

WORKING P A P E R

FY2006 Anti-Gang Initiative Grants in the Central District of California

Report to the U.S. Attorney

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INFRASTRUCTURE, SAFETY, AND ENVIRONMENT

PREFACE

Project Safe Neighborhoods and the Anti-Gang Initiative are national initiatives funded by the U.S. Department of Justice and coordinated through U.S. Attorneys' offices. These programs are strategic, coordinated approaches to reducing gun violence in America. The RAND Corporation is the research partner for the Project Safe Neighborhoods Task Force for the Central District of California. The role of RAND is to provide research and support for the strategic planning components of the initiative in the District. The goals of this program are to (1) increase the capacity of Project Safe Neighborhood (PSN) task forces to design data-driven strategies that produce measurable decreases in firearms-related crime and (2) improve the long-term ability of federal, state, and local agencies to work together to understand, prosecute, and prevent firearms-related violent crime within their jurisdictions.

This working paper is RAND's report on the FY2006 Anti-Gang Initiative (AGI) for the U.S. Attorney for the Central District of California, who coordinates the Project Safe Neighborhoods Task Force in his district. It includes evaluations of each of the initiatives conducted by task force agencies that were funded by FY2006 AGI grants. The analysis described here should be of use to PSN task forces in California and across the nation as well as to others interested in issues of crime and safety. This report complements earlier RAND analyses of violence in several other California jurisdictions funded by PSN, including Los Angeles (Tita et al., 2004; Wilson et al., 2005), Oakland (Wilson and Riley, 2004), San Diego (Wilson et al., 2004), and Hayward (Wilson et al., 2004). The key findings from RAND's evaluations of grant initiatives funded by AGI and PSN in the Central District of California during FY2006, FY2007, and FY2008 will ultimately be published in a final report.

All opinions expressed are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice or any grantee agency.

THE RAND SAFETY AND JUSTICE PROGRAM

This research was conducted under the auspices of the Safety and Justice Program within RAND Infrastructure, Safety, and Environment (ISE). The mission of RAND Infrastructure, Safety, and Environment is to improve the development, operation, use, and protection of society's essential physical assets and natural resources and to enhance the related social assets of safety and security of individuals in transit and in their workplaces and communities. Safety and Justice Program research addresses occupational safety, transportation safety, food safety, and public safety—including violence, policing, corrections, substance abuse, and public integrity.

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SUMMARY

This Final Report to the U.S. Attorney for the Central District of California includes evaluations of all the grants made to members of his Project Safe Neighborhoods Task Force under the FY 2006 Anti-Gang Initiative program. In fiscal year 2006, the Department of Justice allocated \$1,018,901 through its Anti-Gang Initiative (AGI) program to fund local law enforcement efforts to combat gang violence in the Central District of California. Based upon the gang-reduction strategy adopted by the Task Force in March 2006, grant funds were targeted to support activities of law enforcement and prosecutorial agencies within Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. Local law enforcement agencies developed proposals for anti-gang programs which were presented to a Selection Committee in April 2006. Initiatives were selected for funding by the committee based upon a competitive process; a total of seven projects were ultimately funded through sub-grants. RAND was selected as a research partner for these grants and was tasked with making quantitative and qualitative assessments of the contribution of the grant expenditures to the AGI's primary goal of reducing gang violence.

The grants provided human resources and technical resources to support the grantee's efforts to combat gang violence. The human resources grants included:

- Overtime and personnel to assist a gang injunction implemented by the Orange County District Attorney and Santa Ana Police Department;
- Dedicating an additional "vertical" prosecutor for gang cases at the Los Angeles District Attorney's Office and the Ventura District Attorney's Office;
- Placing a Deputy Los Angeles City Attorney in the U.S. Attorney's Office to work as a cross-designated prosecutor; and
- Placing a Los Angeles Police Department detective in the Bureau of Alcohol Tobacco and Firearms Southern California Regional Crime Gun Center.

The technical resources grants included:

- Purchasing a surveillance van for the Riverside Police Department; and
- Purchasing handie-talkie radios for the Riverside County Gang Task Force.

The RAND research team evaluated each grant. RAND conducted site visits at each of the sub-grantee agencies, interviewed key personnel about their grant activities and methods for evaluating performance, and collected data. Interviewees described their systems for measuring grant-related activities and in many cases provided data to RAND regarding workload or other outcomes. Because the nature of the grant activities and the nature of data on the activities varied from agency to agency, there was no single evaluation strategy that was appropriate for all agencies.

Of the various grants, only one grant initiative could support a rigorous evaluation. In 2006, the Orange County District Attorney and Santa Ana Police Department (SAPD) initiated a civil gang injunction designed to reduce crime in a specific 1-square-mile area of the city through targeted enforcement. We evaluate the effectiveness of this intervention using a database of all service calls received by the SAPD between January 2005 and December 2007. We describe and implement both differences-in-differences and matching methods to measure the effects of the injunction on reported crime in the injunction zone and also examine crime spillovers to adjacent areas. The injunction generated an increase in reports of violent crime and a decrease in property crime reports, with no effect on overall crime or public order crime. These effects may reflect changes in willingness to report crimes to the police, which make it difficult to quantify actual changes in criminal behavior due to the injunction. Crime in adjacent areas fell following the injunction.

The other initiatives could not be properly evaluated due to a lack of adequate data or an available comparison group to establish likely outcomes without grant funds. For these, we describe the initiative and data issues in Section 3 of the report. No empirical findings are offered for any of these evaluations due to insufficient data, but it appears that the additional prosecutors provided by the grant were able to reduce office caseloads and secure convictions, the purchase of handie-talkie radios facilitated Riverside County Gang Task Force "saturation days", and the Riverside Police Department has been able to

conduct surveillance in gang-controlled areas due to its use of a new surveillance van. The extent to which these apparent benefits have reduced gang crime is unclear.

When it created AGI, Congress intended to encourage law enforcement agencies to pursue data-driven initiatives to counter gun violence. The initiatives funded by AGI in FY2006 in the Central District of California vary in their goals and present different challenges to evaluation. For all but one, the nature of the initiatives precluded a clear analysis of the likely counterfactual enforcement outcomes had grant funds been unavailable, making a rigorous evaluation of the impact of the grant not feasible. Although grantees suggested in their applications that their efforts would be cutting edge and that they would collect all relevant data, several grantees used the funds to pay for ongoing, routine law enforcement efforts and/or did not collect data. Additionally, there was a relatively limited period during which agencies were able to collect data regarding the performance of their grants because there were significant delays in processing the FY2006 grant funds at the federal and state level.

This limited scope for evaluation makes it difficult to identify promising gang violence reduction strategies in California that might be exported to other regions of the state and country. For example, several of the sub-grants were used to fund equipment purchases. Although modern equipment clearly is an important input into gang enforcement, measuring the specific contributions of equipment to enforcement outcomes is generally problematic. For initiatives involving hiring, agencies were generally able to provide data on the workload of funded personnel, but less indication of how this workload might have been handled differently had grant resources been unavailable.

Going forward, greater attention to funding grant activities that create data to support rigorous evaluation would allow better identification of the most successful enforcement strategies under AGI. This would better fulfill Congress's intent to encourage the development of data-driven initiatives for law enforcement agencies to use to counter gun violence. In addition, because developing data to analyze

takes time, providing a longer amount of time between the dissemination of grant funds and final evaluation will facilitate analysis.

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ABBREVIATIONS

AGI	Anti-Gang Initiative
ADA	Assistant District Attorney
CLETS	California Law Enforcement Telecommunications System
HT	Handie-Talkie
ISE	Infrastructure, Safety, and Environment
LACA	Los Angeles City Attorney
LACDA	Los Angeles County District Attorney
LAPD	Los Angeles Police Department
PSN	Project Safe Neighborhoods
RCGTF	Riverside County Gang Task Force
RCSD	Riverside County Sheriff's Department
RPD	Riverside Police Department
SAPD	Santa Ana Police Department
SAUSA	Special Assistant United States Attorney
SERT	Sheriff's Emergency Response Team
VCDA	Ventura County District Attorney

1. INTRODUCTION

This Final Report to the U.S. Attorney for the Central District of California presents evaluations of grants made to members of his Project Safe Neighborhoods Task Force under the FY 2006 Anti-Gang Initiative program. The evaluations are organized according to the type and amount of data available. For each grantee, we assign a data robustness score ranging from 1 to 5. The scores are designed to capture the type, quantity, and quality of data provided by each grantee and the degree to which the effects of each grant on reducing gang violence can be reliably measured. The meaning of the different scores is explained below:

- 1: No data were collected by the grantee or the grantee was unable to document grant activities. Any effects of the grant are unknown.
- 2: Data were collected for workload or other grant activities but not for outcomes. Specific contributions of grant activities to reductions in gang violence cannot be readily measured.
- 3: Significant data were collected regarding grant activities, but no available comparison group exists against which to measure outcomes without grant funds.
- 4: Significant data were collected for the grant as well as for a clearly defined comparison group, supporting a quasi-experimental evaluation. Effects of the grant can be measured.
- 5: Significant data were collected for the grant as well as for a clearly defined comparison group and treatment was randomized. Effects of the grant can be measured with a high degree of confidence.

Section 2 presents an evaluation of the only grant initiative for which there were adequate data to support a significant evaluation, namely the Santa Nita gang injunction. We scored the data robustness for that initiative at 4; the data for the remaining grants were scored at 1 and 3.

We emphasize that a low data robustness score does not imply that a particular agency's grant activities do not reduce or are unlikely to reduce gang violence, but rather that the nature of the data and/or the

grant activities preclude quantitative measurement of the effects of the grant. In other words, assigning a low data robustness score to the grantee's data collection means that the grantee's effects cannot be reliably measured, not that its efforts have a negligible effect.

Further, measuring the availability of information and credibly establishing likely outcomes under different scenarios of information availability is often difficult or impossible. For example, a law enforcement agency might be vigilant in collecting data on its grant initiative that, when analyzed, indicates administrative successes such as increased numbers of gun traces processed, arrests made, or convictions secured. However, measuring the influence of these successes upon the quantity and type of gang crime is always difficult. This problem of measuring inputs and outputs is endemic to evaluating any government program.

