The High Point Drug Market Initiative: A Process and Impact Assessment of the West End Initiative†*

Project Safe Neighborhoods Case Study #12

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Abstract

The High Point [North Carolina] Police Department has gained attention from the U.S. Department of Justice and police departments, prosecutors, and local governmental officials through a strategic problem solving intervention that has come to be known as the High Point Drug Market Intervention Program (DMI). The DMI seeks to focus on geographically-defined drug market locations and eliminate overt drug markets and corresponding levels of violence. The model includes a highly focused deterrence strategy coupled with police-community partnerships that seeks to offer sources of social support to the subjects of the deterrence strategy while at the same time re-establishing informal social controls within the neighborhood in order to maintain a potential long-term effect. An NIJ-funded study indicates strong support for the intervention among justice system officials and local residents (Frabutt, et al., 2009). The purpose of our study was to test the impact of the intervention in the initial DMI neighborhood in the West End community by using a more rigorous analytical assessment. Interrupted time series models that controlled for prior trends in the data and examined the logged-crime incidents in the target community (in order to compress the skewed nature of the count data) indicated that violent crimes experienced a moderately significant decline of roughly 7.3 percent following the intervention and drug and nuisance offenses declined roughly 5.5 percent, while property offenses did not experience a statistically significant decline. The results of this analysis are consistent with the impressions of HPPD officials as well as residents of the affected neighborhood, the DMI intervention in the West End appears to have had a significant impact on the level of violent, drug, and nuisance offenses. When coupled with the results of a recent assessment of a similar interventions in Nashville, Tennessee and Rockford, Illinois that replicated the High Point model, these results suggest the DMI is a highly promising intervention for addressing the problem of illegal drug markets and warrants further implementation and evaluation.

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Introduction

The mid-1990s began the introduction of several promising interventions aimed specifically at combating violence in varying formats. Boston Ceasefire, also known as the Boston Gun Project, was a focused intervention aimed at reducing homicides and shootings among youths and young adults. Partnerships were a big part of this initiative as it was organized and driven by a multi-agency working group that consisted of the United States Attorney's Office, the Bureau of Alcohol, Tobacco, Firearms, and Explosives, the local prosecutor, probation, parole, social services, community and faith based members and researchers. Research revealed the violence was generally linked to a group of chronic offenders who were carrying guns illegally. The working group took a "pulling levers" approach with the high risk offenders. The deterrence message holding the group responsible for any future violence was coupled with social service opportunities. Formal evaluations of the project revealed a significant decline in youth homicides (Braga et al., 2001a and 2001b).

The documented success of the Boston Ceasefire project would lead the U.S. Department of Justice to develop several other promising initiatives based on the principles of Boston Ceasefire. In 1998 the Department of Justice created the Strategic Approaches to Community Safety Initiative (SACSI). SACSI was implemented in ten cities using the problem solving approach used in Boston. Partnerships and researchers played key roles in identifying the most significant local crime problem and tailoring a response to it. Indianapolis demonstrated a significant reduction in homicides (McGarrell et al., 2006; Corsaro and McGarrell 2009, 2010) and a broader evaluation of the ten SACSI sites found that, while crime was generally declining, SACSI cities witnessed a greater crime decline than comparable cities (Roehl et al., 2005, 2008).

SACSI led to the development of Project Safe Neighborhoods in 2001. Again, designers emphasized partnerships along with strategic planning, training, outreach and accountability.

Multi-agency task forces coordinated by the U.S. Attorneys Offices have sought to address gun and gang violence through research-based problem solving strategies and partnerships among local-state-federal law enforcement, other criminal justice agencies, local governments, and a variety of community organizations and neighborhood partners. Strategies have included targeted enforcement and enhanced federal prosecution as well as prevention, intervention and re-entry strategies. Evaluation of these initiatives has indicated that they show significant impact on violent crime and gun-related homicides when implemented with sufficient intensity and focus (McGarrell et al., 2009; McGarrell et al., forthcoming). Such promise is reinforced when considered in light of research on predecessor strategies for PSN including the Boston gun project and the Department of Justice's Strategic Approaches to Community Safety Initiative (SACSI) (Braga, et al., 2001; Kennedy et al., 2001; McGarrell et al., 2006; Roehl et al., 2008).

