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AN EVALUATION OF THE EFFECT OF
OFFENDER-ORIENTED PUBLICITY ON AUTO CRIMES

By Emmanuel Barthe

A dissertation submitted to

Graduate School-Newark

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

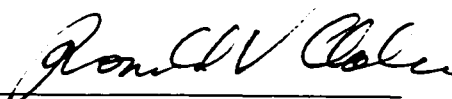
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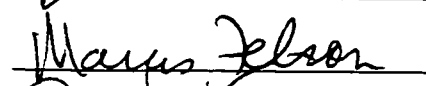
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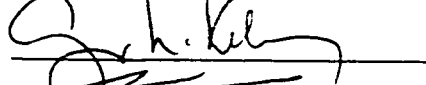
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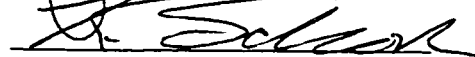
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Newark, New Jersey

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ABSTRACT

Using data collected as part of the "Operation Target" project in Jersey City, New Jersey, this research tested the value of offender-oriented publicity to reduce auto crimes when combined with added police patrols. This study used a quasi-experimental design to measure the impact of offender-oriented publicity in three experimental areas, testing the impact of publicity, increased directed police patrols, and a combination of the two.

Anti-crime campaigns usually target potential victims in an attempt to increase crime prevention knowledge. Publicity campaigns aimed directly at reducing offending through deterrent messages exist, but the general content of the warnings and the lack of law enforcement usually reduces effectiveness. Reduced official attention devoted to the problem of car crime allows potential thieves to remain secure in their assumptions that police apprehension represents only a slight risk.

To test the effectiveness of offender-oriented publicity, warning posters directed to potential offenders warned them of increased police patrols in designated areas. The warning posters also described the nature of the directed police patrols, and highlighted the concerned geographic area of these patrols to specify the boundaries of the protected zones.

Across the different areas, the intervention did not appear to have a significant effect on car crimes or other dependent variables such as the overall number of calls for service. The area receiving the publicity treatment did not exhibit a lower rate of car crime, regular crime incidents (robbery, burglary, aggravated assaults, etc.), or calls for service.

The threat of apprehension did little to deter the car criminals, and it failed to affect person and property crimes.

When looking at the area receiving only the added police patrols, there was a similar lack of significant results, showing that the police patrols did not deter the criminal element. When looking at the area combining the police patrols and the publicity, the area with the most salient threat of apprehension, there was no statistically significant change in the dependent variables.

The role of publicity in crime prevention endeavors, however, needs further study as the more offenders learn about the eventual risks of apprehension through effective information mechanisms; the less likely they are to offend.

PREFACE

This study was based on an initiative undertaken by the Jersey City Department (New Jersey) designed to address the problem of car crimes in a particular policing district. While the police department selected the areas for this study, the present author's position as crime analyst in the Planning and Research Bureau enabled a close monitoring of the implementation and control over data collection procedures. Initially, the police department chose an intervention that consisted solely of additional police patrols. In an effort to maximize the effect of these patrols, publicly placed warning posters were included as part of the intervention. The study also advertised the added police presence in the hopes that the publicity would further deter offenders.

This project would not have been possible without the help of many from the Jersey City Police Department. I am grateful to Chief Frank Gajewski for his inclusion and support of the publicity component as part of the intervention and for all of his help during the project. Special thanks to the staff of the Planning and Research Bureau: Captain Jon Tooke, Michael Burger, Robyn Mace, and Christina Lombardi. Much of the data collection and coding would not have been possible without the tireless research assistance of Karen Weintraub, Chris Sedelmaier, Erika Vergara, and Elizabeth Ashimine; they successfully navigated through the maze that is police data. Thanks also to all of the Jersey City Police Officers and Neighborhood Improvement District

employees (NIDs) who worked on the project, and to Lieutenant Brian Onical for his constant enthusiasm and optimism that good policing can make a difference.

I would like to thank the members of my dissertation committee: Dr. Ronald V. Clarke, Dr. Marcus Felson, Dr. George Kelling, and Dr. Kurt Shock. Their guidance and continued support was vital to understanding and appreciating the many intricacies of this endeavor.

I am also grateful to the faculty and staff of the Rutgers University School of Criminal Justice for their support throughout this journey, with special thanks to Phyllis Schultze, Jean Webster, Shirley Parker, Sandra Wright, and Bess Emano Walden. For their advice on process, format, content, I am indebted to my friends and colleagues, in particular Justin Ready, Mathieu Belanger, and Bill Terrill.

Finally, a special thank you to those who had to experience this process but nevertheless pushed and cared in their own way to witness its completion:

Mom and Dad, Jérôme, Raphaële and Pierre Antoine (and Clara of course), and Lauren, for never losing interest and knowing it would eventually end,

Christina for her continued love and support and for understanding the importance of the hours spent in front of the computer,

Papi et Mamie, voilà la fin du récapitulatif annuel. Cette thèse vous est dédiée - je pense que vous l'avez bien méritée, bonne lecture...

And last but not least, the three musketeers: Belle, Boo, and Kennedy.

Chapter 1 explores previous research on car crime prevention and the nature of the problem in Jersey City compared to national trends. Chapter 2 provides the relevant theoretical backdrop for the interventions and reviews the literature supporting the interventions. Chapter 3 describes the research hypotheses. Chapter 4 explains the research methodology, describes the specifics of the interventions chosen by the police department, and addresses some of the related design issues. Chapter 5 reports the results of the evaluation. Finally, Chapter 6 discusses the implications and conclusions of using publicity and police patrols to address car crimes.

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CHAPTER ONE

Auto Crime and the Jersey City Experience

Introduction

The spread of the automobile in every part of modern life has created a crime problem. Many people have already fallen victim to some form of car crime, and those that have been spared thus far probably fear that their car will be targeted in the future. Attempts to curb this criminal problem have met little success, and the concerned parties do not always take their share of responsibility in terms of its prevention. Should car manufacturers play a bigger role in implementing security measures when it comes to automobile designs? Are victimized individuals simply “asking for it” when they leave personal belongings in plain view on the passenger seat? Should there be tougher legal penalties imposed against offenders and their constant and blatant disregard for other people’s property? These questions have guided past intervention efforts and will inevitably guide future ones.

This research examines the use of offender-oriented publicity to reduce car crimes. To support the publicized offender-oriented warnings, a policing component was included as part of the intervention. Publicity has been a popular tool in the realm of crime prevention (Samuels, 1977; Vidmar, 1978; Heal and Burrows, 1979; Silverman and

Sacco, 1979) although most applications have targeted potential victims. The use of victim-oriented publicity remains questionable when it comes to reducing the incidence of car crime and other crime types (Riley and Mayhew, 1980), but only a few studies have tested the merits of publicity when directed at offenders.

Past researchers have tested the use of offender-oriented publicity to curb non-auto related crimes (Morris 1972; Home Office, 1975; Research Bureau Limited, 1978; Vidmar, 1978; Waters and MacAfee, 1976), but this research focuses specifically on car crimes and asks: Is offender-oriented publicity a useful tool when dealing with car crimes?

A Review of Past Efforts to Prevent Auto Crimes

There have been various evaluations of methods used to curb auto related crimes in different geographic settings. These efforts include legislating steering column locks, making cars more detectable if stolen, increasing surveillance using law enforcement or CCTV, improving parking facility security, and publicity campaigns.

Steering Column Locks

Webb (1994) examined the impact of steering column locks on auto theft rates in Germany, the United States, and in Britain. In all three countries, the introduction of legislation requiring manufacturers to fit new cars with the steering column locks led to a

decrease or stabilization of the car theft rates. In Britain, the greatest reduction was in the number of cars stolen for temporary or joyriding purposes. While the steering column locks were a success in reducing the auto crime rates, the process required governmental intervention in the manufacturing process. Such interventions may be efficient but rare in occurrence: “the steering column lock is the outcome of the first and only regulations requiring vehicles to be fitted with anti-theft devices” (Webb, 1994:71).

Making cars more detectable if stolen

The placing of decals on cars to allow the police to check the proprietorship of the automobile while it is being operated during early morning hours was tested in Texas, England and Wales (Ethridge and Sorensen, 1993; Honess and Maguire, 1993). In an attempt to reduce the number of stolen cars going into Mexico, the McAllen Police Department, located near the Mexican border in Texas, decided to implement the Citizens Against Auto Theft (CAAT) program. By placing colored decals on car windshields, law enforcement agents were able to determine if the automobiles belonged on the road at certain hours, or into Mexico. In England, the implementation of a similar program (Vehicle Watch) carried out by the Gwent Constabulary was able to reach approximately 20% of all registered vehicles in the region, and was well received by the residents. However, while the results suggested that residents who took part in the CAAT program or in Vehicle Watch had a reduced rate of victimization, the conclusion is less promising: “the existence of dramatic differences in victimization rates for members and non-

members...was not borne out" (Honest and Maguire, 1993: 17). One of the confounding factors in this case was that the residents who took the time and effort to enroll in the Vehicle Watch or CAAT programs were not really at risk in the first place. The authors state that "the Vehicle Watch scheme seems to have attracted drivers who were less at risk, either because of their already relatively high security consciousness, or because of their lower exposure to risk (for example, in terms of their parking or car usage habits)" (Honest and Maguire, 1993:21). Ethridge and Sorensen did find that while there was no significant theft difference between those who enrolled in CAAT and those who did not, they discovered an unintended benefit concerning the residents: "The program puts many of their fears to rest. Therefore, the most positive features of the program may be its value as a public relations tool and in being able to reduce fears" (Ethridge and Sorensen, 1993:19).