2. EVALUATION OF THE SANTA NITA GANG INJUNCTION

Overview

In 2006, the Orange County District Attorney and Santa Ana Police Department (SAPD) initiated a civil gang injunction designed to reduce crime in a specific 1-square-mile area of the city through targeted enforcement. We evaluate the effectiveness of this intervention using a database of all service calls received by the SAPD between January 2005 and December 2007. We describe and implement both differences-in-differences and matching methods to measure the effects of the injunction on reported crime in the injunction zone, and also examine crime spillovers to adjacent areas. The injunction generated a 20-40% increase in reports of violent crime, a 20% decrease in reports of property crime, and an increase in reports of weapons/serious violent crime. Effects on total and public order crime were generally not statistically significant. Crime in adjacent areas fell following the injunction. Further research is necessary to determine whether the gang injunction affected gang crime specifically in the injunction zone.

Nature of Grant

AGI granted \$99,985 to fund Santa Ana Police Department overtime and Orange County District Attorney's Office paralegal costs related to the enforcement and prosecution of the gang injunction.

Background

Gang injunctions are civil lawsuits filed by city or district attorneys seeking to reduce the public nuisance of gang-related crime. The ultimate goal of an injunction is to eliminate gang-related crime in a particular geographic area, known as the injunction or "safety" zone. A typical injunction prohibits named individuals who have been identified as gang members from associating with other identified gang

members in the defined geographic area. It also prohibits those individuals from engaging in various activities (many of which are themselves criminal acts) while in the targeted area, such as selling narcotics, vandalism, wearing gang-related paraphernalia, and displaying hand gestures. Individuals who violate the terms of the injunction are subject to arrest and prosecution for civil or criminal contempt.

The implementation of civil gang injunctions to combat gang activity has become increasingly popular over the past decade, most notably in California. Approximately 37 distinct injunctions had been initiated in Southern California as of 2005 (Maxson et al., 2005), and by 2007 the city of Los Angeles alone had authorized 33 injunctions against 50 gangs (Maxson et al., 2005; Isaacs et al., 2007). Despite the extensive use of gang injunctions, little is known regarding their effectiveness. To date, only a handful of studies have examined the impact of gang injunctions. Grogger (2002) conducted one of the earliest studies, examining the effects of 14 gang injunctions implemented in Los Angeles County between 1993 and 1998 using neighborhood-level crime reports. Results showed that violent crime declined by 5 to 10 percent after the first year of treatment. Grogger's findings were corroborated by a later grand jury study that employed similar methods (Los Angeles Civil Grand Jury, 2003). Maxson et al. (2005) surveyed community members to determine the impact of civil gang injunctions on neighborhood quality-of-life. The study found that gang presence in the community declined, residents were less fearful of being confronted by gang members, and fewer instances of gang intimidation were reported.

Although civil gang injunctions have demonstrated some success initially, they are not without controversy. The ACLU, for example, argues that gang members often have no opportunity to defend themselves in court because they receive inadequate notice of injunction proceedings, that injunctions often operate even against unnamed gang members, that injunctions may interfere with legitimate employment and family activities, and that injunctions have the potential of leading to racial profiling. In addition, because injunctions typically include individuals for life, they note that former gang members might unfairly remain subject to injunction even after they are out of the gang (ACLU,

2007). Finally, some organizations assert that injunctions do not actually reduce crime.

As part of its overall evaluation of the 2006 AGI grants, RAND undertook a quantitative assessment of the Santa Nita gang injunction. Enforcement of this injunction was partially funded through Project Safe Neighborhoods and AGI grants to the Santa Ana Police Department (SAPD) and the Orange County District Attorney's office. The preliminary injunction was established on July 14, 2006 and the injunction area or safety zone, mapped in Figure 1 below, was permanently enjoined on November 3, 2006. Enforcement of the terms of the injunction began after the preliminary injunction was approved. Our evaluation is designed to assess the effect of the injunction on (1) overall crime in the injunction area, as compared to a non-injunction comparison area, (2) particular crime types, including violent crime and serious violent/weapon offenses, and (3) spillover of crime into areas adjacent to the injunction zone which were not covered by the injunction.

Implementation of the injunction proceeded in several phases. An initial phase involved a concentrated effort by the SAPD assisted by representatives from other local law enforcement agencies to serve injunction papers on all 134 defendants named in the injunction, a necessary prerequisite to enforcement. Officers involved in this process believed that information regarding the injunction quickly spread across gang members, because some gang members avoided police contact after injunction servicing began, presumably in an effort to avoid receiving this formal notification. A monitoring phase followed in which gang detectives monitored the injunction zone for violations and updates were made to the list of enjoined individuals. These monitoring activities resulted in a higher presence of gang detectives within the injunction zone following the injunction. As of early 2007 the SAPD reported 32 arrests for violations of the gang injunction, including three cases of individuals with multiple injunction violations. Several gang members had received jail sentences of 9-16 months stemming from injunction violations.

A previous analysis of the Santa Nita Gang injunction conducted by researchers at UC-Irvine (Cooper, Noland, and Whitby 2007) suggested

that the injunction generated a substantial crime drop in the target zone relative to a control area selected by the SAPD. Our analysis differs from that of Cooper, Noland, and Whitby in several respects. First, we include all non-traffic crimes in our analysis, whereas Cooper, Noland, and Whitby eliminate crimes outside of a fixed set of crime categories from consideration. Additionally, we attempt to construct control areas based upon measured similarities to the injunction zone in demographic characteristics or pre-existing crime trends, whereas Cooper, Noland, and Whitby match to a control zone selected by the SAPD based upon perceived similarity in gang activity and population characteristics. Our data indicate that the control area selected by the SAPD differs demographically from the injunction area, particularly with respect to overall population, and also exhibited disparate crime patterns prior to July 2006.¹

Data Sources

Our primary data source is a database of all calls made to SAPD between January 2005 and November 2007. SAPD generously provided access to this data. For each call, we observed the date and time of call, incident address, and an alphanumeric code indicating the type of incident. We identified the physical location of each incident by geocoding the incident address using ArcGIS software. Our geocoding process yielded matches for roughly 90% of all crime incidents in the database. We excluded incidents which did not appear to correspond to actual crimes based upon the incident code description from our main analysis, generating a final database incorporating information from

¹ We attempted to replicate the findings of Cooper, Noland, and Whitby (2007) and also found evidence of statistically significant decrease in total, property, and public order calls in the injunction area relative to SAPD's control area, although the estimated effects appeared smaller. For example, Cooper, Noland, and Whitby (2007) estimated a 30% drop in total calls resulting from the injunction, whereas we estimate a 12% drop. These differences likely represent differences across studies in the types of incidents included in the analysis.

182,064 calls.² Because our data come from SAPD, we excluded the area of safety zone north of Westminster Road from our analysis. This particular area is contained within the municipality of Garden Grove and is policed by the Garden Grove Police Department. SAPD was unable to provide us with access to incident data for this area.

² For example, our database included entries for traffic stops and patrol checks. We also excluded incidents such as false burglary alarms, missing persons reports, and traffic, medical, and animal-related incidents.

Table 1: Most Common Specific Crimes in Each Crime Category

Violent	
Domestic violence	54.0%
Battery	14.0%
Robbery	12.3%
Assault with a deadly weapon	6.3%
Shots fired	6.1%
Total Calls	24847

Property	
Burglary	33.8%
Motor vehicle theft	16.3%
Vandalism	9.9%
Petty theft	7.3%
Vehicle hit and run	3.8%
Total Calls	68350

Public Order	
Disturbing the peace	53.8%
Narcotics	9.9%
Municipal code violation	6.1%
Trespassing	4.0%
Public drunkenness	3.6%
Total Calls	88867

Weapon/Major Violent	
Robbery	24.5%
Assault with a deadly weapon	20.7%
Shots fired	20.1%
Possession of a deadly weapon	16.8%
Rape	6.7%
Total Calls	7502

We organize the crime calls into five broad categories: all crimes, violent crimes, property crimes, public order crimes, and weapon/major violent crimes, which we define as the FBI Part 1 violent crimes (homicide, rape, robbery, arson, and aggravated assault), kidnapping, and weapons offenses. Table 1 lists the most common types of incidents

included within each of these categories, their share of the category total, and the total number of reports in each category.

Several limitations of the data deserve mention because they affect the proper interpretation of the estimates we present below. The data consist of call reports as opposed to police incident reports. Call reports may be more reflective of actual crime than incident reports because they involve less processing and interpretation by police. However, citizens may have incentive to overemphasize the seriousness of incidents in order to ensure a more prompt police response, and they may misperceive non-crimes, such as suspicious noises, as criminal events.³

Our data only include crimes known to the police; we do not include unreported or unobserved crime. One potential effect of a gang injunction is to increase the willingness of citizens to report crimes to the police, particularly if citizens believe the injunction represents a greater willingness among police to address neighborhood crime problems. Additionally, the injunction may also increase police presence within the injunction zone, which may lead police to detect crimes which would have otherwise been unobserved. Both of these factors, if present, would tend to cause our estimates to understate the benefit of the injunction in reducing crime. In addition, the data includes all crime but does not distinguish which crimes were gang-related because information on gang involvement for individual incidents was not available to RAND.

Accordingly, we gave this initiative a data robustness score of (4). Significant data were collected for the grant as well as for a clearly defined comparison group, supporting a quasi-experimental evaluation. It should be noted, however, that our evaluation discusses the gang injunction itself, but not the degree to which the specific funding for police overtime and the assignment of a paralegal played a role in the injunction.

³ Because crime counts will be the dependent variable in this analysis, mis-measurement of crime that is random will not affect the validity of the estimates we obtain. However, it is possible that misreporting is non-random.

Methods for Evaluating the Gang Injunction

We discuss below four alternative methods for estimating the effect of the gang injunction on calls for service. With the exception of the pre-post analysis, we implemented all of the methods described in our evaluation of the Santa Nita gang injunction.

1. Pre-Post Analysis

A pre-post analysis estimates the effect of the gang injunction by comparing the average number of calls from the enjoined area in the period after the injunction was implemented to the average number of calls from the same area prior to the implementation of the injunction. The before-after change in the number of calls received is attributed to the effects of the injunction. This type of analysis appears attractive because it requires only information about crime committed in the injunction zone, not neighboring areas, and because the relevant effects can be easily calculated and presented. Statistical summary reports commonly used by police departments that show trends in crime over time have all the information that is required for a pre-post analysis.