Street-level drug enforcement is a long standing chronic issue for most policing agencies. There is no disputing that drug markets bring with them unwanted violence and disorder to their neighborhoods. Policing tactics used to address drug markets and other such problems vary widely and change with what seems to be popular at the time. During the 1990s, police agencies began to experiment with their strategies aimed at crime prevention and control, more specifically diverting from the standard model of policing, described by Weisburd and Eck (2004) to include five broad approaches

...(1) increasing the size of police agencies; (2) random patrol across all part of the community; (3) rapid response to calls for service; (4) generalized investigations of crime; and (5) generally applied intensive enforcement and arrest policies (p.49).

Community policing, problem oriented policing, and hot spot policing vary along two dimensions as it relates to their level of focus (low to high) as well as the diversity of approaches used by law enforcement (mostly law enforcement to a wide array) (Weisburd & Eck, 2004).

Weisburd and Eck's (2004) research suggests that there is more evidence demonstrating effectiveness for *focused* interventions regardless of the approach used by the police.

In 2006, Mazerolle, Soole, and Rombouts completed a meta-analysis of street level drug enforcement along the Weisburd and Eck (2004) dimensions. Mazerolle et al. found that geographically focused drug enforcement interventions are more effective than community wide drug enforcement approaches. And, more interestingly, they found that drug enforcement strategies involving partnerships, either community wide or problem oriented, were more effective than hot spot, law enforcement only interventions (Mazzerole et al, 2006).

Since the SACSI initiative in the late 1990s, one of the most innovative U.S. Attorneys Office has been the Middle District of North Carolina (MDNC). The MDNC seized upon the problem solving model and developed strong partnerships with a number of police departments and communities throughout district. One such partnership which began in 1998 was with the High Point Police Department (HPPD). HPPD established a partnership with research partners from the University of North Carolina Greensboro and Winston-Salem State University as well as with a number of key community partners. Like other PSN sites, the initial focus was on reducing gun and gang-related violence. Having witnessed a significant reduction in gun-related violence, HPPD and its partners decided to focus on the recurring problem of illegal street level or overt drug markets and the violence generated by such markets. The initial intervention became known as High Point West End Initiative (Frabutt et al., 2006).

The High Point Drug Market Intervention

Like police officials throughout the United States, officials in the HPPD were tired and frustrated with open air-drug markets and the associated crime and disorder. Although HPPD

had achieved success in reducing violent crime, particular neighborhoods continued to experience steady or increasing rates of violent crime that, according to the police, was related to the open sale of crack cocaine. With the blessing of a new Police Chief, the High Point Police Department set out to try something new. Based on the promise of the Boston Gun Project (Braga, Kennedy, Waring, and Piehl, 2001; Kennedy, Piehl, and Braga, 1996), and other strategic problem solving approaches, HPPD set out to implement a strategic, focused, data driven project.

This new approach involved some theory and concepts that while not new to the police, were definitely different. First, they had to recognize the problem as a *drug market* problem rather than a *drug problem*. These drug markets were not huge areas spanning the city of High Point, but rather smaller, usually tied to historically defined neighborhoods. Second and closely related to this, they had to agree that what they had been doing simply was not working. They were not shutting down the drug markets. Third, contrary to what they thought, there were not large numbers of drug dealers in each market. Fourth, law enforcement officials were unable to provide consistent consequences for drug dealing. Consequences, if any, were usually low level and high level sanctions were rare and the dealers knew this. Research has estimated that the risk for imprisonment per sale of cocaine is 1 in 15,000 (Boyum and Reuter, 2005).