Increasing Surveillance

The city of Dayton, Ohio tested the effect of increased police patrols (Weiss and Freels, 1996). The study involved two areas; one was assigned extra police patrols while the other served as the control group. This experiment did not focus solely on the prevention of auto theft, but sought to test the effect of aggressive policing on six outcome measures: traffic accidents, robbery, index arrests, drug arrests, auto theft, and arrests for auto theft. After 6 months of increased traffic stops and overall increased police visibility, the authors found no evidence that increased traffic enforcement reduced

the incidence of the designated crimes or increased arrests. This finding did not support previous studies that linked patrol aggressiveness and crime reduction (Sampson and Cohen, 1988). The Dayton study is of particular interest for this project since the authors admit that "because we were interested in testing the independent effects of police activity, there was no publicity about the project or about the activities of the officers involved" (Weiss and Freels, 1996:51). Perhaps, publicizing the intervention would have increased the perception of police presence, resulting in an effect on the selected outcome measures.

The installation of Closed Circuit Televisions (CCTV) cameras in Great Britain (Poyner, 1991; Tilley, 1993) was tested in different sites and overall, the CCTV presence led to a decrease in auto thefts. Tilley states, however, that while the reductions are welcome, "it is more difficult on the basis of the available data to make a judgment about what it is about CCTV and its various modes of operation which have had that effect". Tilley's research supports Poyner's findings on the effect of CCTV on car crime. A university parking lot experienced a significant decrease in thefts from cars after the installation of CCTV in the parking lot. The rate of decrease for auto theft was less significant, but this was due to a low base rate, not the ineffectiveness of the CCTV. A diffusion of benefits manifested itself when an adjacent parking out of the CCTV's coverage area also experienced a reduction in car crimes, suggesting that offenders were uncomfortable committing crimes near any CCTV.

Improving Parking Facility Security

The impact of changing the physical attributes of parking facilities was studied in England (Poyner, 1991; Laycock and Austin, 1992). Poyner's research consisted of restricting access to a parking garage (self-closing exit doors and fencing low level walls at ground level), improving lighting (at entrance and exit doors), and increasing informal surveillance (inviting a taxi company to operate from a small office located near the entrance of the parking garage). The measures had the greatest effect on thefts of cars, not theft from cars: "Although the measures introduced concentrated on reducing accessibility...the real reason seems to be the lack of surveillance in the parking structure with 11 different levels (Poyner, 1991:98). The author concludes that people entering legitimately into the parking garage with a car carried out the thefts, and the lack of supervision on the upper floors facilitated the car break-ins. Laycock and Austin (1992) evaluated the effect of hiring two "crime prevention attendants" to work in a previously unattended parking lot. Not only was the measure the most economically viable, it reduced car related crimes by 66% in the following 12 months. Other successful parking security measures include hiring parking attendants, improving surveillance at lot entrances, and installing electronic access to deter thieves (Clarke, 2002).

Publicity Campaigns

Finally, some efforts have tested the value of publicity campaigns in Holland, New South Wales, Canada, and England aimed at educating the public about the problem of auto crimes so that they may better protect themselves (Riley and Mayhew, 1980; van Dijk and Steinmetz, 1980; Sacco and Silverman, 1981; Monaghan, 1988). Since this form of intervention was part of this project, these studies require detailed discussion and will be covered in the following chapter.

While there have been many past attempts to address car crimes using various measures, this crime remains a serious problem. Efforts based on stickers and decals alerting the police may be effective, but they inevitably work for people who are already security conscious, and are hence the ones least in need of the intervention. Police patrols alone have not proven their effectiveness on auto crimes, but this is partly because the level of deterrence has not been achieved through proper publicity. CCTV installation and physical design changes to parking structures are effective, but CCTV can be an expensive installation for some settings. Furthermore, protecting car parking lots is only one aspect of the problem. Theft of cars from public streets is another problem facing car owners, and until there are CCTV's on every intersection, many cars risk becoming targets. On a methodological note, evaluating these prior research endeavors in

terms of success or not is also a difficult task given the wide range of strategies used. The lack of comparison or control groups, the duration and coverage of the intervention, and the absence of statistical tests used to determine the degree of the success are common pitfalls found in a number of these previous studies.

Jersey City's Experience with Auto Crime

The Jersey City Police Department wanted to address the car crime problem plaguing its residents. Before deciding on interventions, a detailed analysis of the problem was required to ensure that the police department reaction would have an impact on the offending population. This section illustrates the nature of the car crime problem in Jersey City.

Jersey City, New Jersey

The second largest city in New Jersey, and the county seat of Hudson County, Jersey City (population 229, 039) comprises 41 percent of the county's total population. Jersey City covers 14.65 square miles, almost 32% of the county total. Due to its proximity to New York City, Jersey City has historically attracted many different ethnic groups, creating very heterogeneous populations (48% White, 30% Black, 24% Hispanic, 11% Asian/Pacific Islander, and 11% Other). It is a port of entry and a manufacturing center, but a great number of factories have closed, leaving many parts of the city to decay slowly. Even though the past few years have brought renewed economic growth to select areas of Jersey City, the median income in 1990 was \$29,000, and the unemployment rate has been hovering around 9%, compared to the state average of

3.7%.1 Jersey City remains primarily a blue collar, working class city with older row houses lining the streets of most neighborhoods.

Jersey City's growing downtown area shares some of the characteristics of the divergent metropolis as described by Felson, "where the highest risk of auto theft is in cities with many cars but without convenient parking areas; automobile owners must park great distances away from work or shopping and cannot easily see their vehicles" (Felson, 1994: 85). In fact, the development of the downtown area as a financial district with its own numerous office buildings attracts thousands daily from the suburbs, all in search of free street parking. This is to avoid the exorbitant prices of parking lots, some of which can easily cost upwards of \$30 daily. In addition, the PATH train bringing people to New York causes Jersey City to become a vast parking lot during the day hours.

Young professionals working in Manhattan were also quickly settling into the once impoverished downtown area, making it an extension of Greenwich Village in New York City. This gentrification also increased the number of cell phones and inviting briefcases left unattended inside cars, and police reports evidenced that numerous instances of purses, portable music equipment, and laptop computers were stolen from cars. The car owners were either careless or overconfident that nothing would happen during their absence while long time residents knew better than to advertise such valuables. In terms

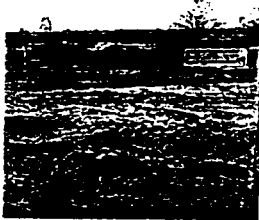
¹U.S Census Bureau.

of the crime rate, Jersey City has been struggling city. Even controlling for population, the crime rate easily surpasses any of the neighboring localities in the county and Jersey City alone accounts for 52% of crimes countywide.

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Hudson tops in car theft

Leads nation: Worse than L.A. and Miami

By John Patrick

Hudson County has the highest vehicle theft rate in the nation, according to a report released Tuesday from the National Insurance Crime Bureau's office.

The study analyzed theft rates of "non-replicated statistical areas" in 1985. An NCB's regularly encompasses a county or group of counties.

Five of seven so registered vehicles in Hudson County was reported stolen during 1985, according to the study. There were 4,112 registered vehicles in the county but only 2,076 of them were reported stolen.

Jersey City accounted for 2.6% of the thefts last year, though state officials noted previously that even that's an overestimate. About 100,000 cars are driven in Jersey City each year, according to Jersey City Police Department statistics.

Jersey City also registered a 28.4 percent decline in car thefts for the period 1980-1985, compared to the percent of loss in 1975, according to Moriarty.

Moriarty reported the decline in the department's annual report "1985 Annual Report" which will be published soon. It will be available.

See MULTIPAGE — Page A-12

ation in car theft

Moriarty said the Jersey City numbers reflected Hudson County alone, while the bureau's Newark area includes Essex, Union and the more rural Sussex, Morris and Warren counties.

The Newark area ranked 16th, with one out of every 70 cars being stolen.

The study says more than \$1.3 million vehicles were stolen in the United States in 1986, with nearly 40 percent of stolen vehicles being shipped overseas or driven across international borders. The remaining 60 percent will eventually be recovered, but only 18 percent are driveable, according to the report.

Vans, sport utility vehicles and pickups are among the vehicles increasing in popularity with thieves, according to the study. The latest figures for these vehicles show an increase of 10,000 thefts nationwide from 1986 to 1987.

The Associated Press contributed to this report.

TOP 10

The following 10 metropolitan statistical areas have the highest vehicle theft rates in the nation, according to the report.

In some cases, the listed cities represent the county they are in and surrounding counties. In other cases, like Jersey City's, the community listed represents only the county within which it is located.

1. Jersey City
2. Fresno, Calif.
3. Miami
4. Memphis, Tenn.
5. New York
6. Phoenix Mesa, Ariz.
7. New Orleans
8. Tucson, Ariz.
9. Pine Bluff, Ark.
10. Los Angeles-Long Beach, Calif.

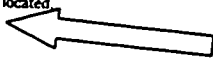


Exhibit 1 Press Coverage of Jersey City's Car Crime Problem (Jersey Journal, New Jersey, 1998)

Each year, 3000-3500 cars are stolen in Jersey City and thousands more are broken into. Jersey City is responsible for 51% of all automobile thefts countywide. In 1997, Jersey City had 3170 car thefts while its immediate geographic neighbors experienced much fewer car crimes. The auto theft rate for Jersey City was 14 per thousand, while neighboring towns reported lower rates: Hoboken, 7.5 per thousand; Bayonne, 4.8 per thousand; Union City, 12.6 per thousand, and Kearny, 8.9 per thousand (Uniform Crime Reports, 1997).