The major disadvantage of a pre-post analysis is that this methodology provides no way to separate the effects of the injunction from other factors that affect the rate of crimes committed over time. For example, police calls typically exhibit seasonal patterns, with larger numbers of calls occurring in spring and summer months than during the winter. Comparing the numbers of calls received in April-June to the number of calls received in August-October (as one might do for an injunction implemented in July), is likely to provide evidence of a reduction in calls, but this reduction may reflect purely seasonal effects and may have little to do with the injunction. More generally, we expect general change in call rates over time due to shifting demographics, changes in police procedure, and other factors, a pre-post analysis confounds these patterns with the effects of the injunction.

Because of the inherent limitations of the pre-post analysis, we do not report such an analysis in this report.⁴

2. Differences-In-Differences Analysis

A differences-in-differences analysis compares the pre-post injunction change in calls in the area covered by the injunction to the change in calls in areas not covered by the injunction to estimate the effects of the injunction. A simple differences-in-differences estimate can be calculated as:

$$\% \text{ Change in Crime Due to Injunction} = \frac{(Injunction_1 / Injunction_0)}{(NonInjunction_1 / NonInjunction_0)}$$

where *Injunction* and *NonInjunction* denote average crime counts in the injunction and non-injunction zones and the 0 and 1 subscripts respectively index the pre-injunction and post-injunction time periods.

These estimates can also be obtained in a statistical regression framework that allows for the inclusion of demographic or other controls. Essentially, this methodology uses the other areas in the city as a comparison group for the injunction area and identifies the effect of the injunction as the differential trend in crime in the injunction area as compared to the rest of the city. An important advantage of this approach is that it automatically controls for general patterns that affect calls in all areas of the city over time (such as seasonality), as well as differences across areas that are relatively stable over time (such as geographic size, presence of schools, and road configuration). It also does not require additional information beyond the number of calls in different areas of the city over time.

For our differences-in-differences analysis we used a Census block group in a particular month as the unit of observation; in total there were 6 block groups covered by the injunction and 166 block groups

⁴ Indeed, for the Santa Ana injunction, the implied effects of the injunction based upon a pre-post analysis vary widely depending on the choice of time window.

citywide. The pre-injunction months include January 2005-May 2006, the injunction was implemented in June 2006, and the post-injunction months are July 2006-November 2007. Table 2 presents our estimates of the effect of the injunction on crime in the injunction area by crime type using the differences-in-differences methodology:⁵

Table 2: Differences-in-Differences Estimates of the Effect of the Injunction on Reported Crime

Crime Type	Estimated Change Due to Injunction	95% Confidence Interval
Overall Total	-5.38%	[-13.8, 3.1]
Violent	20.29%*	[4.5, 36.1]
Property	-17.40%*	[-27.8, -7.0]
Public Order	-7.49%	[-19.7, 4.7]
Weapon/Major Violent	27.25%*	[5.0, 49.5]

Note: * denotes an estimate that is statistically significantly different from zero at the 5% confidence level.

The differences-in-differences analysis indicates that the injunction generated a statistically significant increase in overall violent crime and weapon/major violent crime reports but a 17% reduction in property crime. Overall crime reports fell in the injunction area by 5.3%, but this change was not statistically different from zero. The 7% decline in public order offenses was also not statistically significant.

⁵ Given the count nature of our data, we estimated these models using negative binomial regression. These regressions estimated the number of crimes in a particular block group and month as a function of an indicator variable equal to 1 for a block group contained within the injunction area and a month after the injunction (treatment), block group fixed effects, month/year fixed effects, and an interaction term between the injunction block group and the post-injunction period. The coefficient on this final interaction term provides the differences-in-differences estimate. We also included terms interacting June 2006 with injunction status in the regression, effectively excluding the implementation month from the analysis. 95% confidence intervals reported in the table are constructed using standard errors clustered on block group.

Our data include a large number of coded incidents of police activities not directly related to the commission of crimes, such as traffic stops and patrol checks. Although these types of activities were excluded from the crime analysis presented above, insomuch as these incidents measure general police activity, they allow us to test for the possibility that the injunction led to increased police presence in the injunction zone. Heightened police presence might explain the increased violent and serious crime reports we document in Table 2. However, using the same differences-in-differences methodology described above, we found no evidence of statistically significant increases in police activity due to the injunction. Although it does not appear that general police activity increased in the injunction zone following the injunction, anecdotal evidence from our interviews indicates that gang enforcement officers spent more time in the injunction zone following the injunction.

3. Matching on Demographics

An alternative approach matches the injunction area to another part of the city based upon similarities in demographics, physical configuration, or other factors that may be related to crime. The effect of the injunction can then be measured by comparing call rates in the injunction area to the matched comparison area. The intuition behind this approach is that if two areas of the city have similar demographics or other characteristics but differ in that one area is covered by a gang injunction and the other is not, the differences in call volume between the two areas can reasonably be inferred to arise as a result of the injunction. Because we observe calls both before and after the initiation of the injunction, after matching we can also adjust our estimates based upon pre-existing differences in call volume, which is likely to provide more reliable effect estimates.

Much of the validity of a matching analysis hinges on the quality of the matches. One approach to matching is to select the control area on an ad hoc basis based upon perceived similarity between the injunction area and another part of the community. The primary

advantage of this method is that it can incorporate local knowledge of hard-to-quantify factors that may affect crime patterns (such as gang territories). However, ad hoc matching is generally not preferred because it is not transparent and in some cases can be subject to manipulation.

A more typical approach is to construct a data-driven match. This more formal matching process begins by preselecting a set of measurable area characteristics that are likely to relate to the amount of gang activity in an area (and therefore the likelihood of receiving an injunction). These characteristics may include such factors as the racial and age composition of the population, average income, housing configuration, and presence or absence of schools. Using a statistical method known as propensity-score matching, these various demographic measures can be collapsed into a single 0-1 index value that captures the degree of overall similarity between various parts of the city. The injunction areas can then be matched to an area with a similar index value, signifying that the match area is similar to the injunction area across those characteristics that are most distinctive of the injunction area. An important feature of this approach is that allows the data to determine which parts of the city are most similar to the injunction area, and also provides a transparent method for measuring the degree of similarity.

Relative to the differences-in-differences analysis, the primary advantage of matching is that, when matches are well chosen, this approach will provide more precise estimates of the effects of the injunction on calls. The major disadvantage of matching is that it requires external information for constructing matches, and the results can in some cases be sensitive to the choice of match variables and the matching method. It is also possible to simultaneously match the injunction area to multiple comparison areas or a weighted average of comparison areas ("multiple matching"), and in some cases effect estimates based upon multiple matching will have more desirable statistical properties. However, to provide for the most transparent analysis possible, we matched each portion of the injunction area to a single comparison area.

We constructed our match using data from the 2000 Census.⁶ For each of the six block groups contained within the injunction area, we identified a comparison block group by matching on demographic, economic, and population factors that have been previously demonstrated in the research literature to be highly predictive of crime within a particular area.⁷ Table 3 reports the average characteristics of the six block groups contained within the injunction area and the six matched block groups. An obvious difference between the injunction block groups and the comparison block groups is that the former are contiguous while the latter are not. However, in aggregate none of the demographic characteristics we examined were statistically different between the injunction and control groups, and in practical terms the injunction and comparison groups appear quite similar demographically. The control areas were slightly smaller than the treatment areas in terms of total and Hispanic population.

⁶ An obvious drawback of using 2000 Census data is that it is somewhat outdated; unfortunately no more recent demographic data with sufficient geographic detail are available. The American Community Survey indicates that Santa Ana's 2007 population was 333,236 relative to a 2000 population of 337,937. Between 2000 and 2007 the Hispanic share of the population grew from 76.1% to 78.5%. Thus, more recently it appears that the demographics of the population have stabilized relative to the explosive growth the city experienced in the 1980's and 1990's.

⁷ The matching variables were % households headed by a single female, poverty rate, share of households receiving public assistance, % of the population who are males aged 12-24, % nonwhite, % foreign born, % of residences that are rented, % of residences constructed within the past 5 years, share of the population who have moved within the past 5 years, and population density.

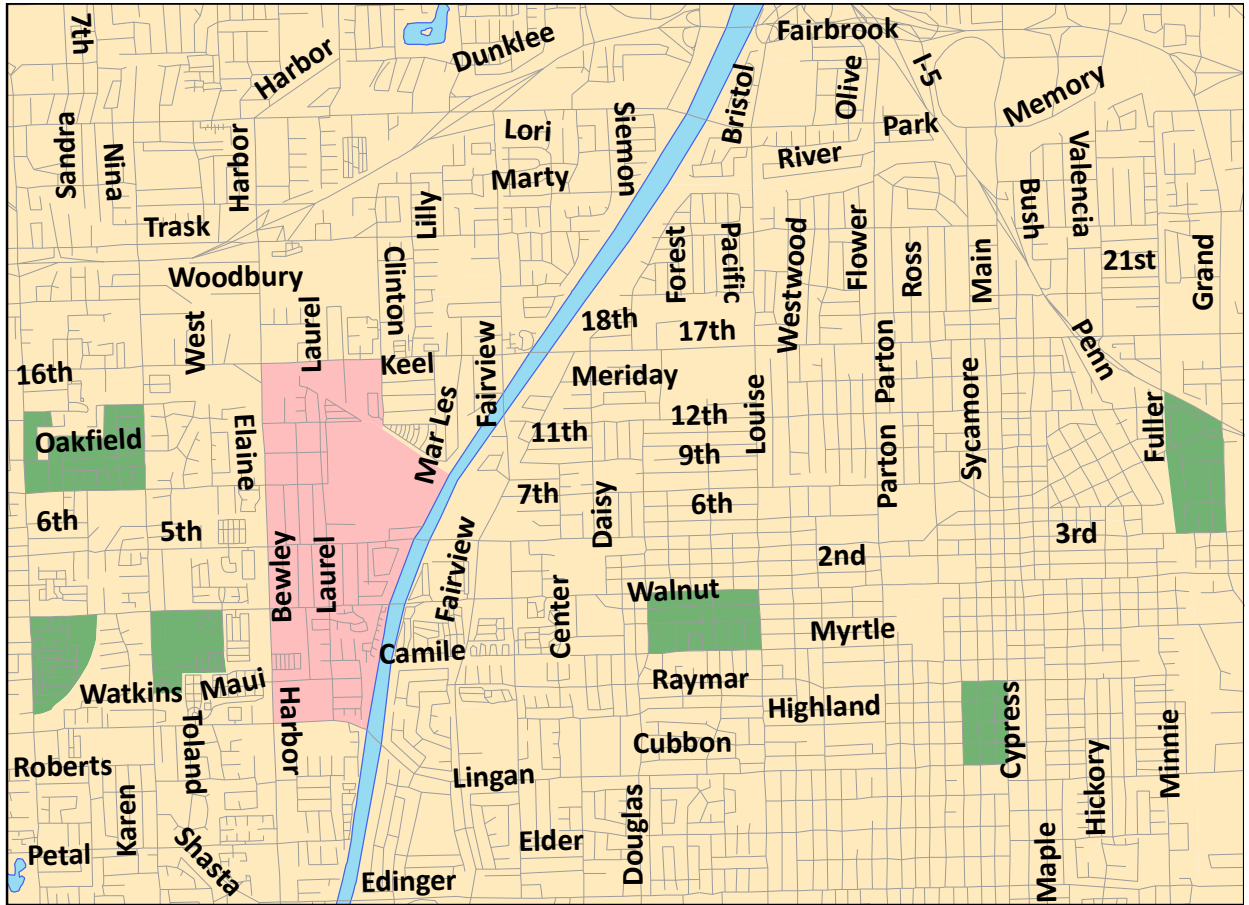
Table 3: Comparison of Some Demographic Characteristics of Injunction and Control Zones

