlauf and Nagin 2011). In focused deterrence strategies, these actions are structured in advance and then rapidly executed, exactly as promised, whenever a violent incident occurs.

Kennedy (2006) has identified six features common to effective implementation of such initiatives: (1) selecting a particular crime problem, (2) pulling together an interagency enforcement group, (3) conducting research, with help from front-line officers, to identify key offenders, (4) framing a special enforcement operation directed at key offenders if they commit further violence, (5) matching enforcement with supportive services and community encouragement to embrace nonviolence, and (6) communicating directly and often with offenders, letting them know that they are under close scrutiny and exactly how they can avoid severe sanctions. This largely has been the approach adapted to and developed for local conditions by KC NoVA.

Focused Deterrence Implementation Challenges, KC NoVA Responses

In 2012, a focused deterrence strategy to reduce group-involved violence was initiated in Kansas City, Missouri. The project was developed and is implemented by an interagency coalition of enforcement, social services, community, and research organizations. In late 2012 and throughout 2013 and 2014, teams, leaders and staff within and across the partnering agencies worked at integrating focused deterrence values and practices into the way they previously had understood and carried out their responsibilities. Institutional, communication and collaborative processes and capabilities were tested, and some were found wanting.

The initiative was first sparked by Missouri's homicide rate—ninth highest in the nation, with St. Louis and Kansas City leading the way. Early in 2012, in Kansas City, the county prosecutor and chief of police, both recently appointed, met with the acting district U.S. attorney to explore strategies for reducing that rate. They became interested in focused deterrence, which had delivered noteworthy violence reduction results in other U.S. cities. The scope and nature of the problem in Kansas City was confirmed by University of Missouri–Kansas City criminal justice professors. Consulting with Cincinnati officials experienced in focused deterrence and enlisting other local, state and federal enforcement agencies in the effort, the group began developing a framework for reducing the city's rate of violent crime, focusing on homicide and aggravated assault committed by chronic violent offenders who were members of groups and social networks. They also enlisted the involvement of community and social services organizations, and together they began shaping the initiative known as the Kansas City No Violence Alliance, or KC NoVA. The KC NoVA Governing Board continues to consist of the Jackson County Prosecutor, the Mayor of Kansas City, the Kansas City Chief of Police, the Regional Administrator of Probation and Parole, the Special Agent in Charge of the Federal

Bureau of Investigations, the Special Agent in Charge of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), the United States Attorney for the Western District of Missouri, and the Chancellor of the University of Missouri-Kansas City.

The Alliance established an Interagency Enforcement Group responsible for leading and coordinating the initiative's central response to violent incidents committed by targeted groups, referred to in focused deterrence circles as the "special enforcement operation." The Interagency Enforcement Group was to be responsible for facilitating decision-making processes and for designing, coordinating and launching the special operation, across the coalition agencies. It was to design that response in advance to assure that violent offenders and key members of their social networks would be rapidly apprehended and consistently sanctioned, without exception, at the most severe levels possible, as determined by consultation among the enforcement agencies; it was also to define exactly which violent incidents would "trigger" the operation. During and beyond the implementation phase, members were to meet at least weekly to review crime reports to identify any "trigger" incidents and to coordinate special enforcement operations accordingly.

For several reasons, early implementation was uneven and faced numerous challenges. Unfortunately, for example, the Interagency Enforcement Group was not officially convened until near the end of the first year (2013) of program operation. As a result, officers, prosecutors and other enforcement staff who were ready to act had no clear direction. Staff reported feeling that they were "working in the dark" and often "winging it." Enforcement decisions were being made at a variety of organizational levels, as needed; communication in most directions was poor, and with the exception of a few KC NoVA workers from different agencies who had been co-located in the prosecutor's office, interagency coordination was sketchy.

The kind of knowledge needed to predict and respond rapidly to violent crime resides with front-line officers. To advance enforcement strategies, their collective knowledge needs to be shared, structured and analyzed, with results being reported back in a form that yields new insights about attacking the problem. The *group audit*, a facilitated process during which officers document what each one knows about violent groups, their members and their relationships, is a cornerstone of focused deterrence. For most of 2013, attempts to conduct group audits at KCPD failed for lack of understanding and support among uninitiated command staff. Very late in 2013, after a training session with David Kennedy that addressed the group audit, KC NoVA leadership and command staff rallied behind the process; in mid-December 2013, the first well-attended group audit was conducted and the difference in the quality of information that analysts could report back afterward immediately became apparent. In 2014, group audits were scheduled to occur every 90 days, keeping the information pool up to date. This was an outstanding instance of the importance of getting the right information to the right people, and then making a successful course correction.