The exact magnitude of the problem, however, is hard to measure due to definitional changes and measurement issues. For Uniform Crime Reports purposes, for example, attempted thefts count as actual auto thefts even though there was no removal of the automobile. The issue is in the definition of an "attempt". For UCR statistical purposes, a differentiation is made, and damage to the steering column is an indicator of an attempted theft, but a broken window is not. However, a broken window and damage to the steering column could simply be attempted auto thefts interrupted at different moments. While official statistics may have a hard time providing an accurate picture of the specifics of car crime, they remain a good indicator of the general magnitude. First, insurance requirements require victims to produce a police report when policy claims are involved, and second, victims realize that the chances of recovering stolen vehicles increase if they notify officials.

In 1997, there were nearly 1.4 million auto thefts in the United States, at a cost of \$7billion, 17% of which occurred in the Northeast of the country. The motor vehicle theft rate in 1997 was 526 per 100,000 inhabitants. Car crimes were a problem for major cities, as the car theft rate for cities over 250,000 people was 11 per thousand while cities less than 10,000 residents only reported a rate of two per thousand. Jersey City's 1997 rate of 14 thefts per thousands exceeds the national average (11) for large cities. With only slight variations from year to year; Jersey City's auto theft rate remains consistently high, raising resident concern.

Official data can only paint part of the picture in terms of the severity of the problem. The Jersey City Police Department keeps auto theft totals for Uniform Crime Reporting purposes, but this type of summary-based measure does not allow for counts within different parts of the city, or other pertinent numerical information regarding car theft. A handwritten log of the reported thefts was kept in an oversized ledger, but this was not suitable for accurate counts or any type of analysis. In an attempt to provide a more accurate description of the car theft problem within Jersey City, all of the police reports dealing with car crimes and recoveries for a twenty-week period (May 1996 to September 1997) were coded into a computerized database. While this database only covered a limited period, it was enough to shed some light on the problems of car crimes in Jersey City. During that period, there were 4981 car crimes. Exhibit 2 shows the frequency of each crime type.

Exhibit 2 Frequency of Car Crimes for Jersey City from May 1996 to September 1997

Crime Type	Frequency	Percent
Auto Theft	1378	28
Attempted Auto Theft	245	5
Theft from Auto (internal items)	1842	37
External Items stolen from Auto	415	8
Vandalism of Vehicle/Criminal Mischief	1044	21
Robbery: Carjacking	22	0
Arson	35	1
Total	4981	100

(Source: Jersey City Police Department, 1996-1997 Incident Reports)

We will now briefly review the two main crime types (theft from auto and theft of auto) to illustrate the nature, frequency of these crimes, and draw conclusions about the offenders.

Theft from Automobiles

Thefts from auto consist of gaining entry into a locked vehicle, or taking advantage of an unlocked one, to steal some items inside the car. Rarely are these offenders interested in the whole car, and hence it is uncommon that these car break-ins result in an actual car theft. While there are very few studies that specifically address the problem of theft from auto, we can extricate pieces of information from more general studies on car theft that mention it briefly. Using the results of two surveys carried out in Greater Manchester and Northumbria interviewing known car criminals, Webb and Laycock (1992) offer some insight into the nature of this crime. According to the authors, the offenders stated that when it came to stealing a car, they planned the act 62 %

of the time. However, when it came to burglarizing an auto, they planned the act only 32% of the time. The role of opportunity in car burglaries is accentuated by the fact that many of the surveyed offenders stated that they stumbled upon unlocked doors 55% of the time, and open windows 15% of the time. Finally, 37% of the thieves reported that valuables had been left in plain view, facilitating the criminal act (Webb and Laycock, 1992).

The Jersey City experience supports this notion that car break-ins are acts that require little planning or premeditation. Car break-ins were the biggest crime category during the studied period (n=1842), accounting for 37% of the total car crimes. Of those 1842 break-ins, Exhibit 3 indicates that breaking windows was the primary method used (65.2%), indicating that offenders simply saw something that they wanted inside the car and they broke the window to complete the theft.

Exhibit 3 Method of Entry into Cars for Jersey City, NJ

Entry Method	Percent
Door lock picked	0.2
Unknown method of entry	0.3
Cut Roof Open	0.6
Trunk Opened	0.9
Door lock Slim Jimmed	2.4
Door forced open	2.6
Other Manner	13.6
Broke Opera/Vent Window	14.2
Door lock punched	14.2
Broke Main Window	51.0
Total	100.0

(Source: Jersey City Police Department, 1996-1997 Incident Reports)

Of particular interest is the finding that most car break-ins are not committed to steal the car radio. Most of the time (70%), thieves were attracted to other items left in plain view, as seen in Exhibit 4.

Exhibit 4 Items Stolen from Cars in Jersey City, NJ

Items	Percent
Car Radios	30%
Other Items Left in Car (Portable electronics, Purse, etc.)	70%
Total	100%

(Source: Jersey City Police Department, 1996-1997 Incident Reports)

Car break-ins in Jersey City appear to be crimes carried out quickly, not involving a lot of planning or equipment, and resulting in the rapid acquisition of valuable goods.

Theft of Automobiles

Theft of an automobile involves the unlawful entry into an automobile, the taking of the automobile, using it for some purpose, then abandoning it afterwards. Much of the car theft literature reports two main reasons for car theft: financial gain and joyriding (Challinger, 1987; Clarke and Harris, 1992). McCaghy, Giordano, and Henson (1977) could classify 90% of all the car thefts they studied with these two motives. To study the problem of auto theft, recovery reports paint a more telling story than theft reports. Too often, a theft report will usually only contain the theft location address and other information such as the date and approximate time of the theft. However, once a car is recovered, the potential reason for the theft is easily deduced based on the resulting damage. For example, when authorities recover a car with engine damage caused by excessive driving practices, one can conclude that joyriding was the reason. Similarly, if a car is recovered partially or completely stripped, financial gain from selling parts was probably the motive behind the theft.

Joyriding

Previous research attributes joyriding to youths seeking a temporary thrill (Schepses, 1961; McCaghy, Giordano, and Henson, 1977; Higgins and Albrecht, 1981; Clarke and Harris, 1992). These juveniles will usually pick out a sporty, alluring vehicle that can be stolen with relative ease (the doors were not locked, or no steering wheel locking device such as the Club was used). Thieves proceed to drive recklessly and

speeding is part of the joyride (Webb and Laycock, 1992). The uses of the car during the joyride can be to impress peers, show off to members of the opposite sex, or provide a haven for sexual activity (Tremblay, Cusson, and Clermont, 1992). W. G McCarney, Vice Chairman of the Northern Ireland Juvenile Courts Association, describes what he witnessed as he followed a group of joyriders:

"I have watched up to five cars race at high speed around the car park at the back of the Ballyowen Health Centre in West Belfast in a scene which made the famous chariot race in Ben Hur look rather dull, the drivers dicing with death as they did fancy hand-break turns in a very confined space. Meanwhile a group of forty to fifty appreciative teenagers hung over the surrounding wall. Joyriding is very much a group activity. There is a whole pattern of behavior that gives it meaning for the young people involved. There is the stealing of the car in the first instance, the excitement of driving at high speed, the added adventure of being chased by the police or army. Merely recounting the details to me brought them to a high state of excitement."

Tremblay states that four elements must be present for a juvenile to engage in joyriding. A youth must first have the desire for transportation (be it for a specific destination or for general cruising purposes), no legitimate means to avail himself of a car, a suitable and vulnerable car to steal, and a general sentiment that the joyriding experience will far outweigh any legal risk. During joyriding, the risky driving practices and overall recklessness of the drivers usually damage a car. Rarely, however, are these cars dismantled, and authorities usually recover them. Some thieves steal cars for joyrides and dump them in various waterways or burn them completely, making it harder to recover the stolen automobile. These are, however, exceptions because it is very difficult to make a car totally disappear, and authorities eventually find dumped or burned cars (Tremblay et al., 1994).

The literature indicates that young people commit most car thefts for joyriding. In 1997, 69% of the 400,000 vehicles stolen in England were recovered and linked to joyriders, while only 27% of the thefts were blamed on professional theft (Sallybanks and Brown, 1999). Clarke and Harris (1992) found that thefts for temporary use and joyriding outnumber professional thefts by at least two to one. Over 65% of those arrested for car theft were under the age of 25 (Uniform Crime Reports, 1997). In Jersey City, similar trends exist, with approximately 65% of the stolen cars recovered and almost 60% of those arrested being under 25 years old. Looking at the damage caused by the Jersey City auto thieves, Exhibit 5 indicates that most of the car thefts are not the work of professional thieves as most cars sustain only minor damage. Of course, these percentages only apply to recovered cars, but those not recovered (35%) by local police usually turn up in a neighboring jurisdiction.

Exhibit 5 Damage Found in Recovered Stolen Cars in Jersey City, New Jersey

Damage	Percentage
No or Minimal Damage	48
Some Damage	41
Partially Stripped	8
Totally Stripped	3
Total	100

(Source: Jersey City Police Department Incident Reports, 1996-998)

Financial Gain

Financial motives drive the second group of thieves who only see the car as many parts making a whole. Before driving off with the stolen car, these thieves have already made a mental picture of the different parts and the financial rewards they represent. In this category we need to include a hybrid offender sometimes referred to as a “Jockey”, since “for jockeys, the value of the ride is contingent upon the prize obtained at the finishing line (the fencing exchange value of the vehicle). The quicker the ride, the more productive the race, and the more races are made, the more productive the jockey” (Tremblay et al., 1994).