Characteristic	Control Area	Injunction Area	Statistically Significant Difference?
Average per capita income	\$8,878	\$9,095	No
% <12 years education	68.5%	68.2%	No
% college degree	7.8%	8.9%	No
% moved in last 5 years	60.5%	59.5%	No
% foreign born	61.0%	59.7%	No
Total population	1742	2086	No
Hispanic population	1227	1722	No
Asian population	388	268	No
% male aged 12-24	12.9%	12.6%	No
% renting home	60.2%	58.3%	No
Average rent	\$812	\$789	No
Density (people/sq. mi.)	17947	18096	No

Figure 1 presents a map showing the location of the injunction area and the six matched block groups. To estimate the effects of the injunction on crime reports, we compared the change in crime rates (crime/100 residents) in the injunction area following the initiation of the injunction to the change in crime rates in the control zone over the same period.⁸ Our estimates of the effects of the injunction are reported in Table 4.

Consistent with our differences-in-differences analysis, matching on demographics we find evidence of an increase in violent crime reports and a decrease in property crime reports resulting from the injunction. For the other crime types our estimates are not statistically significantly different from zero. The effect on serious crime, while seemingly large, is quite imprecisely estimated. This imprecision likely reflects the fact that serious crimes are fairly infrequent in our data, and their occurrence is influenced by largely idiosyncratic factors such as interpersonal arguments.

⁸ Performing the analysis on crime counts as opposed to crime rates yields similar results.



0 0.5 1 Miles

Injunction Control

Figure 1: Map of Injunction Zone and Demographically Matched Comparison Zone

Table 4: Demographic Matching Estimates of the Effect of the Injunction on Reported Crime

Crime Type	Estimated Change Due to Injunction	95% Confidence Interval
Total	-3.47%	[-17.4,10.5]
Violent	39.48%*	[13.0,66.0]
Property	-19.44%*	[-37.1,-1.8]
Public Order	-5.36%	[-25.1,14.4]
Weapon/Major Violent	44.23%	[-9.4,97.9]

Note: * denotes an estimate that is statistically significantly different from zero at the 5% confidence level.

4. Matching on Pre-Injunction Crime

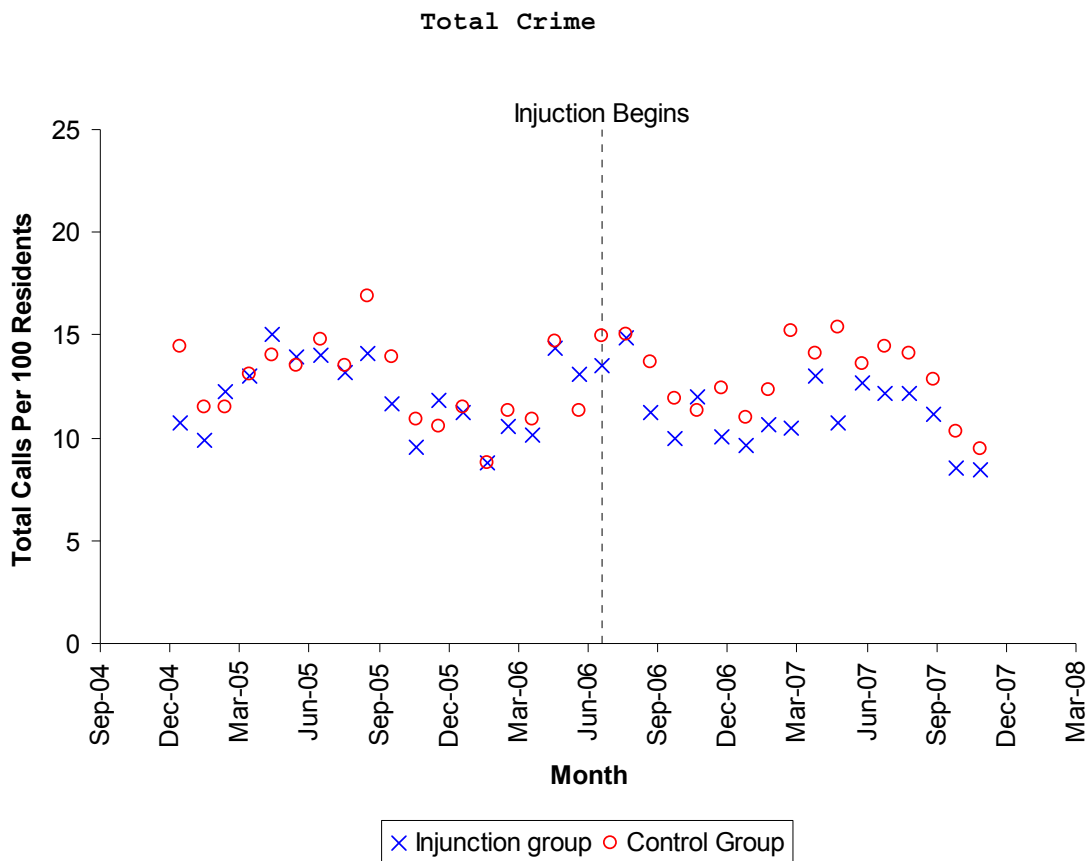
The analysis is similar to the matching analysis based upon demographics, but instead uses crime patterns in the period prior to the introduction of the injunction as the basis of the match. This matching approach captures the intuitive notion that areas which had very similar crime patterns to the enjoined areas prior to the injunction but which were not covered by the injunction are likely to provide a reasonable approximation for what would have happened to crime in the injunction area had the injunction never occurred. The difference between post-injunction calls across these two areas provides an estimate of the effects of the injunction.⁹

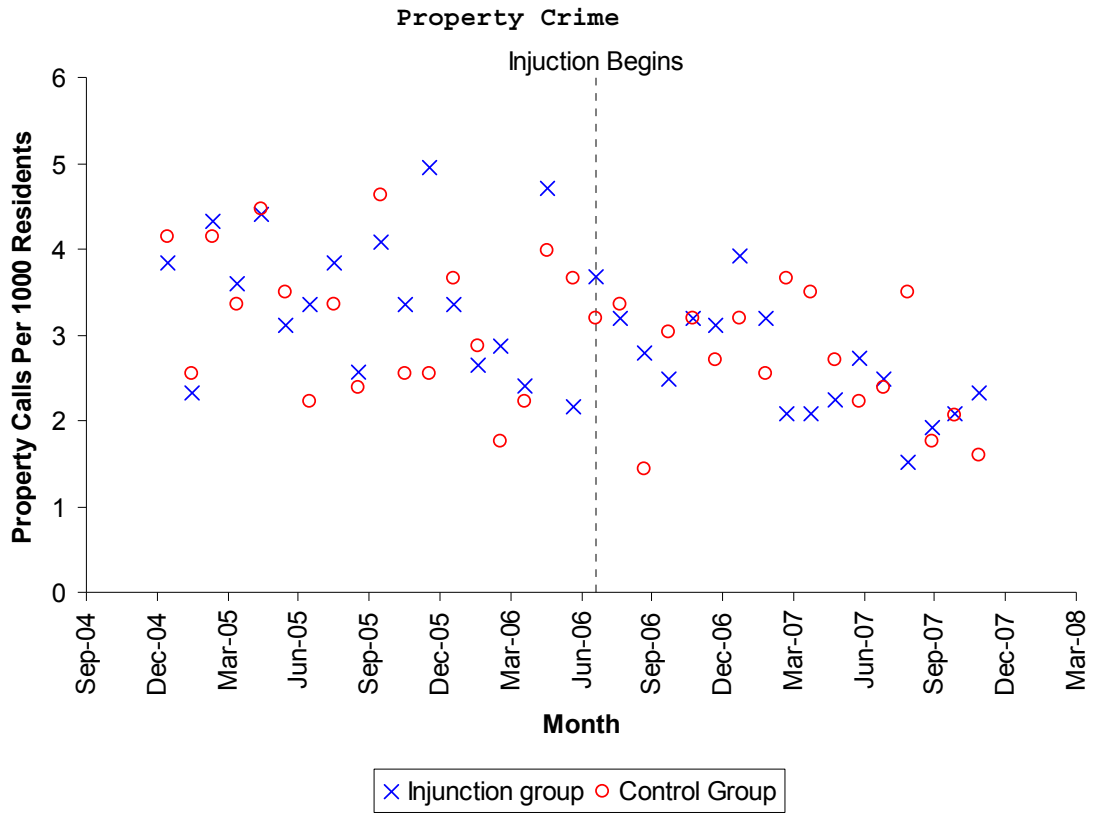
The top panel of Figure 2 plots the total number of calls by month in the injunction area (X) and in the matched control area (O). As expected given that matching was accomplished based upon pre-injunction crime, the crime trends for both groups were generally similar prior to June 2006. It appears that crime trends are slightly lower in the

⁹ For this analysis, we constructed per capita crime reports on a monthly basis for each tract, and considered the injunction zone a synthetic tract. We calculated the sum of the absolute difference between the crime rate in the injunction zone and the crime rates of each of the other tracts in the city across all 17 pre-injunction months. The non-injunction tract with the smallest sum was chosen as the match.