KC NoVA's emphasis on direct, clear communication with chronic violent offenders and their peers makes it possible for those offenders to compare stringent sanctions for violent crime with the alternative of social services and community approval that could open other opportunities—they have a real choice. KC NoVA staff reached out to offenders at home (e.g., custom notifications), police stations, probation and parole offices—wherever they might be found. Although several start-up problems with services provision still needed attention, during 2013, 82 supervised (probationers) and unsupervised clients enrolled for services related to education, jobs, housing, finances, and medical or mental health and addiction treatment. That number is exceptional.

In fact, direct communication with offenders is one of the cornerstones of focused deterrence. A key component of that communication is the call-in, an innovative technique that brings selected offenders face-to-face with enforcement personnel, community members and service providers to hear the facts about their options. The 2013 call-ins were well planned, well executed, and well attended.

KC NoVA's first year of implementation was uneven, with a couple of notable missteps. This was to be expected. First, the initiative attempted to get off the ground without a formal documented implementation plan. A good many obstacles to performance in 2013 that later were observed or reported could be traced back to that oversight. The implementation plan was belatedly approved and distributed nearly a year afterward, in November 2013. Next, as mentioned above, a crucial leadership body, the Interagency Enforcement Group, was missing in action for all of 2013 (having not been authorized by an implementation plan, among other reasons), and the project suffered the consequences in ways that required, during 2014, considerable damage control as well as catching up with a year-long backlog of enforcement-related decision-making and coordination of effort. There were several other smaller but important areas in need of attention. Still, the leadership and staff showed ingenuity and persistence throughout the start-up, and they have earned the public's confidence that KC NoVA will continue to move forward towards achieving it goals.

The research team conducted a mid-point implementation plan evaluation that resulted in a series of recommendations based on the above-mentioned and other shortcomings. It addressed, among other things, the need to update and conscientiously apply the newly minted implementation plan; to improve lines of communication among all stakeholders; to build in feedback loops to detect structure and process problems, and to create organization-wide

environments conducive to open, honest exchange; to increase the focus on service provision, and improve consistency in enforcing sanctions; to maintain current information about violent group members, using all available "vetted" street-level intelligence; and to stay connected for moral and technical support with other cities implementing focused deterrence.

The Alliance responded to those recommendations in writing and, more importantly, by taking action. Alliance leaders openly acknowledged that the ability to identify operational inefficiencies within and among the several organizations of the KC NoVA partnership would continue to be critical to the initiative's success. They expressed a willingness to look inward at their respective organizations and to respond to constructive feedback in order to correct course and implement the strategy in ways that would produce and sustain long-term reductions in violence.

The Alliance noted, accurately, that throughout 2013 the project had been building capacity to implement a focused deterrence model in Kansas City, an undertaking that had been and continued to be extremely challenging. Leaders acknowledged that transparency in organizations and the ability to effect change were the master keys to their success. They agreed that the field of criminal justice has often been resistant to change, often due to structural hierarchies and budget constraints. With admirable fortitude, they responded with a series of actions that would allow KC NoVA to mature into a project that would become the norm in Kansas City rather than just another "special project." The following are examples of those actions taken:

- Having the capability to know who the groups and gangs are who commit violent crime is the most essential element of a focused deterrence model. KC NoVA stakeholders lacked actionable intelligence and had no metric for identifying the level of violence

occurring in those groups. Silos of intelligence were found in police investigative elements, patrol elements, prosecutor's offices, department of corrections and probation and parole. Each silo held a piece to the puzzle for effective implementation. The first steps taken to rectify that problem were to break down those silos and to train intelligence analysts to automate the process of identifying documented police contacts and their related social structures. Developing those "social networks" of violent groups initially took months. This process is now the norm and, depending on the complexity of the group, can be accomplished in minutes or hours.

- Formalizing "official" data, while successful, revealed another obstacle: KCPD did not have the ability to gather and process the street-level intelligence that resided in the minds of its more than 1,400 sworn officers and 600 civilian staff, much less from the staff in the numerous partner agencies. To acquire the ability to collect and analyze violent group data, the process of conducting "group audits" was established, allowing the KC NoVA partnership to deliver its "focused" messages and enforcement efforts directly to the groups identified as priority targets in Kansas City.