If a car is stolen for financial gain, the car is either stripped of its valuable parts or abandoned, or it is stripped down to the shell. When stripped for parts, a car can be disposed of altogether to remove any evidence of the theft, or rebuilt with other parts, made to appear legitimate, and sold for profit. “Auto theft for profit takes several typical forms, including the operation of chop shops that dismantle cars into collection of parts; the theft of vehicles for resale either local or abroad; and the theft of vehicles to allow convenient “stripping” of selected parts in protected locations” (Fleming et al., 1994: 49).

Thieves may also respond to market forces, as in the early 1980’s, when Quebec witnessed an increase in car theft when it became known that insurance companies were now favoring used parts for repairs (Tremblay, 1991). Other research suggests, on the other hand, that a change in manufacturing practices of car parts does not affect the demand for such car parts, and hence does not increase car theft and/or car chopping

(Harris and Clarke, 1991). Nevertheless, laws of supply and demand for car parts are much more likely to affect profit-oriented thefts than joyride-oriented ones, where the market value of the automobile is less relevant (Tremblay et al., 1992). The extent of the market for stolen parts in Jersey City is not clear and the data collected for this project did not shed any light on the problem. However, the recovery rate and the minimal damage to recovered cars indicate that the need for stolen parts is not the force that drives the car theft problem in Jersey City.

Characteristics of Car Crime Offenders

Past studies that have focused on car thieves allow a glimpse as to the characteristics of these offenders. What is common throughout these studies is the picture of opportunistic youths against a social backdrop lacking formal social control agents and or guardians. Light, Nee, and Ingham (1993) used semi-structured interviews with 100 car thieves and they describe car offenders as primarily young, from lower economic backgrounds, and with rather bleak professional prospects. A mixture of excitement and financial gain was the driving force behind their crimes, but most of the sample admitted to desistance from the car crime business as they matured and took on more responsibilities.

Interviewing fifty-five incarcerated auto thieves from Illinois, Reinertsen and Lofgreen (1995) report that these offenders started stealing cars at an early age (17 years old). McCullough et al. (1990), interviewed youths from Belfast who had been involved in joyriding. These joyriding youths reported that their first involvement in car crimes was around the age of 18. However, unlike the Illinois sample that seemed to have a normal childhood, the Belfast sample came from socially deprived inner-city neighborhoods, with all of the associated social ills.

Fleming et al. (1994), interviewed 31 incarcerated youths who had a history of car crimes in British Columbia. This sample had an earlier start in car theft and joyriding, as the mean age for their first crime was 13. Like the Belfast group, poor family structure, poor school performance, and frequent drug and alcohol abuse was common. In terms of

their motives, Fleming found that less than a third of their sample engaged in profit oriented thefts. The samples from Northern Ireland and British Columbia relied on the car thefts and the ensuing joy rides as a source of excitement, and as a chance to show off to peers.

Interestingly, young thieves consider risk when carrying out their illegal acts and most report that they steal cars that are unattended with the keys inside, or cars that lacked protection and or surveillance (Reinertsen and Lofgreen, 1995). The Belfast thieves stole their cars between the hours of 6 PM and midnight (McCullough et al., 1990), and targeted streets that had low levels of public surveillance. Seventy-six percent of the Illinois sample stated that they would stop stealing cars if the chances of getting caught were higher, and 24% stated they chose to steal cars from locations that were “quiet” because there was no one to watch (Reinertsen, 1995). Similarly, 32% of the British Colombian sample chose underground parking lots not patrolled by security personnel. Fleming’s research also shows that urban car thieves had more opportunities for crime whereas “the lack of anonymity perceived by small town delinquents appears to be a major deterrent” (Fleming et al., 1994).

Past research demonstrates that the car thief can come from a wide variety of social settings. Some car thieves can come from advantaged backgrounds, as evidenced by the “favored group” hypothesis (Wattenberg, and Balliestri, 1952), and yet other

research demonstrates that juvenile car thieves resemble other delinquents coming from impoverished and socially deprived inner cities (McCaghy, Giordano, and Henson 1977; Higgins and Albrecht 1981, Light et al., 1993).

In sum, the main reasons for car thefts are joy riding and youth related, “excitement producing” behaviors. Most importantly, cars have become targets to these youths and their thrill seeking activities primarily because of a lack of tangible threats of apprehension and official sanctions.

The Jersey City Police Department and Car Crime

The Jersey City Police Department (JCPD) has approximately 850 sworn officers divided into the four policing districts, with 150 assigned to the NTF (Neighborhood Task Force) community-policing program. While the JCPD is attempting to adopt progressive policing strategies, it is still in the infancy stages of such a transformation, and the resistance to such changes is common throughout all levels of the department. When specific crime problems call for police attention, reactive methods are the first solutions proposed and adopted. Specialized “squads” are seen as the answer to addressing any particular crime problem. This is rarely based on thorough crime or data analysis, and no unit has truly solved any of the problems they were assigned to address.

This is due to the reactive nature of these squads, and a poor understanding of the dynamics behind the targeted problems. Political connections, friendships, and other factors not necessarily related to the skills needed to make such units productive and efficient determine assignment to these squads. Because administrations, or commanders in search of quick fixes create these squads, any in-depth adoption of problem solving philosophies have yet to become established pillars of the overall policing strategy. In terms of addressing car crimes, there has not been a solid strategy adopted by the police department aside from the traditional “anti theft squad”. This unit was in existence for approximately five years and consisted of police officers driving in an unmarked police car who attempted to catch car thieves in the act. The unit had minimal impact on the problem and a new administration quickly disbanded it. Aside from that effort, car

crime prevention receives no special attention, and is the responsibility of the regular patrols.

Auto crimes remain, nevertheless, problematic for the police. Nationally, car crimes represented approximately 10% of all reported 1997 index crimes. In Jersey City, almost 20% of all index crimes were car thefts. While the number of car thefts is consistently high, the national police clearance rates remain very low (around 14%). Hudson County² also faces low arrest numbers for auto theft:

Exhibit 6 Arrest Rates for Auto Theft in Hudson County, New Jersey Compared to National Rate

	Number of Car Thefts	Number of Arrests	County Arrest Rate	National arrest Rate
1995	6783	96	1%	14%
1996	6798	81	1%	14%
1997	5993	85	1%	14%

(Source: Jersey City Police Department, New Jersey and Uniform Crime Reports, 1997)

² Hudson County numbers are presented because the Jersey City police department did not keep adequate information concerning auto crime arrests.

The number of people on parole for auto theft also reflects the poor law enforcement response. In 1997, the Hudson County Parole Department had 1,194 people on parole in Jersey City. Of these, only one was under supervision for auto theft. There are several explanations for these low rates. Car crimes are committed very rapidly and at times when there are few "guardians" around. With the high rate of car crimes, police officers may also feel overwhelmed at the thought of having to tackle such a large problem, and many adopt a defeatist attitude. Many police officers overlook the financial severity of such a loss by arguing that this type of crime is not as serious as a "person on person" crime. To most in the law enforcement community, car theft is just another property crime. Police officers also feel that since the insurance companies will compensate the owner for any damage, the overall harm of the crime (and hence the attention it deserves) is greatly reduced. Finally, the police are reluctant to devote energies and resources to combat car crimes because they know that the probability of an apprehension or arrest is very low, and this is probably most true in areas where the police are overwhelmed with numerous other, "more serious" crimes. "In the face of increasing rates of violent crime, auto theft overall may be attracting less police attention, which would help to account for declining clearance rates" (Clarke and Harris, 1992: 14). Most car crimes receive very little police attention beside the usual initial police report to meet insurance requirements. One Jersey City police officer was surprised at the lack of attention paid to the problem: "A burglary where a \$400.00 T.V was stolen receives the visit of a patrol car, and the apartment can be dusted for fingerprints. But your \$70,000

Lexus gets stolen and the police only take a report. They figure the insurance companies will work it out” (Conversation with Jersey City Police Officer, 1997). Exhibit 7 shows the manner in which the JCPD gathered car theft information at the time of this project. It is not hard to see why proactive police work to stop car crimes was rare.