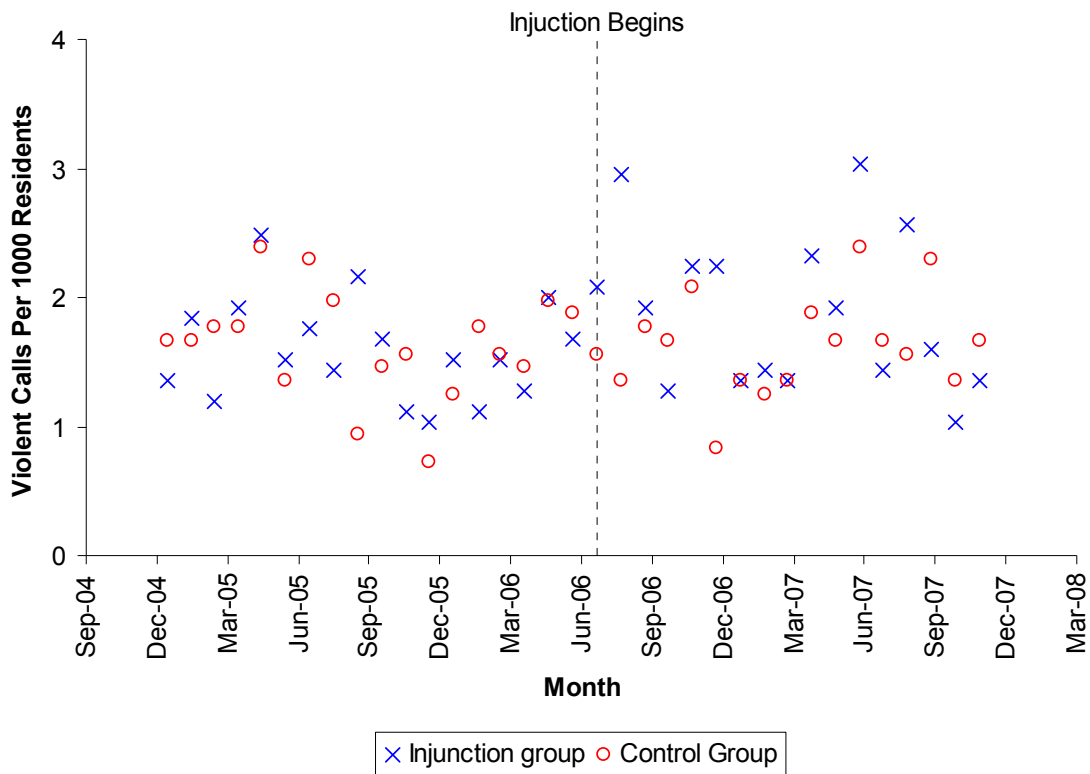
injunction area relative to the control area following the injunction, suggesting that the injunction may have had a small effect on overall call volume. For property crime, there is no apparent differential crime pattern in the post-injunction period. For violent crime, there is some evidence of higher crime in the injunction zone following the injunction, although this pattern appears to reverse towards the end of the sample. Finally, there is some indication that public order crime fell in the injunction zone relative to the control zone, particularly in the latter half of 2007. Whereas the public order crime rate in the injunction zone exceeded the control tract in 9 of the 18 months prior to the injunction, it did so in only 1 of the 16 months following the injunction.

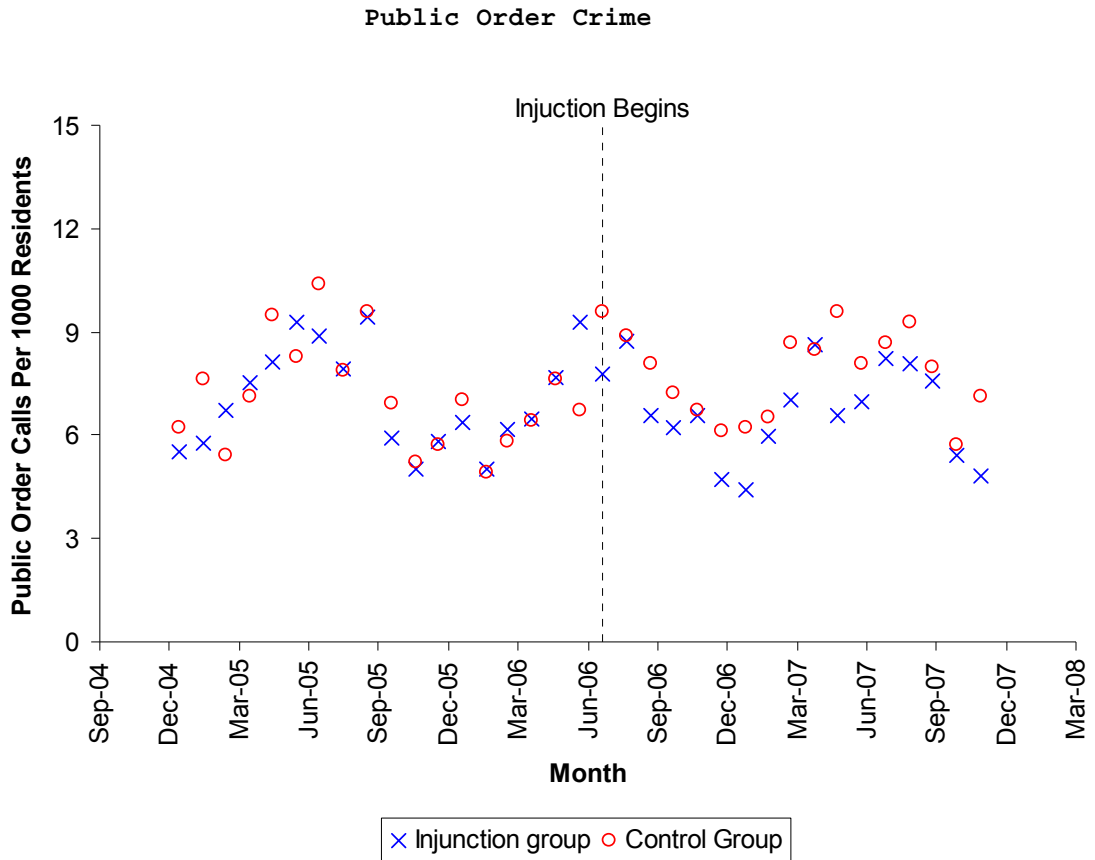
Figure 2: Crime Trends in the Injunction Zone and a Comparison Zone Matched on Pre-Injunction Crime





Violent Crime





We formalize our analysis of the patterns depicted in Figure 2 by calculating regression estimates of the effect of the injunction on crime using these comparison groups matched on pre-existing crime rates. As with our previous analyses, we structure this analysis to exclude July 2006, the implementation month. In our regression estimates, for all crime categories except weapons/major violent crime, the pre-existing differences in crime between the injunction zone and the comparison zone are not statistically significantly different from zero, indicating that the matching process generated comparability between the treatment and comparison groups. For weapons/major violent crime, the injunction zone had somewhat higher crime than the comparison zone pre-injunction, a difference we account for in our estimates.

Table 5 reports these regression estimates. Matching on pre-injunction crime yields coefficients of similar magnitude to our differences-in-differences analysis, although the coefficients are less

precisely estimated. Using this matching approach, we find evidence of statistically significant increases weapon/major violent crime reports resulting from the injunction. The somewhat surprisingly large magnitude of the estimated effect may represent our inability to closely match on pre-injunction crime for this crime type. Relative to the control group, property crime also fell while violent crime increased, although these changes were not statistically significant.¹⁰ \

Table 5: Pre-Crime Matching Estimates of the Effect of the Injunction on Reported Crime

Crime Type	Estimated Change Due to Injunction	95% Confidence Interval
Total	-10.76%	[-25.4, 3.9]
Violent	18.38%	[-10.2, 46.9]
Property	-9.05%	[-30.5, 12.4]
Public Order	-13.90%	[-33.2, 5.4]
Weapon/Major Violent	61.53%*	[9.9, 113.1]

Note: * denotes an estimate that is statistically significantly different from zero at the 5% confidence level.

Analysis of Spillovers

Some opponents of gang injunctions argue that the primary effect of injunctions is not to alter crime levels, but merely displace gang activity from the injunction zone towards other parts of the community not covered by the injunction. To test for the possibility of a displacement effect of the gang injunction, we re-estimated our

¹⁰ We also experimented with models that simultaneously matched on both demographics and pre-injunction crime. Because the demographic data are cross-sectional and the crime data are longitudinal, matching in this way required us to use average crime in the pre-period as a matching variable, which potentially generates a loss of information relative to matching based upon monthly crime. We obtained similar coefficients matching in this way for all categories except violent crime; for this category the 95% confidence interval was [-31.6, 27.5].

differences-in-differences model allowing for a separate effect in the post-injunction period for block groups located within 1/2 mile of the injunction zone. Clearly, it is possible that crime is displaced more generally throughout the city, in which case focusing on the immediate area around the injunction zone may be misleading. However, in the presence of general displacement we would expect the differences-in-differences analysis to detect a decrease in crime in the injunction area relative to the rest of the city, and our analysis above found no change in overall crime. It seems logical to expect that displacement effects might be concentrated in the area immediately surrounding the injunction zone, particularly in light of the fact that territories of the two major gangs operating within the injunction zone include surrounding neighborhoods.

Table 6 presents our estimate of the effects of the injunction on nearby areas outside of the injunction zone. All categories of crime fell in the area surrounding the injunction zone following the injunction. There was a statistically significant 14% decrease in serious crimes in this region. The evidence in Table 6 is not consistent with simple displacement of crimes to adjoining areas. Indeed, one interpretation of this evidence is that the injunction induced beneficial crime spillovers into adjoining neighborhoods, a situation which might occur if gang members are not clearly aware of the precise boundaries of the injunction zone.