- In April 2014, KCPD established a Violent Crime Intelligence Squad within the Violent Crime Division to manage, properly verify, share and drive responses to the new intelligence being gained. The unit consisted of a police sergeant, five detectives and a civilian analyst. This unit, by ensuring that the intelligence is collected, validated and disseminated across partnering agencies would prevent the gaps and lack of structure that existed during the first year of implementation.

- During its early implementation, several KCPD chains of command each held responsibility for enforcement actions and reactionary responses to violent crime. The

ability to implement the model, while simultaneously providing operational knowledge to key commanders involved, was challenging. In an effort to streamline the command-level decision-making process, the Alliance finally developed the KC NoVA implementation plan at the end of 2013, outlining roles and responsibilities for five key committees. Those committees were then able to assume accountability and authority for implementation oversight, data, enforcement, service delivery and community engagement.

- In April 2014, Chief Daryl Forté made critical decisions to re-structure KCPD based on the lessons learned in 2013. Chief Forté permanently transferred 28 uniformed officers from the Patrol Bureau to the Violent Crimes Division to deal with emerging trends and violent groups. He further transferred and re-aligned command for more than 30 additional personnel to properly investigate gun crime and weapons violations in cooperation with the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). The ATF deputized four additional detectives at KCPD to assist in those cooperative efforts to reduce violence by prosecuting violent offenders with illegal firearms.

- The Jackson County Prosecutor's Office and the U.S. Attorney's Office also designated specific prosecutorial staff for KC NoVA, streamlining communication on enforcement efforts.

- The social service aspect of KC NoVA continues to thrive, contrary to predictions from the outset of the project. The ability to focus services to key individuals in violent group structures is a model to be emulated. The advocates have continually adjusted to meet the growing needs of the project and have formalized their assessment "paths" to tailor responses to the needs of the individuals being serviced.

- Deepening the involvement of Missouri Probation and Parole has been critical to providing accountability and messaging to identified group members. Prior to KC NoVA, the relationship between KCPD and MO Probation and Parole had been insignificant. Their collaboration through KC NoVA resulted in streamlining case management and dramatically increasing the stringency with which key offenders are held accountable. Intelligence gaps were identified and removed, resulting in the arrests of hundreds of felony probation parole absconders in 2013 and 2014. In 2014, Missouri Probation and Parole committed an officer to be co-located in the prosecutor's office with other KC NoVA staff.

By the start of 2014, KC NoVA was truly off the ground. Multi-agency committees were meeting, there was a written plan, group audits were occurring regularly, call-ins and custom notifications of key group members were happening regularly, group enforcements were being coordinated, and social services were being offered to members in known groups. Because of this evolution, we consider January 1, 2014 the date Kansas City started fully implementing focused deterrence.

Methods

Data

To assess the changes in violent crime in Kansas City, official police data were used, with indicators of violent crime being *reported incidents of homicide* and *aggravated assaults with a gun*. Ideally, we would have had information about the number of group-related homicides and non-fatal shootings in Kansas City going back at least five years. Those data were not available, however, since only current homicides and shootings had been evaluated in order to determine

group involvement. Given the lack of historical data on group-related violence, we were only able to assess the overall violence numbers.

KCPD provided information on all reported homicides and aggravated assaults from January 1, 2010 through December 31, 2014. Data were provided with the date of the incident and type of incident. For aggravated assaults, data were provided on the type of weapon involved. All aggravated assaults involving any type of firearm were included in the *aggravated assault with a gun* variable. Because of low cell counts (no homicides were reported on many days), we aggregated the number of incidents per month. As a result, the unit of analysis is the month. Over the period of study, there were 60 monthly time periods.

Homicide and *gun-related aggravated assault incidents*, as described above, were the two main dependent variables. The main independent variable was *focused deterrence implementation*. Implementation took place during all 12 months of 2014; therefore, the 48 months from January 2010 through December 2013 were coded as pre-implementation, and January 2014 through December 2014 was coded as the implementation period.