Stolen Auto

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NO	NAME	YR	MAKE	PLATE	LOCATION	TIME
1		00	CAT		18th - MARIN ST	Mid
2		88	TOYO		100 Clifton Pl	Mid
3		85	Buick		50 Hill Dr - W. S	Even
4		90	VW		569 Montgomeri	Day
5		93	Honda		Grant - Jersey	Even
6		82	Acura		Sussex - Warren	Mid
7		94	Honda		Mountg - Barrow	Mid
8		92	Honda		8th - Division	Mid
9		91	Dodge		2nd - Jersey	Mid
10		91	Cher		Newark - Wash	Day
11		88	Dodge		1st - Warren St	Mid
12		98	Hyl		100 Clifton Pl	Day
13		91	Ford		57 Bergen Ave	Day
14		94	Honda		9th - Jersey	Even
15		87	Ford		Bay - Warren	Day
16		00	Jeep		351 2nd St	Even
17		78	HITSU		2nd - Hudson	Even
18		98	TOYO		369 Unique St	Even
19		94	Inf		Montgomeri - Barrow	Mid
20		91	Acura		491 Mercar St	Mid
21		01	Suba		Montgomeri - Barrow	Mid
22		90	Honda		111 1st St	Mid
23		00	ISU		Barrow - Newark	Mid
24		74	SAT		MARIN C.D.	Day
25		95	BHW		142 Steuben	Mid
26		72	Honda		264 9th St	Mid
27		84	TOYO		410 Marin Blvd	Even
28		93	Honda		Clifton - Sum	Mid
29		95	SAT		232 Grant St	Mid
30		98	Jeep		Sussex - Green	Mid
31		91	BHW		115 Harris St	Mid
32		95	Jeep		5th - Coles St	Mid
33		89	Honda		1 Chapin CT	Mid
34		99	Honda		194 Van Horne	Day
35		74	Jeep		W. Han. Tou St.	Mid
36		71	MB		385 7th St	Even
37		91	Lex		448 Grant St	Day
38		92	Honda		337 4th St	Mid
39		00	Ford		370 Grant St	Mid
40		91	HITSU		2nd - Grant St	Even
41		97	Honda		810 Mtg - Barrow	Even
42		98	Jeep		3rd - Telet	Even
43		01	Jeep		Lawson - Wash	Even
44		98	Acura		319 8th St	Mid
45		91	Acura		155 Wash.	Mid
46		00	Jeep		York - Wash.	Even
47		00	Jeep		Lawson - Wash.	Even

Exhibit 7 Sample Page of the "Stolen Auto" log kept by the Jersey City Police Department, 2000

(The author has smudged unique identifiers)

CHAPTER TWO

Theoretical Context for Publicity and Police as Interventions

The car crime in Jersey City was primarily the result of youths seeking thrills and offenders realizing that there was little enforcement since the police focused on crimes that are more “serious”. As a solution, the police department decided to add additional police patrols in problem areas to target car crimes, but due to limited resources, this study sought to maximize the effectiveness of these police patrols. Relying on past situational crime prevention research, the police department decided to move away from ineffective victim-oriented publicity and adopted an offender-oriented approach. An advertising campaign publicized the added police patrols.

Since the publicity component sought to alter the offender’s perception of the criminal situation, this section reviews the basic tenets of the rational choice and routine activities perspectives and explains why these perspectives support the use of publicity as an intervention. Finally, an examination of the benefits of intensive directed police patrols is offered.

General Review of Rational Choice and Routine Activities

Because this research involves using offender-based publicity and alerting potential auto criminals of the risks they are facing, we need to focus on theories and

perspectives that treat offenders as decision-making entities. The rational choice perspective contends that offenders go through a thought process about engaging in criminal activities, and they are hence “reasoning criminals”. Offenders are “much more responsive to changes in the risks and effort of crime than predicted by contemporary crime theories” (Clarke and Felson, 1993:4). The idea that people respond differently to costs and rewards was nothing new in the social sciences and economic models of behavior were applied to criminal motivations (Becker, 1968), and some were even directly applied to the problem of auto theft (Koskela and Viren, 1993). Rational choice theorists found these economic models, however, to be unsatisfactory on several levels. The two most important criticisms of economic models were that 1) “rewards” were only measured in terms of monetary amounts, not allowing for other types of rewards some offenders seek when engaging in criminal activities (excitement, status, power, etc.), and 2) the economists saw the criminal as a perfect self-maximizing machine. Economic models treated offenders as individuals who always made the best choices (high rewards, low risks) but rational choice theorists saw this as a limitation since they saw crime as being much more “opportunistic, ill-considered and even reckless in nature” (Clarke and Felson, 1993:5).

The rational choice perspective posits that much of criminological theory has neglected the role of the offender in offending. In their article entitled *Modeling Offenders ' Decisions: a Framework for Research and Policy*, Clarke and Cornish (1985) offer an extensive review of previous research carried out in sociology, criminology,

economics, and psychology. They conclude that "it is useful to see criminal behavior not as the result of psychologically or socially determined dispositions to offend, but as the outcome of the offender's broadly rational choices and decisions" (Clarke and Cornish, 1985:147).

One particularly relevant aspect of the rational choice perspective to this research is the notion that criminals fail to maximize their rewards due to poor decision-making. Economic models attempt to impose simplistic models on offenders and their less than perfect lives: "a useful theory of criminal behavior can dispense with special theories of anomie, psychological inadequacies, or inheritance of special traits and simply extend the economist's usual analysis of choice" (Becker, 1968 in Clarke and Cornish, 1985:156). The rational choice perspective, however, sees the need to be more realistic since most offenders base their decisions on numerous factors, many of which are outside the offender's control. This lack of control over all the components needed for effective decision-making is what leads to many offenders not maximizing their rewards.

The routine activities approach (Cohen and Felson, 1979) is interested in explaining crime trends without relying on theories about criminal motivations. According to Cohen and Felson, opportunity is the key component of crime. Focusing on the level of opportunity a situation presents says more about likelihood of a crime than an offender's motivation or criminal disposition. A person's routine activities (going to work, shopping, etc.) and the criminal opportunities encountered during these activities (as offender or victim) are the primary concern of this approach to understanding criminal

events.

The three elements of the routine activities theory are *the likely offender, the suitable target, and the absence of a capable guardian*, the main idea being that crimes will occur when these three elements converge together in time and space. Much of the impetus behind this approach is to move away from traditional criminological research that seems overly concerned with explaining criminal motivations and the reasons why people choose criminal lifestyles. Cohen and Felson “did not deny the existence of criminal inclinations, but took these as given, virtually dismissing what was central to most contemporary criminology of the 1960's and 1970's” (Clarke and Felson, 1993:2).

These brief reviews of rational choice and routine activities serve to demonstrate the need to better understand the dynamics of offending. It is no longer enough to know *who* offends, but *how* they offend, and *why* they offend *when* they do. In criminology, there has been a renewed interest in looking at offending from the offender's point of view. Traditional criminological theories seek to explain offending by studying the social conditions of certain individuals, explaining their behavior by looking at elements that were often out of the offender's control. Offender-based approaches put less importance on social determinism and treat individuals who commit crimes as decision-making, thinking beings. Taylor et al. note: “Thus men rob banks because they believe they may enrich themselves, not because something biologically propels them through the door” (Taylor, et al., 1973:61).

The Role of Rational Choice and Routine Activities in Offender-Oriented Publicity Interventions

The rational choice perspective is interested in the distinction between the decisions leading to initial criminal involvement and the decisions that lead to the completion of a criminal event. This focus on the offender's decision-making process is what links publicity as an intervention to this perspective. The study of the decision processes related to criminal involvement is a much different exercise than the study of the actual criminal events. Involvement decisions are spread out over long periods, incorporating numerous factors in the individual's background. One does not choose to become a criminal overnight, and even if one chose to do so, they would probably lack the necessary expertise of the criminal lifestyle. Clarke and Cornish describe this lengthy and engaged process: "Involvement decisions are characteristically multi-stage, extend over substantial periods of time, and will draw upon a large range of information, not all of which will be directly related to the crimes themselves" (Cornish and Clarke, 1986:2).

The second element, the event decision-making process, is a much more short-term exercise. This is where an individual already having gone through the involvement decision process (already involved in criminal affairs), has to decide if he is going to commit a particular crime or not. This decision-making process is more bounded in time and space than the involvement model: "the event decisions... are frequently shorter

processes, utilizing more circumscribed information largely relating to immediate circumstances and situations” (Cornish and Clarke, 1986: 2). The event model usually involves information about the impending criminal activity such as the possible gains, risks, and the amount of effort needed to carry out the task. If the potential offender goes through the event model and considers that all the factors are leaning towards his favor, there is a high chance that he will commit the crime. It should be remembered that this process (the event decision) can happen within a very short time frame. For example, a petty thief is walking down the street and he sees valuables on the passenger seat of an unattended parked car. It is dark, no one is around, and the young thief has the proper tools to break the window. Within seconds, the young thief must decide whether to carry out the car burglary. In that period, he must consider the value of the contents inside the car, the probability of being noticed or apprehended, and his ability to properly break the car window to allow him access.

Modifying the offender’s decision-making process is important because the rational choice perspective holds that crime is purposive in nature. Criminals engage in various activities to achieve their goals, and these can either be material in nature or not, or both. For example, an aspiring car thief might seek the thrills linked to joyriding in a stolen car, but in the process of seeking these goals, however, decisions and choices must be made (ie., what car to steal from where). The perspective explains that these decisions and choices are often made within certain constraints outside the offender’s control. For

example, the young car thief may not have the time or the ability to steal the “best” automobile or he may underestimate the risks involved. Therefore, while a joyrider may be in search of thrills, “meeting these needs involves the making of (sometimes quite rudimentary) decisions and choices, constrained as these are by limits of time and ability and the availability of relevant information” (Clarke, 1997:10). In an attempt to modify the offender’s decision-making process, publicity advertises relevant information, namely the increased likelihood of apprehension, hence reducing the benefits of the act.

The routine activities perspective also offers some support for the use of publicity. Publicity advertising added police presence, alters the notion of the absence of capable guardians (one of the three requirements for a crime to occur), making the crime less possible. In addition, the added warnings of police presence not only increase the perception of police guardianship, but that of residents as well. Offenders will perhaps believe that the overall level of concern for the problem of car crime in the chosen areas will be shared by residents, leading to more awareness and hence more guardianship. Publicizing this increased guardianship supports the routine activity approach “which is focused upon changes from moment to moment and hour to hour in where people are, what they are doing, and what happens to them as a result” (Clarke, 1997:11).