Table 6: Differences-In-Differences Estimates of the Spillover Effect of the Injunction

Crime Type	Estimated Change Due to Injunction	95% Confidence Interval
Total	-4.55%	[-9.7, 0.6]
Violent	-4.01%	[-13.5, 5.5]
Property	-4.75%	[-12.3, 2.8]
Public Order	-4.10%	[-10.7, 2.5]
Weapon/Major Violent	-13.56%*	[-24.4, -2.7]

Note: * denotes an estimate that is statistically significantly different from zero at the 5% confidence level.

Summary and Interpretation

Our evaluation is designed to assess whether the Santa Nita gang injunction affected patterns of reported crime in the injunction zone. We employed several alternative methods for constructing comparison areas for the injunction zone, including using differences-in-differences analysis incorporating the entire city of Santa Ana, demographic matching, and matching on pre-existing crime. Table 7 summarizes the estimated effects of the injunction across these different analytic approaches.

Table 7: Summary of Estimates of the Effect of the Injunction

Crime Type	Analysis Approach		
	Diffs-In-Diffs	Demographic Match	Pre-Crime Match
Total	NS	NS	NS
Violent	20.29%	39.48%	NS
Property	-17.40%	-19.40%	NS
Public Order	NS	NS	NS
Weapon/Major Violent	27.25%	NS	61.53%

Note: NS denotes an estimate that was not statistically different from zero at the 95% confidence level.

Our analysis indicates that the injunction generated increases in reports of violent crime of 20-40% and decreases in reports of property crime of about 20%, and increases in reports of weapon/major violent crimes. Although the pre-crime match estimates for violent and property crime reporting are not statistically significant, they are consistent in sign with the estimates obtained using the other two approaches, and the pre-crime match 95% confidence intervals contain the estimates generated using the other approaches. One explanation of this finding may relate to reporting itself – citizens in the injunction zone may have been more willing than before to report violent crime incidents to the police following the injunction, in which case the injunction could lead to changes in the number of crimes that are reported even when actual underlying crime patterns were constant or dropping. An alternative explanation is that members of competing gangs may have been more willing to commit crimes in the injunction zone following the injunction, believing that the injunction reduced the likelihood of retaliation by Santa Nita gang members. Unfortunately, we lack data with which to test these two hypotheses. We also find no evidence that crime from the injunction zone spilled over into neighboring areas; adjoining areas actually experienced decreases in crime following the implementation of the injunction.

Going forward, several possibilities exist for further research providing insights into the effects of the Santa Nita injunction. Extending the crime data to include 2008 would provide information regarding the longer-run effects of the injunction on crime. Interviews or other qualitative data collection efforts in the injunction area could also provide insight regarding the effects of the injunction on citizen attitudes towards the police, particularly with regard to crime reporting. Additionally, in 2007 the Orange County District Attorney's office successfully obtained two additional injunctions targeting the Varrio Viejo and Varrio Chico gangs operating in San Clemente and San Juan Capistrano. Comparing the effectiveness and implementation of these two injunctions to the Santa Nita injunction may provide greater insight into the factors that contribute to the success of gang injunctions. We plan to explore these avenues for further research in our reports for the FY2007 and FY2008 AGI and PSN grants.

3. SUMMARY OF OTHER TASK FORCE GRANT ACTIVITIES BY AGENCY

3.1 VERTICAL PROSECUTION GRANTS

Two grants were made to support the assignment of vertical prosecutors to gang cases. Under vertical prosecution, a single prosecutor handles a case from the investigation phase through sentencing or other disposition. Relative to the traditional prosecutorial model, which employs different attorneys at each successive phases of prosecution, the vertical model is thought to provide better handling of case information and greater accountability leading to superior outcomes.

The MITRE Corporation conducted a quasi-experimental evaluation of vertical prosecution of gang crimes through the Hardcore program in Los Angeles in the early 1980's (Dahmann, 1981). At its inception, resource constraints permitted only a fraction of potential cases to be handled vertically by Assistant District Attorney's (ADAs) in the Hardcore program, providing a natural control group of similar cases that were handled using the traditional prosecutorial process. Dahmann (1981) found that vertically handled cases were less likely to be dismissed, more likely to achieve convictions or adjudications, and more likely to result in prison sentences than traditional cases.

There was insufficient data for either of the grants funded by AGI to conduct a similar evaluation. Each grantee provided caseload data, which indicated that office caseloads were reduced and convictions were secured. No specific contribution to reductions in gang violence could readily be measured. Although the data and other limitations mentioned below precluded an evaluation of the AGI-funded prosecutors along the lines of Dahmann (1981), it seems reasonable to expect that the findings of this original study are applicable to the vertical prosecution efforts funded through the AGI.

3.1.1 Ventura County District Attorney Vertical Gang Prosecutor

The Ventura County District Attorney's Office (VCDA) received \$160,000 to employ a second vertical gang prosecutor. Currently, cases involving gang charges that occur within Ventura County but outside the city of Oxnard are assigned by the Ventura County District Attorney (VCDA) to one of two prosecutors who specialize in gang prosecutions.¹¹ The two Ventura County assistant district attorneys (ADAs) are assigned particular areas and gangs with which they have expertise to prosecute cases involving those groups or locations. They also coordinate with officers in local law enforcement agencies on gang investigations. Prior to receipt of the 2006 AGI grant, there was a single vertical gang prosecutor in the office of the VCDA.

The only available data to evaluate the impact of adding a second vertical gang prosecutor was the VCDA's caseload data for the additional prosecutor. Caseload data regarding the previous prosecutor was not shared. Supervisors use caseload as the primary method for determining the performance of gang prosecutors, including the AGI-funded vertical gang prosecutor. All Ventura County ADAs, including the two vertical gang prosecutors, maintain case logs with basic information about each case, including the arresting agency, charges, case progression, and final outcome. Based upon logs provided by the VCDA's office, approximately 15-20 new gang cases are filed each month by the AGI-funded vertical prosecutor. Of a sample of 11 cases filed in Q4-2006 by the vertical prosecutor, 8 cases were filed with gang-enhanced charges. As of October 2007, 3 of these cases had resulted in guilty pleas, 1 in a jury conviction, and 7 were pending. Based upon this data availability, we assigned this initiative a data robustness score of (3): Significant data were collected regarding grant activities, but no available comparison group exists against which to measure outcomes without grant funds.

¹¹ The Oxnard City Attorney's office also employs two assistant district attorneys who specialize in gang prosecution.

The only measurable impact of this grant is that it helped to reduce the workload of the gang prosecutors to more manageable levels. In 2006 the county Board of Supervisors allocated money for a gang unit within the Ventura County Sheriff's Department, and referrals from this unit have substantially increased the gang-related caseload of the VCDA. The previously lone prosecutor did not have adequate time to handle all incoming cases. For example, the vertical prosecutor funded by AGI has begun prosecuting fairground injunction violations that could not be handled in the past due to overwhelming caseloads.

Ideally, to fully understand the effects of the grant, in addition to characterizing the outcomes of cases actually handled by the prosecutor, it would also be valuable to construct the counterfactual scenario describing how these cases would have been handled without the services of the additional prosecutor. For example, a stronger evaluation of the benefits of these grant expenditures might involve comparing the outcomes of a set of potential cases prior to the introduction of the additional prosecutor to a comparable set of cases handled after the new prosecutor was hired. Conceptually, it seems likely that the benefits of the new prosecutor would arise both through a workload effect (more cases can be handled with additional prosecutors) and through an expertise effect (prosecutors with expertise regarding particular gangs can build stronger cases). Isolating these two effects would better inform future prosecution efforts.

However, Ventura County ADAs believed that it might be difficult to identify a suitable set of comparison cases for such an analysis. Available case records make it difficult to identify incidents for which gang prosecution was considered but ultimately not pursued for past cases. Using information from current cases might be problematic because all current cases involving gang charges are assigned to the vertical gang prosecutors. Because horizontally managed cases involve different sets of charges, isolating the effects of vertical handling would likely be difficult. Additionally, trials are rare enough that looking at outcomes other than length of sentence may be difficult, and

individual attorneys are constrained in their ability to negotiate over plea agreements.¹²

¹² In particular, departmental policy mandates that prosecutors must require defendants to plea to the most serious charge facing them as well as at least one third of all outstanding charges.

3.1.2 Los Angeles County District Attorney Vertical Gang Prosecutor

The Los Angeles County District Attorney's office (LACDA) received \$135,000 to employ a vertical gang prosecutor. The AGI-funded prosecutor operates under the auspices of the Hardcore Unit of the Los Angeles County District Attorney's (LACDA) office, which is a group of approximately 50 prosecutors who already handle serious felony cases involving gang members vertically. The case assignments of the AGI prosecutor are focused on serious weapons offenses involving gang members. The majority of cases involve allegations of murder or attempted murder.

The AGI-funded vertical prosecutor maintains case logs providing information about ongoing prosecutions; ongoing cases are periodically reviewed by senior management. Sentencing results and number of cases handled are the primary productivity measures utilized by the LACDA. Electronic information about the cases handled by the AGI-funded prosecutor as well as all other L.A. County ADAs is compiled in a database that allows managers to track performance of individual attorneys over time. Based upon this data availability, we assigned this initiative a data robustness score of (3): Significant data were collected regarding grant activities, but no available comparison group exists against which to measure outcomes without grant funds.

The caseload and sentencing data collected by the LACDA provide workload-based measures suggesting that the grant led to some reduction in gang violence by contributing to the incarceration of violent individuals. Ideally, it would be desirable to assess how outcomes in the cases handled by the AGI-funded prosecutor would have differed had resources for vertical prosecution been unavailable. Evaluating the performance of the grants in this manner would involve identifying a set of cases comparable to those handled by the AGI attorney which were handled under a traditional prosecution scheme. Differences in outcomes across these cases would provide an estimate of the marginal effects of the grant expenditures.

As a practical matter, however, there are several obstacles to constructing a valid set of comparison cases. Los Angeles County has one of the most extensive vertical prosecution programs in the country, and the majority of serious crimes, including most gang crimes, are handled vertically under the current system. Although the ADAs we interviewed cited some anecdotal examples in which cases involving gun crimes committed by gang members were handled outside of the vertical pool of prosecutors, these cases were considered exceptions and generally resulted from incomplete information at the time of case assignment. Thus, identifying a set of cases that were included in the general trial pool that are comparable to those handled by the AGI-funded prosecutor was deemed problematic. Additionally, there is only a limited amount of available information on defendant characteristics in the electronic case database maintained by the LACDA. For example, state regulations preclude collection of data regarding race/ethnicity, and data on prior criminal histories of defendants is incomplete. Any comparison analysis would confront the problem that many factors likely to affect case outcomes are unobserved.