And finally, the neighborhoods where these drug markets existed were a constant source of problems for the police department. There were high volumes of calls for service but low levels of cooperation from the residents in these neighborhoods. There were neighborhood norms and narratives that had to be addressed, and, perhaps, there was a persistent misunderstanding between the police and the neighborhood residents. The drug markets brought

along with them a host of other problems, especially violence. The community basically had decided that the police could not help them and this was the way it was going to be.

High Point, North Carolinai

High Point, North Carolina is comprised of four counties in North Carolina with the majority of the city lying in Guilford County. The city covers roughly 50 square miles. The 2000 U.S. Census revealed 85,839 residents in High Point with an estimated population over 100,000 people in 2009, making it the eighth largest city in North Carolina. In terms of demographics, 60.5 percent of High Point residents are white, 31.8 percent are African American, the median household income is \$40,137, and just over 77 percent have graduated from high school. High Point is known for its furniture and textiles manufacturing, often called the "Furniture Capitol of the World."

Description of the High Point West End Initiative

The High Point Police Department which coordinated the Drug Market Initiative in the West End Area attempted to shut down the drug market in the West End Neighborhood using a process organized along nine steps. These nine steps represent the method for achieving the four interlaced goals of the DMI: 1) eliminate open-air drug markets; 2) return the neighborhood to the residents; 3) reduce crime and disorder; and 4) improve the public's safety as well as their quality of life (Hipple and McGarrell, 2009).

While the police department had a good idea of the neighborhood where the drug markets and associated problems were, they wanted to back up their hunches with data. High Point began by mapping data (step 1) from several different sources to determine the focus area for their initiative (see Hunt et al., 2008 for a complete methodology discussion). They used sources such as 911 calls and calls for service, field contacts made by officers, drug arrests, and UCR

Part I and II crimes focusing on those incidents involving person crimes, drugs, weapons, sex/prostitution. They examined each map individually and then "layered" all of them onto one map as adding neighborhood and census block layers. The density map revealed five specific neighborhoods. Specifically, the data pointed to particular areas within West End that desperately needed their attention. They agreed to focus on an area that was roughly 165 acres in the West End Neighborhood as their first target area.

After deciding on a target area, team members met with police officers, probation officers, vice officers who worked in the target area, and community members who lived in the in the target area about drug dealers in the area, who they are and where they live (Step 2). There is often a perception that there are "hundreds" of dealers in a given area. But, after careful thought and review, this survey led to the identification of 16 active street-level drug dealers in the West End Neighborhood.

The vice/narcotics detectives then conducted a modified incident review (Step 3) (see Klofas et al., 2006 for a discussion about crime incident reviews). Focusing on the names and places elicited from their earlier assessment, they bought in all vice and narcotics officers that worked in the target area. Rather than conduct a review case by case as is the way with a traditional incident review, they reviewed information person by person. They also gathered all the police incident reports, contacts with police and intelligence and conducted a link analysis.

From here, the list of drug dealers was refined to include only those street-level dealers that are still active in the target area. They asked themselves important questions such as: is the dealer a street-level or mid-level dealer? Does he or she have a history of violence? Does he or she have any pending charges? Once the list had been narrowed again, police and prosecutors (both local and federal) decided who if anyone should be prosecuted immediately based on some

of the review criteria (see Decker et al, 2006 for a discussion about targeted prosecution). Those individuals who were high level dealers and/or already had a demonstrated history of violence or were not considered candidates for the Call-in. Instead, these four individual were pursued immediately with as much legal and prosecutorial power as possible (Frabutt, Shelton, Di Luca, Harvey, and Hefner 2009). The remaining 12 individuals were targeted for the Call-in.

After narrowing the list of dealer in the area, the police were not asked to do anything different than they normally do. The vice/narcotics officers focused on trying to build cases on the identified drug dealers (Step 4). This included making undercover buys as well as using confidential informants. The use of audio and video equipment during these undercover operations was critical. This process lasted approximately 90 days.