Increasing the Risks: A Situational Prevention Technique

Situational crime prevention is a method used to address crime and disorder problems. Environmental criminology, the rational choice perspective, and routine activities theory each provide concepts to the theoretical framework of situational crime prevention (Clarke, 1993) to allow a careful analysis of a given crime problem, and identify the “mechanics” of the crime such as locations, actors involved, rewards gained, in short, its environmental factors. Armed with detailed information about the crime’s nature, situational crime prevention attempts to formulate appropriate responses to the problem through one or more modifications (Clarke, 1997).

Because of its focus on the specificity of crimes, situational crime prevention relies on very particular methods of crime reduction called “Opportunity-Reducing Techniques”. There are sixteen such techniques, each falling under one of four categories: 1) Increasing Perceived Effort, 2) Increasing Perceived Risk, 3) Reducing Anticipated Rewards and 4) Removing Excuses. Any one or more of these techniques can be applied to a given crime problem and a complete review of all the techniques is given in Clarke’s *Situational Crime Prevention: Successful Case Studies* (1997). Through its focus on highly specific forms of crime (daytime auto thefts from parking garages versus the general category of auto theft), its aim is to alter the physical arenas in which crimes thrive by making criminal ventures less attractive in terms of rewards gained.

This research makes use of one of these techniques: *increasing the perceived risks* and one way of increasing these risks is through Formal Surveillance.

Formal surveillance “is provided by the police, security guards, store detectives, whose main function is to furnish a deterrent threat to potential offenders (Clarke, 1997:20). With the added police patrols directed to focus only on car crimes, and the posters advertising the extra police presence, formal surveillance is established. The content and wording of the posters make this surveillance even more salient by highlighting potential police procedures people may experience in a given area. Such activities include traffic checkpoints, police surveillance, field interviews, or similar activities designed to increase police visibility. Because the nature of the intervention is a sign/poster designed to provide potential offenders with information, it is tempting to include another technique: *Stimulating Conscience*. While signs posted in stores reminding people that “shoplifting is stealing” or that “smoking is illegal, selfish, and rude”, also target potential offenders in an effort to curb future behaviors, the content of the signs differ from those proposed in this experiment. As its name suggests, *Stimulating Conscience* appeals to the moral nature of the offender, hoping that a friendly reminder of social rules will thwart the commission of a specific kind of offense. The warning of the proposed posters does not appeal to the conscience of the offenders by reminding them that auto theft is a “bad” act, it simply warns that extra police attention will be paying special attention to auto activity in a given area. Because of this important differentiation, formal surveillance remains the only appropriate situational crime prevention technique for this study.

Publicity and Situational Deterrence

The notion of deterrence is important to this research because the publicity campaign seeks to reduce criminal offending using posters warning increased risk of apprehension. The relevant concepts of deterrence theory are mentioned below, but of particular relevance is Cusson's notion of situational deterrence, which serves as a valuable link between deterrence and situational crime prevention.

Most research seeking to deter offenders asks not only: Will deterrence work?, but rather: Under what circumstances will deterrence work?. Using his study of youth violence in Boston, Kennedy explains why deterrence research may not always produce the intended effects: "It may be that we are not using this deterrent capacity very well. It is currently spread very thin: we routinely exercise it against a great many people, for a great many kinds of offending, more or less reactively. What if we were to focus it against fewer offenders, fewer kinds of offending, or both?" (Kennedy, 1997: 472). A review of the deterrence research supports the notion that "the collective actions of the criminal justice system exert a very substantial deterrent effect" (Nagin, 1998:3). This statement is offered with caution however, as Nagin also explains that to achieve deterrence, proper program implementation (targeted and incremental change) is necessary: "So for policy makers the issue is not whether the criminal justice system in its totality prevents crime but whether a specific policy, grafted onto the existing structure, will materially add to the preventive effect" (Nagin, 1998: 3).

Williams and Hawkins (1986) state that it is not enough to focus on objective measures of deterrence (the actual likelihood of arrest) and that efforts should focus on the perceptual properties of sanctions (the perceived likelihood of arrest). The deterrence literature is concerned with how offenders learn about increased risks, and offenders' perception of the threat or of the increased sanctions. Making threats and increasing penalties remains a futile exercise if the intended audience does not receive the message. To explore how offenders perceive risks and sanctions, two common methods are cross-sectional and scenario-based studies (Nagin, 1998). Cross-sectional studies question individuals about their perception of the certainty and severity of various sanctions, and their answers compared to their reported past and future intentions to offend. Scenario-based studies present respondents with a criminal situation and ask them about their perceptions of the risks associated with that crime. Finally, respondents state if they themselves would engage in that particular activity, given their perception of the risks involved. These types of studies demonstrate that as the perception of risk of detection or punishment increases, the likelihood of offending decreases (Jensen, 1969; Minor, 1977; Grasmick and Bryjak, 1980; Grasmick and Bursik, 1990; Bachman, Paternoster, and Ward, 1992; Paternoster and Simpson, 1997).

An interesting finding in risk perception research is that individuals who have a low offending rate and those that have had minimal contact with formal sanctions have an increased perception of risk of apprehension (Tittle, 1980; Minor and Harry, 1982;

Horney and Marshall, 1992). This is attributed “to the naïveté of inexperienced offenders who overestimate the effectiveness of enforcement apparatus” (Nagin, 1998: 15). Others call this the “shell of illusion” (Tittle, 1980: 67). Actual offenders are more aware of the risks involved in committing crimes than those that simply hypothesize about it.

Paternoster states that “people who engage in illegal acts without getting caught may be expected to lower their estimates of the probability of getting caught because, by engaging in forbidden behavior without being sanctioned, they may empirically refute their earlier estimates of the risks involved” (Paternoster et al., 1983: 458). This suggests that any policy intended to increase the perception of risk has the added burden of convincing those that already have a preset notion of the actual risks involved. The utility of offender-oriented publicity to achieve deterrence is dependent on increasing this risk perception, “the dynamics of the risk formation process” (Nagin, 1998: 19). General warnings and poorly targeted or ill-defined threats will do little to alter the offender’s risk formation process. Clear, concise, and credible information about the nature of the policy change/threat is the key to changing the offender’s risk perception.

Cusson explains that situational deterrence results when crime prevention efforts instill fear in offenders: “Situational Deterrence puts the focus on the offender’s fear that is generated by the actual circumstances of the criminal event. It is the intimidating effect of the dangers involved in a specific crime situation” (Cusson, 1993:61). Cusson states that there are two types of fears an eventual offender must face when deciding to commit a crime: 1) physical harm (i.e., victim fights back) and 2) the eventual legal punishment.

In the case of the physical harm, the offender must rely on the cues he receives from the victim (size, strength, likelihood of counterattack) and take his chances. In the second case, there are also cues that give the offender information: "All offenders can read in the pre-criminal situation the signs that enable them to estimate their risk of being punished sooner or later: inquisitive passersby, a watchman, metal detectors, alarms, closed circuit televisions, etc." (Cusson, 1993:62). Offender oriented publicity is a viable tool to advertise these cues to the offending population as situational risks can be highlighted in such a way as to instill enough fear that the criminal act is never completed.

Past Research on Publicity

A distinction exists between victim-oriented publicity and offender-oriented publicity. Victim-oriented publicity are campaigns that attempt to reduce an individual's chance of becoming a crime victim through the application of some crime prevention method, or ones that show how to be a better "crime fighting" citizen by reporting certain acts to officials. Offender-oriented publicity, on the other hand, seeks to warn potential offenders as to the costs and consequences of various illegal acts in the hopes of making the criminal enterprise less attractive. The literature discussing the use of publicity as a crime prevention tool does not always distinguish between the directions of the publicity, although most studies rely on victim-oriented methods. Regardless of the direction of the publicity, the theoretical tenets of changing behaviors through the supply of information are at the core of both types of publicity.

"Attitude theory" and the concept of "action preparedness" are integral parts of the publicity theoretical framework. One of the theory's premises states that: "The actions an individual will engage in are a function of cognitive judgments and affects within the limits of the relevant social norms" (Fishbein and Ajzen, 1975). For example, our fear of crime and our corresponding actions is based on what we hear, are told, read or see in the media. Similarly, the notion of "precaution preparedness" refers to the actions we take to protect ourselves given what our surroundings have told us about crime. Publicity, being part of our surroundings, has the power to influence our behaviors

about numerous things and in this case, crime prevention.

A Dutch victimization survey conducted in 1979 sought to examine how fear of crime influenced precaution preparedness. Respondents were asked to state what precautions they took when it came to five different property crimes, and their respective precautions were correlated with other more general questions about crime. Precaution preparedness was strongly correlated with cognitive opinions concerning crime: “the opinion that one’s personal chance to become a victim increased during the past two years correlates with taking more precautions.” However, “precaution preparedness is not correlated with the more emotionally charged attitudes concerning crime, such as fear of strangers in the street and being afraid alone at home at night” (van Dijk and Steinmetz, 1980:3). The study also explored how different demographic groups differ in their levels of precaution preparedness. For example, urban youths are twice more likely to be criminally victimized than the elderly, but they nevertheless show an overall lower level of precaution, (this level increases however, once they have become victims) (van Dijk and Steimetz, 1980).

Our cognitive framework is a powerful tool when it comes to our deciding what our level of precaution preparedness should be. However, recalling the earlier quote by Fishbein and Ajzen, norms also play a role in our level of preparedness. Van Dijk and Steinmetz therefore explain “the irrational carelessness displayed by younger people in big cities” (p. 9) by the social norms relevant to that particular social group, namely that of adopting a wild-and-crazy attitude.