The availability of department-wide data on prosecutions provides for an alternative evaluation approach based upon an aggregate analysis that relates the total number of available prosecutors to aggregate case outcomes, such as number of cases handled and average sentence length. By describing how outcomes vary as a function of the total number of prosecutors, we might infer the benefits of being able to hire an additional prosecutor funded through a grant program such as the AGI. The primary concern with this type of analysis is that it might be tainted due to our inability to observe factors that potentially affect both the number of prosecutors and the quality of cases available to prosecutors. For example, suppose there were a large influx of talented public defenders who began to successfully defend gang cases, and so the LACDA assigned more attorneys to the gang division in order to allow prosecutors to spend more time on each case. Data on attorney counts and case outcomes might show a correlation between a larger number of prosecutors and higher numbers of acquittals, but it would be wrong to conclude that adding prosecutors leads to more acquittals.

3.2 LIAISON GRANTS

3.2.1 Los Angeles City Attorney Cross-designated SAUSA

The Los Angeles City Attorney's office (LACA) received \$141,293 to fund a cross-designated Deputy Los Angeles City Attorney/Special Assistant United States Attorney (SAUSA). LACA assigned one of its experienced prosecutors to serve in the United States Attorney's Office in Los Angeles in order to enhance interagency cooperation and to facilitate the federal prosecution of gang members.

As an anti-gang strategy, the rationale behind federal prosecution is two-fold. First, for certain firearm and drug-related offenses, the United States Sentencing Guidelines recommend minimum prison terms that are several times the maximum sentence imposed under California law, with less opportunity for parole. Criminal street gangs in Los Angeles are vulnerable to federal prosecution due to their heavy reliance on narcotics sales and guns. Proponents of this strategy hold that gang crime will be reduced by incapacitating gang members. Second, in addition to harsher sentences, some law enforcement officials believe that incarceration in a federal penitentiary offers the shock value of a novel form of sanction combined with the ostracizing effect of sentences which are frequently served in federal penitentiaries remote from Los Angeles. These officials believe that selective use of federal prosecution can do more to disrupt gang networks and deter gang crime than state prosecution, even if the sentence meted out were the same length.

LACA provided RAND with a list of prosecutions and trial outcomes for the SAUSA since his appointment in 2005. In four years, the SAUSA has prosecuted 46 cases, all but two of which resulted in a conviction. It was not always possible to infer from the records when a case began and ended, but at least nine of the indictments were issued in calendar year 2006. Among the cases are stark examples of sentencing enhancements with federal prosecution. For example, a drug dealer associated with the 83 Crips gang, operating in LAPD's 77th Division, was

successfully prosecuted by the SAUSA and sentenced to 17 years in federal court (ten years for sale of over 50 grams of crack cocaine, five years for using a gun in furtherance of narcotics sales, and an additional two years at the judge's discretion) in contrast to the 2-5 year sentence he would have received in state court. In a trial being prosecuted by the SAUSA at the time of writing, the defendant is eligible for a life sentence under federal law, but is expected to plead down to 20 years; he would likewise have faced a 2-5 year sentence had he been tried in state court. Based on this data, RAND assigned a data robustness score of (3): Significant data were collected regarding grant activities, but no available comparison group exists against which to measure outcomes without grant funds. The nature of the SAUSA's work does not lend itself to an empirical evaluation of his impact on gang crime in Los Angeles.

According to City Attorneys in the LACA Gang Division and the SAUSA himself, the true test of the SAUSA's effectiveness is his ability to establish and maintain a rapport with LAPD and the Los Angeles District Attorney's Office. The LAPD has discretion in notifying the SAUSA of potential cases, and the DA decides whether or not to hand over a case for federal prosecution. Initially this entails meeting with command staff in the relevant LAPD patrol divisions and with deputy District Attorneys to explain the circumstances under which federal prosecution can be applied to gang members. From that point forward it requires selecting cases and demonstrating the ability to successfully prosecute them, which, as the SAUSA noted, turns on differences in state and federal rules of evidence and sentencing laws. Improvements in the quality of professional relationships and interagency cooperation are difficult to measure. The fact that the SAUSA was a seasoned gang prosecutor with the City Attorney's Office prior to his appointment, and was hence likely familiar to many in the Los Angeles criminal justice system, may well have promoted increased interagency cooperation. However, limitations in the case file records would evidently make even a crude comparison of the number of gang cases being handed over to U.S. Attorney's Office before as opposed to after the appointment of the SAUSA extremely difficult. For future grant evaluations, we may gather

additional qualitative evidence of interagency cooperation by asking LAPD and LADA officials about their experiences with the SAUSA.

3.2.2 Los Angeles Police Department Detective II ATF Liaison

The Los Angeles Police Department received \$144,980 to employ a Detective II (Sergeant) as a liaison at the Bureau of Alcohol, Tobacco, and Firearms Southern California Regional Crime Gun Center. The purpose of the liaison officer is to expedite gun trace requests. When police recover a firearm pursuant to an arrest, a search warrant, or a crime scene investigation, there is often valuable information to be obtained from having the weapon traced. "Crime gun" traces are accomplished through an ATF database, called eTrace, which provides the gun's history from the manufacturer to the distributor to the dealer to the first purchaser. The data obtained from traces can therefore be used to link individuals to crimes, identify sources of illegal "straw purchases", or help reveal weapons trafficking patterns (e.g. a dealer that is making an inordinate number of fraudulent sales).

Laws designed to protect gun owners' privacy bar public safety agencies from accessing information outside their jurisdictions, so municipal public safety agencies like the LAPD have to request crime gun traces through ATF on a case-by-case basis for any gun sold outside city limits. The delays and the inconvenience of this system were the impetus for establishing a cross-deputized LAPD Detective II position within the ATF, which has been wholly or partially funded through PSN/AGI grants since 2005.

RAND was unable to perform any evaluation of the grant because only data broadly related to the liaison were disclosed. As Table 8 shows, the number of guns recovered by the LAPD citywide held steady at around 6000 per year between 2006 and 2008, while the number of crimes involving the use of firearms declined markedly over the same period.

Table 8: LAPD Citywide Gun Crime Statistics, 2006-2008

	2006	2007	2008
Guns Recovered	5951	6119	5932
Homicide	384	304	293
Rape	56	38	44
Robbery	5244	5032	4555
Aggravated Assault	5288	4606	3854

Source: LAPD Crime Analysis Mapping System Crime Counter Report as of 1/16/09

The volume of guns recovered and the number of gun-related crimes are relevant statistics for an initiative aimed at reducing gun crime in Los Angeles, but they reflect many inputs beyond the liaison's efforts. Absolute number of traces performed and the average turnaround time on trace requests before versus after the liaison, would seem to be more direct measures. However, these numbers are not readily obtainable. Accordingly, RAND assigned a data robustness score of (1): No data were collected by the grantee or the grantee was unable to document grant activities. Any effects of the grant are unknown.

Even if data were available, the impact of the liaison would be difficult to measure because the context of his role has changed. First, the California Law Enforcement Telecommunications System (CLETS) has come online since the position was created. This advance in crime gun data management has decreased the turnaround time for LAPD gun traces independent of the liaison position. The information necessary for a gun trace is entered into CLETS by officers when guns are booked into police property, and downloaded by ATF two to three times a week for tracing. By contrast, when the detective was first cross-deputized in January of 2005, he had to input all gun traces manually. Furthermore, the Detective II ATF liaison is now assisted with crime gun traces by another detective from the LAPD Gun Section whose salary is not funded by the grant. These changes have freed the liaison to perform other liaison duties. For instance, the liaison reports that he facilitates interagency cooperation in the opposite direction on a daily

basis by assisting ATF agents to acquire reports and other information they need from LAPD for their own investigations. He also expedites high priority traces for the LAPD Robbery-Homicide Division.

Second, the liaison performs duties for the LAPD Gun Section that are not connected to his liaison role. The liaison has regular duties as a detective in the Gun Section, such as working undercover in gun-law enforcement operations for LAPD. Up to four times a year, the liaison works undercover at gun shows in Arizona and Nevada, which have more lax gun laws, to intercept weapons being brought into California illegally. In addition, he has occasionally taken on administrative duties in the Gun Section.

3.3 EQUIPMENT GRANTS

3.3.1 Riverside County Gang Task Force Handie-Talkie Radios

The Riverside County Sheriff's Department (RCSD) received \$89,832 to purchase 21 MacCom Motorola P7100 Handie-Talkie (HT) radios and service contracts for use by the Riverside County Gang Task Force (RCGTF). The purchase of these HT radios was intended to remedy interoperable communications problems faced by the Task Force.

In response to rising gang violence in Riverside County, the Sheriff's Department, Probation Department, and District Attorney's Office spearheaded the creation of a countywide task force late in 2005. The Riverside County Gang Task Force is comprised of 26 law enforcement agencies representing all levels of government in the county, from municipal to federal. The RCGTF divided the county into eight enforcement regions, although task force members are not required to remain in any particular region; in fact, the task force periodically concentrates all its resources in one region for "Saturation Days".

A primary logistical issue for the RCGTF was the difficulty of maintaining reliable communication between all task force members throughout the 7,300-square mile county. Task force members initially used their home agency's radios. Members from the RCSD used their Motorola P7100 Handie-Talkies (HTs), which broadcast at 800 MHz and have an extensive network of signal towers throughout the county. Members from police departments had radios that were on different frequencies and less powerful, such that task force members moving through the county, as during a pursuit, would have to continually adjust their radio channel and relay calls for assistance and other communications through local law enforcement dispatchers. Such convoluted communication links could lead to operational inefficiencies and put officers at risk. Communication difficulties would also impede Saturation Day operations, which require instantaneous communication to ensure that search warrants at multiple locations are executed simultaneously, lest suspects at one location alert fellow gang members

at other locations of the impending raid, giving them time to destroy evidence and/or flee, as well as to maintain officer safety.