Meanwhile, the police began to focus on something that was not as easy as traditional police work: mobilizing and engaging the community (Step 5). Key to the implementation of the High Point Drug Market Initiative was the buy-in and commitment of the West End community. There were misperceptions on both sides that needed to be addressed before this initiative could move forward. The West End area was routinely subjected to routine intrusive police enforcement tactics for many years despite the fact that these strategies had little or no effect on the overt drug market (Kennedy and Wong, 2009). On the law enforcement side, the police perceived that no one in the West End community cared anymore, that the dealers own families did not care what their relatives were doing. On the community side, residents often did not trust the police for various reasons. The residents perceived many police actions as racially motivated. For some, the Police Chief was the right person to solicit support for the initiative. For others, it was better for other community leaders such as those from the faith based sector or

simply someone who is not involved in law enforcement or prosecution to solicit engagement (Frabutt et al., 2009).

Going back to the list of individuals targeted for the Call-in, everyone was in agreement that people who were important to the Call-in candidate had the possibility of being very influential in the candidates' life and future actions. Thus, these people were deemed "influentials". This would naturally be family but could also be friends, spiritual advisors, or other non-family members. The police with the help of other community members spent time indentifying influentials for each Call-in candidate. Then, a small group of police officers, community members, and clergy reached out and visited the identified family member or other influential people and explained the goals of the initiative, invited them to participate in asking the offender to quit doing what they are doing, and encouraged the family to actually attend the Call-in (step 6). Also during this step, letters from the Chief of Police were hand delivered by the visitation teams to the targeted offenders. These letters informed the offender that the police were aware of their street-level drug dealing and that this behavior had to stop. The Chief invited the candidate to a meeting (i.e. the Call-in) at which they would be confronted by evidence of their involvement and receive a one-time offer of help from the community. It is important to note that the offender was told he or she would not be arrested at the Call-In and this will be made very clear in the letter from the Police Chief. Additionally, the letter will suggest that the offender bring someone who is important to them with them to the meeting.

The Call-in for the West End was held on May 18th, 2004 (step 7). This was a face to face meeting between the offenders, the community, and law enforcement (see McDevitt et al, 2006 for a discussion on offender notification meetings). The meeting took place at the High Point Police Department headquarters. Nine of the 12 invited candidates attended. The fruits of

all the police undercover work were displayed. There were three-ring notebooks for each candidate on display which included all the information the police had about the candidate and their drug dealing habits including pictures of the drugs dealers, pictures of drug deals in action, and the houses and street corners where these transactions took place. Finally, each notebook contained an unsigned arrest warrant for that offender.

The meeting began with the community members and social service providers telling the candidates that their illegal and destructive behavior would no longer be tolerated in the West End area. The message was coupled with a theme that the candidates were still valued individuals and the community and social service members were willing to help them stop their drug dealing behavior. This included, but was limited to, drug treatment, education, job training, gainful employment, help with family issues, and transportation. Next, the police delivered a very strong two-pronged message. First- continued drug dealing and violence will no longer be tolerated in the target area. Second- each of the candidates has been put on "official notice." At this point, the High Point Police already had enough evidence to arrest each notified offender right then and there, but they will not. If the offender did not stop doing what he or she was doing, they would be arrested. They were given a rare second chance. At the end of the meeting, the offenders were given a deadline to cease and desist their drug dealing activities. They had until midnight May 21st, 2004 to stop. And indeed, open air drug dealing seemed to vanish overnight in the West End neighborhood.

While the Call-In was seen as very important and the climax of a lot of hard work, what happened after the meeting was very important as well. It was very important to enforce the standards that had been set at the Call-in: no more drug dealing in West End (step 8). The police and the community were very careful to watch for any signs of continued street-level drug

dealing in the target area. The police continued to try and make buys in the area and continued to send in confidential informants into confirmed drug locations. The residents were encouraged to call the police and their calls will be given priority (e.g. West End residents were given a special phone number to call to report drug activity). Any reports of dealing were immediately investigated by police and additional officers were assigned to the area for six weeks (using overtime money). And, any complaints involving a notified offender resulted in a judge signing his or her arrest warrant and ultimately his or her arrest. Finally, the prosecutor's office assigned one assistant district attorney to these cases and so they will be "special" treatment by the prosecutor's office.