Crime prevention publicity lies within this niche of social behavior. Publicity campaigns target the “cognitive judgment” all individuals have in the hopes that their actions will follow accordingly. “Lock your car” campaigns are clearly trying to remind car owners that they should pay a little more attention to their valuable possessions. Many publicity campaigns target potential victims under the assumption that they are more likely to change their behavior patterns than motivated offenders are. From Exhibit 8, we see that while publicity efforts have targeted different crime problems, most have focused on property crimes. Of great interest for this current research is that while victim-oriented “education” campaigns show little success, offender-based campaigns are most successful when the threat of increased apprehension is communicated through the publicized message (regardless of the type or duration of the campaign).

Authors	Year	Crime(s)	Crime Prevention Benefits?	Target of Publicity	Length of Campaign	Type of Publicity	Span of Campaign	Increased threat of apprehension?	Location
1. Marplan Limited	1972	Car crime/Burglary	No	Victims	2 months	T.V and Press	National	No	England
2. Marplan Limited	1973	Burglary	Mixed	Victims	6 months	T.V and Press	National	No	England
3. Home Office	1976	Car crime	No	Victims	4 months	Press and Poster	National	No	England
4. Silverman and Sacco	1979	Multiple Crimes	No	Victims & Offenders	12 weeks	Radio, T.V, Press, Billboards	National	No	Canada
5. Van Dijk and Steinmetz	1979	Car crimes and Burglary	No	Victims	2 years	T.V, Radio, Posters	National	No	Holland
6. Burrows and Heal	1979	Car crime	No	Victims	5 weeks	Press, Radio, T.V, Posters	Local	No	England
7. Riley and Mayhew	1979	Car crime	No	Victims	8 weeks	T.V, Press, Posters	National	No	England
8. Monaghan	1988	Car crime	Yes	Victims	Months	T.V, Press, Radio, Posters	National	No	Australia
9. Laycock	1991	Burglary	Yes	Victims	6 months	Decals, Press	Local	Yes	England
10. Sheppard	1968	Drunk Driving	Yes	Offenders	6 months	T.V	National	Yes	England
11. Ross	1970	Drunk Driving	No	Offenders	1 year	T.V	National	No	England
12. Decker	1972	Slug Use in Parking Meters	No	Offenders	3 years	Warning Stickers	Local	No	U.S.A
13. Morris	1972	Careless Driving	No	Offenders	2 years	?	Local	No	England
14. Buikhuisen	1974	Failing to replace old tires	Yes	Offenders	Unknown	?	Local	Yes	Holland
15. McNees et al.	1974	Shoplifting	No	Offenders	20 days	Signs/Posters	Local	No	U.S.A
16. Home Office	1975	Vandalism	Yes	Offenders	unknown	Press	Local	Yes	England
17. Waters and MacAfee	1976	Careless Driving	No	Offenders	unknown	?	Local	No	U.S.A
18. Home Office	1978	Vandalism	No	Offenders	8 weeks	T.V	Local	No	England
19. Samuels and Lee	1978	Drunk Driving	No	Offenders	4 months	T.V	National	No	England
20. Home Office	1979	TV License Evasion	Yes	Offenders	unknown	T.V and Press	Local	Yes	England
21. Poyner	1988	Bus Vandalism	Yes	Offenders	Months	T.V and Press	Local	Yes	England
22. Wortley et al.	1998	Car crime	Yes	Victims & Offenders	3 months	T.V and Press	Local	Yes	Australia

Exhibit 8 Research Using Publicity as a Crime Prevention Method. Shaded squares represent efforts with crime prevention benefits via offenders.

Educating Potential Victims

Victim oriented publicity campaigns are designed to either encourage potential victims to take preventive action or to reinforce the need for continued vigilance” (Laycock and Tilley, 1995:547). Traditional efforts to deal with car crimes have usually focused on public education since the public is often unaware of the crime problems in their immediate area (Silverman, 1983). While they may have a general idea of the overall dangerousness of their neighborhood, rarely do they know the exact dimensions of the problem and even rarer is the accurate information connected with useful information on risk reduction. Media, word of mouth, and personal experiences are the usual ways people obtain information about a crime problem in an area. All of these, however, run the risk of being inaccurate since they are rarely based on objective measures. Furthermore, when it comes to information, people may become prey to either under information or over information. Lack of information can lead to a false sense of confidence, and results in people not taking the appropriate steps to prevent crime. On the other hand, being over informed can unduly heighten fears causing people to retreat indoors, or leave the area altogether. Unfortunately, these outcomes offer little benefits to crime reduction and residents remain ill equipped to deal with the problems in their neighborhoods, as citizens may not be sufficiently aware of the methods of preventing crime. Some people may have a general idea of crime fighting strategies, but if everyone were knowledgeable and consistently vigilant, maybe fewer people would fall victim to

crime. However, even those who are aware of crime fighting techniques rarely practice them, either out of negligence, or because of the belief that they stand little chance of becoming a victim.

In terms of car crimes, the literature is replete with examples of attempts at public education. Van Dijk and Steinmetz (1980) analyzed the effect of a public campaign against three property crimes (pick pocketing, theft from cars, and residential burglary). Carried out in the Netherlands during 1977 and 1978, a campaign "was organized through the mass media and posters to encourage the general public to take certain precautionary measures in order to prevent specific crimes" (van Dijk and Steinmetz, 1980: 4). While the authors report some success with the campaign in terms of having people adopt more crime prevention techniques in their daily lives, "the campaigns did not contribute to a more balanced distribution of the precautionary measures for the population as a whole. Groups belonging to the lowest social class as well as groups of younger people in big cities do not pay attention to crime prevention which would be applicable in the light of their objective risks" (van Dijk and Steinmetz, 1980:9).

Many attempts to use victim-oriented publicity were carried out in the United Kingdom, sponsored by the Home Office and organized by the Central Office of Information (C.O.I). In 1976, a four-month national press and poster campaign tried to educate people about the importance of locking their cars while unattended, but failed to change people's behaviors. In 1979, another Home Office effort used television spots and posters in the north of England to promote a car-locking campaign, but the results

showed no improvement in terms of the locking behavior or in the reduction of car crimes (Riley and Mayhew, 1980:4). Burrows and Heal evaluated a five week mounted police campaign in Plymouth during 1977, and they showed that “despite an unusually high level of coverage, [the campaign] failed to influence the number of car thefts known to the police or the proportion of drivers locking their cars” (Riley and Mayhew, 1980:4).

In Canada, the Solicitor General of Alberta funded a province-wide program of crime prevention through mass media (radio, television, newspapers, and billboard advertisements). This broader campaign attempted to target three different property crimes (vandalism, residential burglary, and theft from automobiles.) Although the campaign reached a large number of Albertans, only a small number perceived the crime prevention themes as salient, and an even smaller number altered their behavior in response to the campaign. “While the program may have overcome the physical barriers of communication, it did not effectively overcome the more important psychological barriers” (Sacco and Silverman, 1982:198).

The National Roads and Motorists' Association (N.R.M.A) launched a publicity campaign in Australia during May of 1987 whose primary aim was to elevate the perception of the seriousness of auto theft. Although there never was a stringent scientific evaluation of this program, the N.R.M.A claims that car owners had installed 20% of car alarms and ignition fuel cut-off switches in vehicles of a research sample since the beginning of the campaign (Monaghan, 1988). A more recent Australian effort involved a publicity campaign that urged citizens to participate in a Vehicle Identification

Number (VIN) etching program. Wortley et al., (1998) found that while the number of car thefts dropped significantly after the introduction of the campaign, “there did not appear to be any significant change in the behavior of car owners which would account for this reduction” (Wortley et al. 1998:59). In this particular case, the author stated that the campaign had an unexpected success through the deterrent effect it had on potential offenders. In terms of educating the targeted public, however, the intended campaign had little effect.

Given the results of the above studies, one should be wary of publicity efforts aimed at the public to prevent car crimes. The power of publicity consistently targets those who, as the evidence shows, heed crime prevention information the least: “audience members are only marginally interested in the themes and appeals of crime prevention messages” (Sacco and Silverman, 1982:191). There are arguments, however, to explain the apparently naive victims-to-be. Perhaps they see the publicity and judge that they do not really run the risk of victimization. Perhaps they feel that the campaigns are artificially promoting some agenda for third parties (after all, being told that car theft is a serious problem surely increases the profits of local retailers selling such items as the *Club* or other steering wheel locking devices).

Victim oriented publicity’s main accomplishment lies in the long-term effects, as evidenced by changes in resident attitudes and eventual behaviors. For example, most people now know better than to leave their cars unlocked in public, or leave the vehicle unattended while it is running with the keys inside. Marplan Limited (1973) reports that

“regular if spasmodic exposure to crime prevention publicity acts in much the same as water wearing away the stone”. Nevertheless, the reviewed literature does not support victim-oriented publicity as a viable intervention to car crimes as most people do not pay attention to the advertised message. We will now turn to the benefits of crime prevention publicity targeted at offenders.

Warning potential offenders

Crime prevention publicity does not rely solely on providing information to potential victims. Offenders are also deserving of information about the costs of committing crime: “advertising has warned that offending is likely to incur costs for society as well as for the individual himself in terms of social stigma and financial penalties” (Mayhew and Riley, 1980:3). While the fear of punishment should deter someone from committing a crime, the probability of getting caught is in fact the more salient factor in the offender’s mental equation. This idea ties in to the deterrence theoretical framework previously discussed.