Analytic strategy

Analysis of the outcome data progressed in three steps. First, we displayed homicides and gun-related aggravated assaults. Visualizing the trends in the data showed the overall levels of violence in Kansas City from 2010 through 2014. Second, we compared violent crime rates from before the implementation of KC NoVA with violent crime rates after its implementation. That is, we examined the mean changes in homicides and gun-related aggravated assaults from the years prior to implementation with those from the full year of robust implementation in 2014. The third stage in the analysis was an interrupted time series (ITS) model that measured any changes in the trend of homicides and gun-related aggravated assaults. Interrupted time series

analysis is a method of statistical comparison of time trends in data before and after an

intervention is implemented (Penfold and Zhang 2013). Those models controlled for any trends

in the data that were ongoing before implementation of KC NoVA.

Findings

Descriptives

Visualization of the data was the first stage in the analysis of the homicide and gun-related

aggravated assaults. Figure 2.1 displays the monthly total numbers of homicides from January

2010 through December 2014. The vertical line at January 2014 indicates the start of robust

implementation. Over the five-year time period, we found considerable monthly variation

ranging from about 5 to 15 homicides per month. Visual inspection of the data also showed that

the number of monthly homicides in 2014 was less volatile with fewer spikes than in previous

years.

Figure 2.1: Homicides in Kansas City, Misssouri January 2010 to December 2014
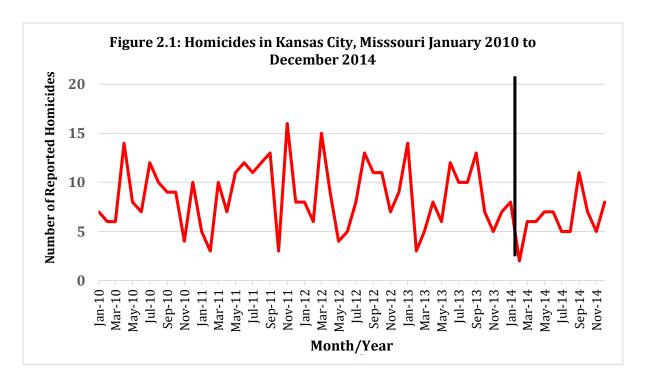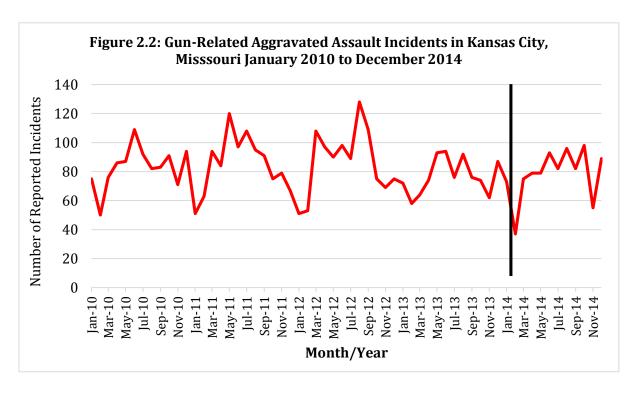
Figure 2.2 shows the monthly totals of gun-related aggravated assaults from January

2010 through December 2014. Again, the vertical line at January 2014 indicates where data

begins for focused deterrence implementation. The gun-related aggravated assault data tended to

show seasonality, with more incidents occurring in the summer months than in the winter

months. Monthly peaks in 2013 and 2014 did not go above 100 per month, although they had

gone above that mark in the prior years 2010, 2011 and 2012.

Figure 2.2: Gun-Related Aggravated Assault Incidents in Kansas City, Misssouri January 2010 to December 2014

Figures 2.1 and 2.2 provide evidence that the trend in violence changed in 2014. That change

was investigated further with bivariate and time-series analysis.

Bivariate analysis

To empirically assess the change in the mean number of homicides and gun-related

aggravated assaults, table 1 displays means for the pre-implementation period compared with

means for the implementation period. From January 2010 through December 2013, there were

8.73 homicides on average per month; after implementation, from January 2014 through

December 2014, the average number of monthly homicides was 6.42, a significant reduction of

26.5%. From January 2010 through December 2013, there were 83 gun-related aggravated

assaults on average per month; after implementation, from January 2014 through December

2014, the average number of monthly gun-related aggravated assaults was 78.17, a non-

significant reduction of 5.8%.

This analysis again indicated that the trend in violent crime corresponded with the

implementation of focused deterrence in Kansas City. The analysis thus far, however, had not

taken into account the trend in the data. It was clear that the data were not independent; that is,

the rate of violence in one month could impact the rate of violence in subsequent months. The

temporal autocorrelation in the data had to be accounted for to better assess the change in violent

crime during implementation. Interrupted time series (ITS) analysis was used to further assess

those data.