The final stage (step 9) involved a variety of efforts to work with local neighborhood leaders, the faith community, schools, businesses, and residents to improve the quality of life and build the type of social relationships to sustain the gains made through the intervention with the drug market. Local residents reported that they knew the neighborhood had changed when they no longer saw drug sellers or prostitutes on the streets. Additionally, one local leader said that when a prostitute did appear on the streets, he knew things had changed because a group of neighbors were confronting the women and explaining her behavior was no longer tolerated in the neighborhood.

Analytic Framework

Ultimately, the goal of the High Point pulling levers strategy in the West End Neighborhood was to reduce open-air drug markets and criminal offending as well as to make the target area more inhabitable. To date, impact analysis of the High Point West End initiative has consisted of bivariate pre- and post- call-in crime trend comparisons and examinations of percent change (Hunt et al., 2008). These initial analyses have shown an average decline of 39

percent four years post-intervention (Frabutt et al., 2009). The current investigation is designed to take these simple analyses a step further by controlling for possible trend influences that have the potential to confound impact results. It will assess the impact of strategies implemented in High Point by examining whether changes in criminal offending occurred in the neighborhood (as an impact assessment) as well as the overall city (for a general trend comparison in similar offenses) at the time the intervention was implemented by HPPD.

Data Source

The trend data used here include all offenses reported over a six year period in the city of High Point, North Carolina. Offense data were aggregated into a monthly format starting in April 2001 through May 2007, which equates to over three years (i.e., 37 months) of preintervention and over three years of post-intervention (i.e. 37 months) of trend information. Each month's crime measure was operationalized as a composite variable, running from its first through its last day, of all offenses over this period. The categorization of offense data is subjected to an internal reliability check at HPPD. All offense data are reviewed by supervisors and then reviewed by records staff to ensure the report meets statutory and UCR requirements. Thus, we rely on the use of offense data in our study in order to take advantage of internal reliability checks conducted by HPPD.

Table 1 displays the offenses that were aggregated in order to create three composite measures used to assess crime impact in the current study: violent offenses, property offenses, and drug and nuisance offenses. Consistent with the UCR operationalization, violent crime is comprised of three major violent crimes: murder, robbery, and aggravated assault. Violent offenses over this total time period were comprised of less than .1 percent homicides, 63.6 percent aggravated assaults, 36.7 percent robberies. Also similar to the UCR property offense

categorization, property offenses here were a composite of burglaries (38.7 percent), larcenies (52.1 percent), and motor vehicle thefts (9.2 percent). Finally, drug and nuisance offenses were those crimes that have been used in prior research to measure levels of neighborhood physical and social disorder. The drug and nuisance crime measure is comprised of roughly 83.4 percent of drug offenses (including drug equipment), 3.4 percent sex offenses, and 13.2 percent prostitution offenses.

Table 1: Description of Composite Offenses

Violent Offenses	Property Offenses	Nuisance & Drug Offenses
Murder	Burglary	Prostitution
Aggravated	Motor Vehicle	Sex
Assault	Theft	Offenses
Robbery	Larceny	Drug/Narcotics Violations

As an initial descriptive analysis, we examined the average monthly percentage changes in violent, property, and nuisance/drug offenses for the West End Neighborhood centering on the May 2004 offender notification meeting. Table 2 shows that the target community experienced an average decline of 30.6 percent in violent offenses between the pre- and post-intervention periods. In addition, the average number of property offenses declined from 9.2 to 8.5 per month over this same period, which equates to a 7.5 percent reduction. Finally, and most substantially, drug and nuisance offenses declined by 32.2 percent, reducing from roughly 2.7 offenses per month to roughly 1.8 per month after the intervention. It is important to note that the bivariate percentage changes seen in Table 2 represent the simple pre- and post-intervention reductions, and thus do not control for prior trends in the data, seasonality, and other influences that are likely to influence a 'regression to the mean' tendency. However, these bivariate changes are suggestive a major crime difference before- and after the implementation of the DMI campaign.