Given this communications issue, the RCGTF sought to provide each task force member with an HT, or at least to partner non-RCSO task force members with RCSO deputies so that each team would have at least one HT. With 21 HTs purchased under the AGI grant, additional HTs purchased under other grants, and a supply of HTs borrowed from the Sheriff's Emergency Response Team (SERT), the RCGTF can now provide HTs to 85 task force members.

The RCGTF scrupulously tracks its gang enforcement efforts. RCSO was officially notified of its 2006 AGI grant award by OES in August 2007, it purchased the HTs in November 2007, but did not receive them until March 2008. During the first three quarters of 2008, the RCGTF recorded substantial increases in nearly every category of gang enforcement activity listed in its quarterly reports to RCSO command staff, a partial list of which is shown in Table 1. In fact, by the end of September, the task force had already eclipsed its totals in most categories for the whole of 2007, which in turn was far more productive than its inaugural year of 2006.¹³

¹³ The 2006 RCGTF annual report notes that the task force was not operating in all eight regions for the whole of 2006.

Table 9: Summary of Riverside Gang Task Force Activity for 2006-2008

	1/08-3/08	4/08-6/08	7/08-9/08	Total 1/08-9/08	Total 2007	Total 2006
Gang-related Felony Arrests	230	453	659	1342	734	335
Gang ID Cards	1530	3602	5495	10627	2497	1555
Criminal Cases Filed	283	545	773	1601	896	479
Gang Enhancements	121	236	330	687	440	134
Probation Searches	527	1010	1422	2959	1547	456
Probation Violations	94	191	265	550	325	103
Parole Searches	347	681	1013	2041	1163	407
Parole Violations	82	161	259	502	302	164
Total Firearms Recovered	38	71	138	247	224	64
Search Warrants Served	65	111	145	321	215	67

Source: RCGTF Reports Source: RCGTF Reports

However, isolating the contribution of HTs to these efforts would prove challenging. It would be yet more challenging to isolate the contribution of AGI-funded HTs from that of HTs that the Task Force has used its inception or the others that it purchased using funds from other sources. The size of the RCGTF, which has grown from 60 to 85 since its inception, is in part a function of the number of HTs available, but a more important factor is each constituent agency's determination regarding how many officers it can staff to the RCGTF,

based on its budget and resources. Accordingly, we assigned a data robustness score of (3): Significant data were collected regarding grant activities, but no available comparison group exists against which to measure outcomes without grant funds.

According to the Administrative Sergeant of the RCGTF, an RCSD deputy, HTs positively impact the safety and operational efficiency of the RCGTF by allowing task force members to communicate informally and in real time. Increasing the number of HTs allows the task force to expand the size and scope of task force Saturation Day operations. In addition, he suggested that the Saturation Day strategy would not have been contemplated without HTs. The increased supply of HTs gives the RCGTF greater flexibility in personnel allocation and facilitates communication. Increases in the scope and productivity of Saturation Day operations are probably the best measure of the contribution of HTs to the RCGTF's gang enforcement efforts, but such comparisons would be complicated by the fact that a different region is targeted for the Saturation Day each month and the need to ascertain how many HTs and task force members were deployed for each Saturation Day.

3.3.2 Riverside Police Department Surveillance Van

The Riverside Police Department (RPD) received \$100,000 to purchase a van, surveillance equipment, and installation services. The van is intended to improve the quality of surveillance, and safety and comfort of law enforcement officers performing the surveillance.

As the RPD stated in its 2006 AGI grant application, the "Achilles heel" of the city's gangs is their heavy reliance on narcotics trafficking revenues. According to RPD, arrests pursuant to undercover narcotics buys have disrupted this revenue stream and taken many gang members off the streets. These operations were conducted using unmarked police cars with video equipment for surveillance, undercover officers wearing wires to make the buys, and patrol officers to make the arrests.

By purchasing a surveillance van, the RPD has been able to facilitate these sting operations and other intelligence gathering efforts in a safer and more effective manner. The vehicle's disguise and its camera's powerful zoom lens allow the RPD Gang Unit to conduct surveillance in relative safety in neighborhoods that, due to the level of gang infestation, were impervious to surveillance by less covert means. The van's battery-powered heating and air-conditioning systems and relatively spacious interior also make the task more comfortable. The van is equipped with sophisticated surveillance technology including multiple cameras (one with a 360-degree periscope), high-powered zoom lenses, a motion sensor feature, and a nighttime mode which enables filming in very low ambient light. Audio can only be captured with a remote microphone, usually worn by an undercover officer, but the van equipment records both video and audio on to a single digital disc, whereas before video and audio tapes had to be synchronized after the fact.

The RPD Gang Unit offered additional benefits to using the surveillance van. The van can potentially reduce the amount of manpower needed to conduct stakeouts. For instance, a Gang Unit detective recalled an occasion in which the van was parked in the middle of a

recreational area popular with gang members. From this vantage point detectives were able to surveil two houses on either side of the park that were several hundred meters apart. The van's enhanced surveillance capabilities may also indirectly improve police-community relations by reducing RPD's reliance on heavy-handed gang suppression tactics, such as dragnets. In addition, it is possible that surveillance footage, particularly when it leads to plea agreements, may reduce the amount of time that officers spend testifying in court. Surveillance footage may also be valuable for training purposes.

RPD provided RAND with its data regarding RPD's use of the surveillance van. RPD typically deploys the van to monitor gang members for surveillance of a specific criminal act, such as a narcotics sale, or for general intelligence at events where gang members congregate. On a few occasions the RPD Vice Unit has borrowed the van for prostitution sting operations, but because the gangs are behind much of Riverside's prostitution, and because the surveillance van is always run by a Gang Unit detective, these deployments also present the Gang Unit with intelligence gathering opportunities.

Each time the van is deployed, RPD Gang Unit detectives complete an "After Action Report." The report describes where the van was situated, for what purpose it was used, and any intelligence that was obtained. The report also lists a department file number for the event, which one of the unit detectives said would also be appended to arrests and prosecutions stemming from the use of the van. Between February and November 2008, the van was deployed a total of 25 times.¹⁴ Information obtained through van surveillance has led to or facilitated 34 arrests: six arrests were for homicides, eight were for felony narcotics violations or felony warrants, and the remaining twenty concerned prostitution/solicitation and marijuana/alcohol offenses. The commanding officer of the Gang Unit knew of two pending prosecutions

¹⁴ The Gang Unit did not receive the van until February 2008. The RPD finalized its order for the van in September 2007, three months after receiving its FY2006 grant approval letter from the California Office of Emergency Services, the fiscal agent for the Central District of California Project Safe Neighborhoods Task Force. RPD was reimbursed by DOJ in June 2008.

where surveillance van recordings were going to be introduced as evidence.

Unfortunately these benefits are difficult to quantify. An ideal evaluation would use random deployment of the surveillance van (when appropriate situations arise) and compare the number of arrests and convictions obtained in cases using the van against outcomes in other cases where the van could have been used. Next best would be a comparison of control and treatment neighborhoods. However, each of these scenarios would require the RPD Gang Unit to leave the van idle when it expects to benefit from its use, which is unrealistic. As more data are accrued, a comparison could be made between outcomes in surveillance cases before and after the van was acquired, but insufficient data exist currently. Gang Unit personnel surmised that juries were more skeptical of the synched surveillance footage and grainier images of the pre-van era. Even an evaluation such as this is fraught with confounding factors. Key personnel changes were made in the RPD Gang Unit around the time the van was obtained, hence its tactics may have shifted, and sharp overall declines in crime have enabled RPD to devote more of its resources to anti-gang enforcement. Based on these data, we assigned a data robustness score of (3): Significant data was collected regarding grant activities, but no available comparison group exists against which to measure outcomes without grant funds.

4. CONCLUSIONS

This report summarizes RAND's evaluation of the initiatives funded by the FY06 Anti-Gang Initiative grant to the Central District of California Gang Task Force. Although all of the activities funded through AGI sub-grants were focused on enforcement, the nature of grant activities varied across agencies. Five of the sub-grants were used to provide human resources and two were used to provide technical resources. No clear empirical findings appear from our analyses.

From the single sub-grant that supported a rigorous evaluation (the Santa Nita Gang Injunction), we unexpectedly found evidence of increases in violent crime and decreases in property crime resulting from grant-related activities. However, this result may be related to changes in reporting behavior, making it difficult to quantify changes in criminal behavior due to the injunction. More detailed analysis of the effects of this intervention is warranted.

Insufficient data exists on the remaining sub-grants to support meaningful evaluation. For these sub-grants, the major obstacles to rigorous evaluation included (1) an inability to directly measure the contribution of the grant expenditures to outcomes of interest, and/or (2) difficulties in characterizing likely outcomes in the absence of the grant program. Although no empirical findings are offered for any of these evaluations, it does appear that the grants may have offered some institutional benefits that may have led to some reductions in gang violence. For instance, funding for additional prosecutors provided by the sub-grants were able to reduce office caseloads and to secure additional gang crime convictions; the purchase of handie-talkie radios facilitated Riverside County Gang Task Force operations, particularly "saturation days"; and the Riverside Police Department has been able to conduct criminal surveillance in gang-controlled area due to its use of a new surveillance van. The extent to which these apparent benefits have reduced gang crime is unclear.

In addition to funding initiatives that improve community safety, AGI has the potential to provide better information about which

strategies are most effective in reducing gang violence.¹⁵ Both AGI and PSN are intended to support data-driven initiatives to fight gun violence. The extent to which this potential is realized depends largely upon the research partner's ability to provide rigorous evaluations of initiatives funded through AGI and PSN. Going forward, greater focus on funding initiatives that support high-quality evaluation will improve the utility of AGI for both the policy making community and the public. This may require participation of the research partner during the application crafting or vetting process, as the research partner will have the relevant expertise to identify how to construct an evaluation and identify a comparison group.

In addition, data generation is a time-consuming process. Analysis is hampered by the current requirement that evaluations be performed by the end of the program's fiscal year or by the end of a limited number of short extensions. This is particularly problematic when the grant-delivery process is not completed until after the end of the fiscal year, resulting in grantees receiving their funds and commencing their initiatives after the date that the evaluations are initially due.

¹⁵ For example, Papachristos et al. (2007) demonstrate the utility of offender notification meetings as an enforcement tool drawing from a PSN-funded intervention in Chicago.

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