Table 1. Changes in the average monthly violent crimes.

		Pre-Implementation (Jan 2010- Dec 2013)	Implementation (Jan 2014 - Dec 2014)	t-value	Total
	n =	48	12		60
Homicide		8.73 (3.34)	6.42 (2.19)	2.91*	8.27 (3.26)
Gun-Related Aggravated Assault		83.00 (17.75)	78.17 (17.45)	0.85	82.03 (17.65)

Note: Mean (Standard Deviation)

* p < .05

Interrupted time series analysis

Table 2 shows the results of the interrupted time series model. For both homicides and

gun-related aggravated assaults, the 1-month, 3-month, 6-month and 12-month effects are

shown. Those effects indicate the change in slope at that point after implementation. That is, the effect shows the change in slope, given the trend in the data, after 1 month, 3 months, 6 months and 12 months. Those different effects showed the change in the data after different time points. Table 2 shows the parameter estimate, which is the number of monthly reductions in homicide and gun-related aggravated assaults at that point. The 95% confidence interval is also presented along with the relative effect. The relative effect was standardized so that we could compare the percent of change in homicides to the change in gun-related aggravated assaults.

In terms of homicides, table 2 shows that the one-month effect was a 39.98% reduction in the trajectory of homicides. After three months, there was a 33.94% reduction; after six months, a 28.94% reduction; and after 12 months of implementation, there was a 15.65% reduction in the number of homicides, taking into account the trend in the data prior to the implementation of the project. In terms of gun-related aggravated assaults, there was an 18.64% reduction after one month of implementation. After three months of implementation, the effect was a 13.76% reduction in gun-related aggravated assaults; and after six months, the effect was a 4.92% reduction in gun-related aggravated assaults. Interestingly, after 12 months of implementation the trend in gun-related aggravated assaults increased by 10.91%, although not significantly. As was displayed in table 2, the overall totals of gun-related aggravated assaults were lower in 2014; the interrupted time series analysis indicated that those reductions were realized in the first few months of implementation, and by the end of 2014 this trend had increased.

Table 2. Interrupted time series models

Level Effects	Parameter Est.	Sig.	95% Confidence Intervals		
			Lower	Upper	Relative Effect
Homicide					
1 month	-3.66	*	-4.47	-2.84	-39.98%
3 months	-3.09	*	-3.71	-2.48	-33.94%
6 months	-2.53	*	-3.06	-2.00	-28.94%
12 months	-1.41		-2.21	-0.61	-15.65%
Gun-Related Aggravated Assaults					
1 month	-15.85	*	-21.65	-10.06	-18.64%
3 months	-9.98	*	-14.45	-5.51	-13.76%
6 months	-4.05		-8.09	-0.01	-4.92%
12 months	7.81		1.67	13.95	10.91%

* $p < .05$

Overall, the data indicated a dramatic and significant reduction in homicides that corresponded to robust implementation of focused deterrence in Kansas City. Although gun-related aggravated assaults were down overall, we cannot rule out that that reduction was due to chance. Interestingly, we found that the violence reduction was more dramatic earlier in the program. This could be an indication of a decay effect, where the reductions slow or become less over time. It should be noted that implementation of focused deterrence only became more robust through 2014, which makes this finding more interesting. That raises questions about the long-term effectiveness of focused deterrence. It is possible that focused deterrence becomes routine for group and gang members, and levels of violence slowly increase back to pre-project levels. Obviously, it is too soon to conclude that this is the case; however, it is something that researchers should test for and continue to monitor.

Summary of Findings

Focused deterrence was a highly interactive, coordinated undertaking. Overall, by the end of 2014, the data were indicating a significant reduction in homicides that corresponded to robust implementation of focused deterrence in Kansas City. The implementation of focused deterrence had continued to become more robust through 2014, although the violence reduction was more dramatic earlier in the program, indicating a possible decay effect, making it imperative that the Alliance continues to encourage innovation while assessing their effectiveness. Clearly, however, it is too soon to assume that this will be a long-term trend or to draw conclusions about the cause of decay, if it exists. Researchers should test for this and continue to monitor it.