Table 2: Bivariate Changes in Violent, Property, and Nuisance/Drug Offenses Between Pre- and Post-Intervention Periods

Offense Type	Number of Offenses Per Month (Pre-Intervention)	Number of Offenses Per Month (Post-Intervention)	Average Percentage Change
Violent	1.83	1.27	-30.6%
Property	9.24	8.54	-07.5%
Nuisance/Drug	2.67	1.81	-32.2%

We next proceeded with a more detailed analysis of the crime trends by examining the monthly trend for violent, property, and drug and nuisance crimes for the West End Neighborhood. We treated May 2004 as the intervention date because it was during this month when the HPPD: 1) Facilitated a number of arrests for violent-offenders who participated in open-air drug trafficking, and 2) Conducted the West End Neighborhood call-in, bringing community and key criminal justice officials together to impact lower-risk drug offenders in a positive and pro-social manner.

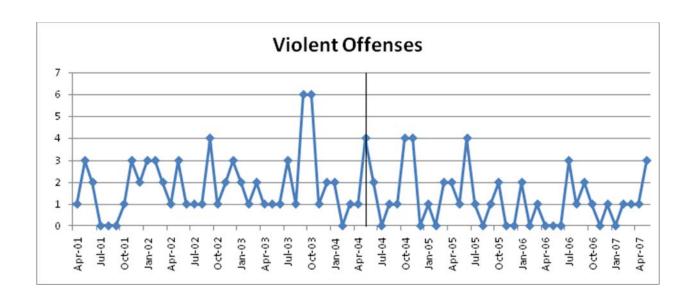
One of the most widely adopted statistical procedures in econometrics and criminal justice used to determine the impact of programs and public policies is time series analysis. This type of procedure is also referred to as "impact assessment" (McCleary and Hay, 1980).

McCleary and Hay state "the widest use of the time series design has clearly been in the area of legal impact assessment" (1980:141). Consistent with this approach, we relied upon Autoregressive Integrated Moving Average (ARIMA) time series models for subsequent analyses. Time series analysis, in this illustration, is the analysis of violent, property, and nuisance/drug trends over time in the West End Neighborhood in High Point. As with most analytic approaches, the data must conform to a number of statistical rules, or assumptions. The most important is the assumption of mean and variance stability, or stationarity, over time. To

illustrate, if a crime reduction strategy were implemented at an ideal time when crime rates were already on the decline, it would be likely for researchers to inaccurately claim 'success' because the trend was already on a decline at the start of the intervention. However, if the series conformed to these critical assumptions, which we tested and controlled for, then this type of analytic approach can control for the pre-existing trends in the data (i.e., autocorrelation and seasonality) and the full impact parameter in the model can be empirically tested (McCleary and Hay, 1980). The intervention date here is the May 2004 strategic intervention revolving around the notification meeting. Here, the intervention component is a dichotomous variable (0 for pre-May 2004 and 1 for post-May 2004).

We examined the trend data for West End neighborhood for violent, property, and drug/nuisance offenses over the period modeled in the time series analysis. We used logarithmic transformations on the raw violent, property, and drug and nuisance crime data to better approximate a normal distribution, which is an assumption of ARIMA modeling (McCleary and Hay, 1980). Figure 1 displays the trend in the logged-offenses for violent, property, and drug and nuisance crimes in the West End Neighborhood. We include the intervention date (May 2004) as a break in the series that we test with ARIMA time series modeling.

Figure 1: Violent Offenses Trend



We also examined the trends in property crimes (Figure 2) and drug and nuisance offenses (Figure 3) using the same time series 'break' in May 2004.