Over time, focused deterrence has become an important part of the Kansas City Police Department's strategy to reduce violent crime. Sustaining focused deterrence has proved to be challenging in other jurisdictions (Berman and Fox 2010), but the KCPD organizational structure has evolved to position the department well for institutionalizing the innovation. The implementation of innovation within criminal justice organizations is challenging (Weisburd and Braga 2006). The KC NoVA experience has generated several recommendations for stakeholders to consider when applying new evidence-based practices.

First, buy-in from the top is critical. As an initiative is launched, institutional leadership's comprehension and endorsement is essential (although not, by itself, sufficient). Leaders who are fully engaged, publicly and privately, in successful innovation will foster an environment receptive to that innovation and to risk taking and challenging the status quo. Leadership buy-in becomes more complicated in multi-agency alliances such as KC NoVA, which require that commitment across multiple elements of the criminal justice system. Innovators should

recognize and prepare for the fact that leadership in public organizations frequently changes hands.

Second, identify organizational and structural impediments to change, and devise ways to mitigate or correct them. In particular, find ways to prevent innovation from becoming threatening to the prevailing occupational culture. Policing is a street-level bureaucracy; policy is made at the top of the hierarchy, but implemented in a low-visibility environment at the bottom (Lipsky 1980), with mid-level managers at the intersections in between. Mid-level managers often are born, raised and socialized under traditional models of policing. They generally have worked for years waiting to be promoted or assigned to desirable positions within the department; they have much to lose from change. Small wonder, then, that most would resist innovation that threatens or challenges that status quo.

Similarly, throughout much of KC NoVA's early development, the police department's organizational structure impeded the initiative's success. Focused deterrence, at least as it was operationalized in Kansas City, was a highly interdependent and interactive undertaking, requiring structural (and attitudinal) change throughout the Alliance member agencies, including the KCPD, in order to be fully realized. Depending on the innovation and the local organizational context, significant changes in an institution's structure may be needed in order to implement focused deterrence, and such changes almost certainly will be resisted by many employees. Nonetheless, such hierarchical and functional transitions, if well designed and implemented, will position those agencies for sustaining innovation beyond the life of federal grants.

The importance of appreciating how a particular policing innovation reconciles with the existing officer culture and departmental traditions cannot be overstated. Departments that are

more closely aligned with the standard model of policing—"one-size-fits-all application of reactive strategies to suppress crime" (Weisburd and Eck 2004, 44)—are likely to be more challenged while implementing innovations that involve diverse approaches and a high degree of focus. Focused deterrence introduced a broad array of unfamiliar approaches, such as call-ins and communication to the street, social services, and partnering with other criminal justice agencies. Many of those activities were counter to the department's normative crime-fighting behaviors. Focused deterrence also meant maintaining a high level of focus on smaller than usual groups of individuals. At a time when the overall violent crime rate was particularly high, many initially found the idea of focusing on small groups and individuals as the surest route to reducing that rate difficult to grasp, if not outright ludicrous. Focused deterrence, also, was on its way to not passing the "sniff test."

In an effort to demystify focused deterrence—what it was and what it was not—the KC NoVA Unit conducted in-service training sessions across the department and presented additional orientation sessions for external constituents. Those efforts contributed to clarifying how focused deterrence could complement and be consistent with the existing culture and traditions. The documented reductions in violent crime that were attributed to focus deterrence certainly did not hurt the effort to win the hearts and minds of early skeptics.

Third, patience is needed in order to allow the seeds of innovation to take root. Innovation takes time to develop, and focused deterrence is not a quick fix for complex problems. Early on, KC NoVA stakeholders had cautioned the public that focused deterrence was a "mission shift," "a new way of doing business," and "would take time to develop." Tempering expectations and the natural impatience of those eager for solutions to serious problems in this way was important to permit the several interactive moving parts of KC NoVA across several organizations to gel

and to begin working smoothly and effectively. In such cases, knowing when to be patient and

when to apply pressure is a virtue.

References

Berman, G., and A. Fox. 2010. T*rial and Error in Criminal Justice Reform: Learning from Failure*. Washington DC: Urban Institute Press.

Braga, A. A. 2008. "Pulling Levers Focused Deterrence Strategies and the Prevention of Gun Homicide." *Journal of Criminal Justice* 36: 332-43.

—, D. M. Kennedy, E. J. Waring, and A. M. Piehl. 2001. "Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire." *Journal of Research in Crime and Delinquency* 38 (3): 195-225.