Figure 2: Property Offenses Trend

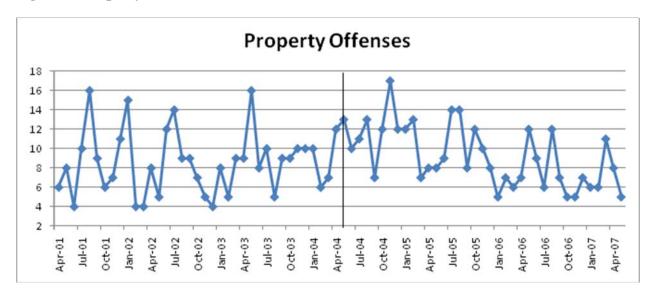


Figure 3: Drug and Nuisance Offenses Trend

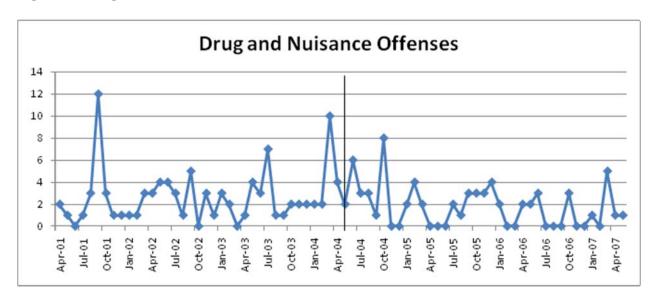


Table 3 presents the impact assessment of the call-in intervention strategy for the West End Neighborhood for the city of High Point. Importantly, these statistics control for prior trends and seasonal influences that can influence pre- and post-intervention analyses. In terms of specifics, violent offenses experienced a decline of roughly 7.3 percent following the DMI implementation, meaning the observed reduction was highly unlikely due to chance (p = .071) and met the social scientific standard of marginal statistical significance (i.e., we are 90% certain the observed change in violent crime was not due to chance). Thus, at the time of the drug market intervention, violent crimes experienced a marginally statistically significant and substantive reduction controlling for other trend influence factors. In addition, property offenses in the West End Neighborhood experienced a decline, seen in the negative coefficient (-.095), which equates to a 9.1 percent decline. However, this reduction in property crime was not statistically significant (p = .267) and thus we cannot assert that the decline in property offenses in the target neighborhood was driven by the intervention but could have also been related to

¹ In order to calculate the estimated percentage change, we use exponentiation on the estimated coefficient (exp (-.075 = (-.927 - 1.0) = 7.3%)).

external factors (e.g., a reduction to the mean, or a reduction that was due to some alternate chance phenomenon). Finally, and perhaps most importantly given the focus of the intervention, drug and nuisance offenses declined from an average of 0.86 logged-offenses per month to 0.80 logged-offenses per month (a decline of 5.5 percent), and this reduction was marginally statistically significant (p = .096) meaning these specific forms of drug and disorder based offenses experienced a sharp, statistically significant, and sustained decrease after the DMI call in notification meeting in the West End Neighborhood.

Table 3: Time-Series Analyses for Offense Types in High Point, North Carolina

Offense Type	Pre- intervention Mean	Post- intervention Mean		RIM. Aode d		Intervention Coefficient (S.E.)	p- value	AIC
Violent Offenses (Ln)	0.55	0.47	-	-	-	-0.075 (.041)	.071	100.4
Property Offenses (Ln)	2.16	2.07	1	-	-	-0.095 (.085)	.267	64.4
Drug/Nuisance Offenses (Ln)	0.86	0.80	-	-	-	-0.056 (.034)	.096	117.4

Discussion

Our results indicate that criminal offenses in the West End Neighborhood experienced a significant decline following the May 2004 DMI strategy. Controlling for seasonal effects, prior trends in the series, and autocorrelation between key lags in the series, we found that violent and drug and nuisance offenses had marginally statistically significant declines that corresponded with the notification and drug market intervention meeting. In addition, property crimes also declined during this period, but we cannot assert the decline seen with this specific type of

offense was beyond the influences of external factors other than the intervention. Regardless, all forms of crime modeled here experienced declines after the notification meeting.