—, and D. L. Weisburd. 2012. "The Effects of Focused Deterrence Strategies on Crime: A Systematic Review and Meta-Analysis of the Empirical Evidence." *Journal of Research in Crime and Delinquency* 49 (3): 323-58.

Cook, P. J., and J. Ludwig. 2006. "Aiming for Evidence-Based Gun Policy." *Journal of Policy Analysis and Management* 48: 691-735.

Corsaro, N., E. D. Hunt, N. K. Hipple, and E. F. McGarrell. 2012. "The Impact of Drug Market Pulling Levers Policing on Neighborhood Violence: An Evaluation of the High Point Drug Market Intervention." *Criminology and Public Policy* 11 (2): 167-99.

—, and E. F. McGarrell. 2009. "Testing a Promising Homicide Reduction Strategy: Re-assessing the Impact of the Indianapolis 'Pulling Levers' Intervention." *Journal of Experimental Criminology* 5 (1): 63-82.

Durlauf, S., and D. Nagin. 2011. "Imprisonment and Crime: Can Both Be Reduced?" *Criminology & Public Policy* 10 (1): 13-54.

Engel, R. S., M. S. Tillyer, and N. Corsaro. 2013. "Reducing Gang Violence Using Focused Deterrence: Evaluating the Cincinnati Initiative to Reduce Violence." *Justice Quarterly* 30 (3): 403-39.

Fagan, J. 2002. "Policing Guns and Youth Violence." *The Future of Children* 12: 133-51.

Rosenfeld, R., R. Fornango, and E. Baumer, 2005. "Did Ceasefire, Compstat, and Exile Reduce Homicide?" *Criminology & Public Policy* 4 (3), 419-49.

KCPD (Kansas City Police Department). 2012. *Annual Report*. Retrieved from KCPD.org.

Kennedy, D. M. 2006. "Old Wine In New Bottles: Policing and the Lessons of Pulling Levers." In *Police Innovation: Contrasting Perspectives,* in Weisburd and A. A. Braga (eds.), 155-70*.* Cambridge, UK: Cambridge University Press.

Lipsky, M. 1980. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*. New York: Russell Sage Foundation.

Morgan, S. L., and C. Winship. 2007. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. New York: Cambridge University Press.

Nagin, D. 1998. "Criminal Deterrence Research at the Outset of the Twenty-first Century." In *Crime and Justice: A Review of the Research*, edited by M. Tonry, vol. 23, 1-42. Chicago: University of Chicago Press.

Penfold, R. B., and F. Zhang. 2013. "Use of Interrupted Time Series Analysis in Evaluating Health Care Quality Improvements." *Academic Pediatrics* 13: S38-S44.

Rivers, L., A. Norris, and E. F. McGarrell. 2012. "Mental Model of Drug Market Intervention." *Journal of Drug Issues* 42 (1): 59-81. doi:10.1177/0022042612436653.

Rosenfeld, R., R. Fornango, and E. Baumer. 2005. "Did Ceasefire, Compstat, and Exile Reduce Homicide?" *Criminology and Public Policy* 4: 419-50.

Tillyer, M. S., R. S. Engel, and Brian Lovins. 2010. "Beyond Boston: Applying Theory to Understand and Address Sustainability Issues in Focused Deterrence Initiatives for Violence Reduction." *Crime and Delinquency* 58 (6): 973-997.

—, and D. M. Kennedy. 2008. "Locating Focused Deterrence Approaches within a Situational Crime Prevention Framework." *Crime Prevention and Community Safety* 10: 75-84.

UCPI (University of Cincinnati Policing Institute). 2009. *Implementation of the Cincinnati Initiative to Reduce Violence (CIRV): Year 2 Report*. University of Cincinnati Policing Institute, School of Criminal Justice: Cincinnati.

Weisburd, D., and A. A. Braga. 2006. *Police Innovation: Contrasting Perspectives*. Cambridge: Cambridge University Press.

—, and J. E. Eck. 2004. "What Can Police Do to Reduce Crime, Disorder, and Fear?" In *Annals of the American Academy of Political and Social Science*, vol. 593: 42-65. doi:10.1177/0002716203262548.

Wellford, C. F., J. V. Pepper, and C. V. Petrie, eds. 2005. *Firearms and Violence: A Critical Review*. Committee to Improve Research Information and Data on Firearms. Washington DC: The National Academies Press.