An empirical limitation of the current study should be noted. We would ideally have control site data available in order to compare offense trends in order to minimize the concern that the observed reductions in crime in the West End Neighborhood were due to external factors rather than the DMI itself.² Indeed, the uses of experimental or quasi-experimental designs are well-suited methodological strategies for program assessment (Cook and Campbell, 1979). Due to data availability issues, we did not conduct separate and comparable analyses that would further isolate the potential of the program impact. In addition, count regression models such as those used by Braga et al. (2001) will be important in future studies to cross-validate key the findings presented here.

One of the real strengths of time series models is that these techniques require a lengthy pre- and post-intervention period and thus they are not acutely sensitive to large increases or decreases in crime but rather are robust against fluctuations at any given point in time. One of the disadvantages of the analysis approach is that they often likely under-estimate what may be 'true' impact because they are very conservative estimates (i.e., they control for prior trends in the data and give a conservative estimation between pre and post intervention). In addition, the estimated percentage decreases in offense types were between five and nine percent depending on event type, controlling for prior trends in the data, relying on logged-crime incidents to compress the skewed nature of the count data, and only examining an abrupt permanent transfer function (i.e., modeling an immediate estimated change). We believe the reason why the crime percentage changes are estimated slightly low here is because we have included the lengthier pre-intervention series (2001 to 2004) making the analysis less sensitive to the large numbers of

² Indeed, in future analyses such comparisons will be conducted.

crimes in the neighborhood that *immediately* preceded the intervention (and thus the impact is estimated against the neighborhood for a lengthier period of pre-intervention time). In addition, the observed decline could have been more gradual than immediate, which can be expected when trying to eliminate a long-standing illicit street drug market. Future impact results will test these potential hypotheses. However, the fact that the models were consistently significant lends strong confidence that the post-intervention crime rate was different (i.e. lower)—especially given our conservative estimation. Despite these limitations, and given the length of the series available for the three types of crime and the power of the statistical analysis presented herein, we are confident the decline seen in violent and drug/nuisance offenses was driven by the May 2004 intervention.

The HHPD and its partnering social and justice organizations implemented the strategy in a rigorous and detailed manner that was consistent with the traditions of the approach. In fact prior to implementation, the city relied on consultation from David Kennedy, one of the pioneers of the strategy who was instrumental in its inception in Boston (see Braga et al., 2001; Kennedy, 1997) and in many additional cities since. When coupled with parallel findings in Rockford, Illinois and Nashville, Tennessee (Corsaro et al., 2010; forthcoming), as well as reports from a number of communities that have participated in the Bureau of Justice Assistance's DMI training and technical assistance program (Hipple and McGarrell, forthcoming), the High Point DMI clearly stands as a "highly promising" approach to addressing illegal drug markets.

Consequently, the High Point model has the potential to serve as a framework for additional sites to focus on program implementation as well as to test the viability of this intervention strategy for reducing crime and disorder and enhancing the quality of community life.

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ⁱ Given that the strategy's onset implementation was late 2003, we examined High Point with other U.S. counties, comparing across the 2001 Uniform Crime Reports (UCR) index offenses. We did this in order to provide context for crime issues that were important for local law enforcement officials. We created county-level crime rates (i.e., number of index offenses per 10,000) for standardization purposes. It is important to note that since the city of High Point is seated across a total of four counties, we created a weighted-county score (i.e., roughly 90 percent by Guiliford County estimates, and evenly distributed thereafter among Randolph, Davidson, and Forsyth Counties). Our crime measures indicated that High Point ranked just inside the upper quartile (i.e., the top 25% of all US counties) for index, violent and property offenses. However, a more detailed review of the within-city data made available by HPPD indicated that most of the UCR crime rates were saturated in specific neighborhoods, which became the focus of their initiative.