Publicity campaigns aimed at offenders attempt to increase this risk perception among the offender population, but only a handful of studies have evaluated their benefits. Offender directed publicity is visible in anti-drunk driving campaigns, or other safe driving initiatives. Some studies have also looked at offender-oriented publicity to reduce vandalism, television license evasion, increase seat belt use and defective tire replacement (Home Office, 1976). These experiments demonstrate that the value of this type of publicity depends greatly on the *nature* of the message. Attempts to deter offenders by publicizing legal or personal consequences had minimal effect. However, campaigns that sought to increase fear of detection by revealing changes in legislation or police practices have had more success: “the evidence indicates that crime prevention advertising in the United Kingdom has not been strikingly successful in promoting changes in behavior likely to lead to a reduction in crime. This appears true of all victim-

oriented publicity...something of an exception has been offender-oriented campaigns which have publicized changes in legislation or law enforcement intended to increase the risks of getting caught" (Mayhew and Riley, 1980:3).

This supports the need to refine offender-oriented publicity, bearing in mind that the nature of the message will have a great impact on the desired behavioral outcome. Decker's (1972) study of slug use in New York City parking meters showed that merely pointing to something as being illegal is not enough to cause a motivated offender to desist from a criminal activity. Decker altered the parking meters so that they would no longer accept slugs as payment, and included a view window that left the last deposited "coin" visible, betraying those that attempted to insert slugs. Decker also added labels to the meters, warning of various fines and other legal sanctions for slug use. Unfortunately, "it appeared that warning potential offenders that slug use is a violation of the law and punishable by substantial sanctions had little deterrent value" (Decker, 1972). McNees et al. (1974), looked at perhaps the most common of offender-oriented publicity: anti-shoplifting signs. This study had a two-pronged approach to the shoplifting problem in a clothing department store. General anti-shoplifting signs were placed in a high-risk area of the store, while some high-theft items were specifically tagged with a smaller sign (red star shaped) indicating that this item was frequently stolen. The results were that the general signs had a minimal impact on the problem while the clothes tags "virtually eliminated the problem" (McNees, et. al., 1976).

These two studies are quite relevant to this research on car crime because they

illustrate that simply warning people about the illegality of an act does not ensure compliance. However, the lack of success of the overall warnings could be because the offenders were not looking to learn the legalities of their actions; they probably already knew it was illegal. The offenders were more concerned with the chance of apprehension. Riley and Mayhew further support this point with examples from the drunk-driving literature, specifically, a 1975 study carried out by the National Swedish Council for Crime Prevention. This study calculated that assuming a normal policing level, “a motorist with a blood alcohol level in excess of the permitted maximum could, on average, drive 7 kilometers to and from the center of Stockholm once a week for 25 years before being detected” (Riley and Mayhew, 1980:13). Given these odds concerning apprehension, the lawbreakers are likely to scoff at warning signs.

The above example, however, relies only on publicity to achieve an effect. Had the shoplifting experiment placed special security guards to complement the general signs, then the risks go up and perhaps shoplifting may have declined more significantly. Similarly, the parking meter study only threatened a sanction. Perhaps the deployment of some personnel tailored to increase apprehension and make the sanctions a reality might have changed the original results. Another finding of the McNees et al. study is that items located in a particular part of the store were rarely stolen. This is a problem because the intervention focused on too few targets. For crime prevention measures to be useful, they should protect numerous targets, not only a select few. It is plausible that tagging all the garments in the store in a similar fashion would lose the deterrent effect

because the threat would now become too broad, and meaningless: “one might ultimately confront a problem of diminishing returns when too intensive coverage merely results in boredom and over-exposure (Riley and Mayhew, 1980:10).

There is, however, some evidence that publicity does become an important factor in an offender’s decision to commit a crime or a delinquent act. These success stories highlight the need to consider publicity as a viable situational crime prevention measure, especially when it warns of increased risk of apprehension: “One of the key elements of these offender-oriented publicity campaigns has been not only to publicize changes in legislation but to imply that there is an increased risk of being caught” (Laycock and Tilley, 1995:552).

Poyner (1988) examined the effect of CCTV installed on double-decker buses in England designed to curb vandalism. Live cameras were installed in two of the eighty buses, while three other buses only received dummy (non-operational) cameras. An intensive publicity campaign aimed at young vandals complemented the “video bus” intervention. Newspaper articles and television reports discussed the new risks of apprehension when vandalizing buses due to the CCTV cameras. In addition to media campaigns, scheduled demonstrations at local schools showed students the CCTV buses in action. These publicity campaigns clearly showed how the cameras worked and demonstrated the ease of catching and punishing vandals. Since one-way mirrors hid the cameras, officials told the students that all of the buses in the fleet were equipped with the

CCTV technology when in fact, only two were. The CCTV intervention and the complimentary publicity campaign were considered a success when damage to buses was reduced to a third of what it had been the previous year. The conclusion is that when the children realized the potential consequences, and were unable to gage the viability of the threat, the delinquent behavior was simply no longer worth the risk.

Laycock's research on Operation Identification in South Wales is another testament to the power of publicity. The study selected three villages and 71% of residents volunteered to take part in the project. Selected homeowners marked household valuables to make them more difficult to fence in the occurrence of a burglary. Finally, participants placed window decals by entrance windows to warn burglars that the house was "protected". In the 12-month period after the introduction of the program, burglaries dropped by 40%, and households that participated in the program experienced fewer burglaries than those that declined to participate. Laycock states that part of the implementation contributed to the decrease in burglaries: "it is almost certainly the case that the police, in calling at almost every door as they did, were also calling at the doors of the burglars" (Laycock, 1991: 70). The surprise finding was that in the second year of the program, burglaries continued to drop. The authors attributed this further decrease to the fact that the success of the first year was publicized in local media outlets, which interviewed the chief constable, and residents from the research area, both of whom heralded the property-marking project. Through the publicity component, an unintended

benefit arose, namely that of showing burglars that an intervention was in place and having an effect. In sum, it is important to reduce the appeal of the crime: "It is probably as important to tell the burglars about the scheme as it is to tell the general public" (Laycock, 1991:71). Finally, an interesting practical implication drawn by Laycock is the "power of local advertising ...in a small, clearly defined area" (Laycock, 1991:71). This focused approach lends even more salience to the publicized message, increasing its effectiveness.

The Wortley study discussed above provides evidence to further support offender-oriented publicity. While they did not find their expected results (publicity leading to increased security measures taken by car owners), they did observe a decrease in car thefts. They concluded that the decrease was also linked to a change in the offender's perception of the risks involved: "the community awareness campaign may have created the perception that there was suddenly an increase in both the effort and risk and a decrease in the reward factors associated with stealing vehicles". They also state, "as potential auto thieves became aware that police were targeting auto theft, they refrained from engaging in this activity" (Wortley et. al., 1998:63). This is evidence that offenders do pay attention to the informational cues in their immediate environment when weighing the benefits of a crime, and that those previous attempts at offender-oriented publicity that were been met with little success, have focused only on publicizing the legal consequences. Publicity directed at offenders should emphasize the increased likelihood

of detection and apprehension. This is when offender oriented publicity, as supported by past research, achieves its ultimate goal of crime reduction.



Exhibit 9 Some Examples of Offender-Oriented Publicity or Warnings in Jersey City, New Jersey

Additional Benefits of Publicity

In addition to crime reduction, publicity can have several other benefits. While this research does not attempt to study these, any publicity campaign should consider them.

1) Reduced fear of crime. Measures designed to address a particular crime problem, lead to residents being comforted. Parking garages handing out leaflets or posting signs reminding shoppers to lock their cars may lead to the image of a concerned business looking out for its customers. The popularity of Neighborhood Watch program exemplifies how publicizing crime prevention efforts reduces fear: “It makes sense to the public that watching out for crime is a useful and worthwhile activity” (Laycock and Tilley, 1995: 552).

2) Improved police – community relations. Publicity campaigns offer residents a chance to see law enforcement agencies as prevention partners instead of a sanctioning force. Laycock also found that “areas with high crime rates...may welcome the launch of crime prevention initiatives even if the areas have a reputation for poor relations with the police” (Laycock, 1991:71).

3) Spreading social responsibility for crime prevention. It is important to remind residents that crime prevention is a comprehensive effort, one that should not be

delegated only to the police. Watching out for crimes, not committing crimes, and reporting crimes, are all measures the public can take to increase the effectiveness of the police, in essence becoming the proverbial “ears and eyes of the police”.

4) “Magnification” of situational crime prevention methods. Publicity can amplify the actual workings of a crime prevention initiative. For instance, warning of increase police patrols does not necessitate an actual increase on every corner. All that is required is to make people believe that there is an increase in patrols. Limited resources are therefore more effective, achieving the same outcome as interventions that are more extensive.

5) Offender oriented publicity can also lead to what is called “anticipatory benefits” (Smith et. al., 2002). This occurs when crime prevention measures achieve results *before* the actual implementation of the intervention. One explanation is that the offender’s perception of a potentially beneficial situation (through criminal gains) is altered prior to the complete implementation of the chosen crime prevention techniques. Publicity can play a special role in creating anticipatory benefits by spreading information aimed at reducing crime opportunities. The most effect is expected in small campaigns as the threat of the message becomes even more relevant: “...we are not talking about generalized publicity campaigns, who effect has typically been found to be meager,...but of information that the police or other agencies are taking action of specific kinds in

circumscribed places” (Smith et. al., 2002: 79). Research also shows that publicity is at times more important than the advertised crime prevention practice, as the publicity suffices to create situational deterrence (Laycock, 2001; Sallybanks, 2000). In sum, Exhibit 10 is a good representation of the objectives of publicity when linked to crime prevention efforts:

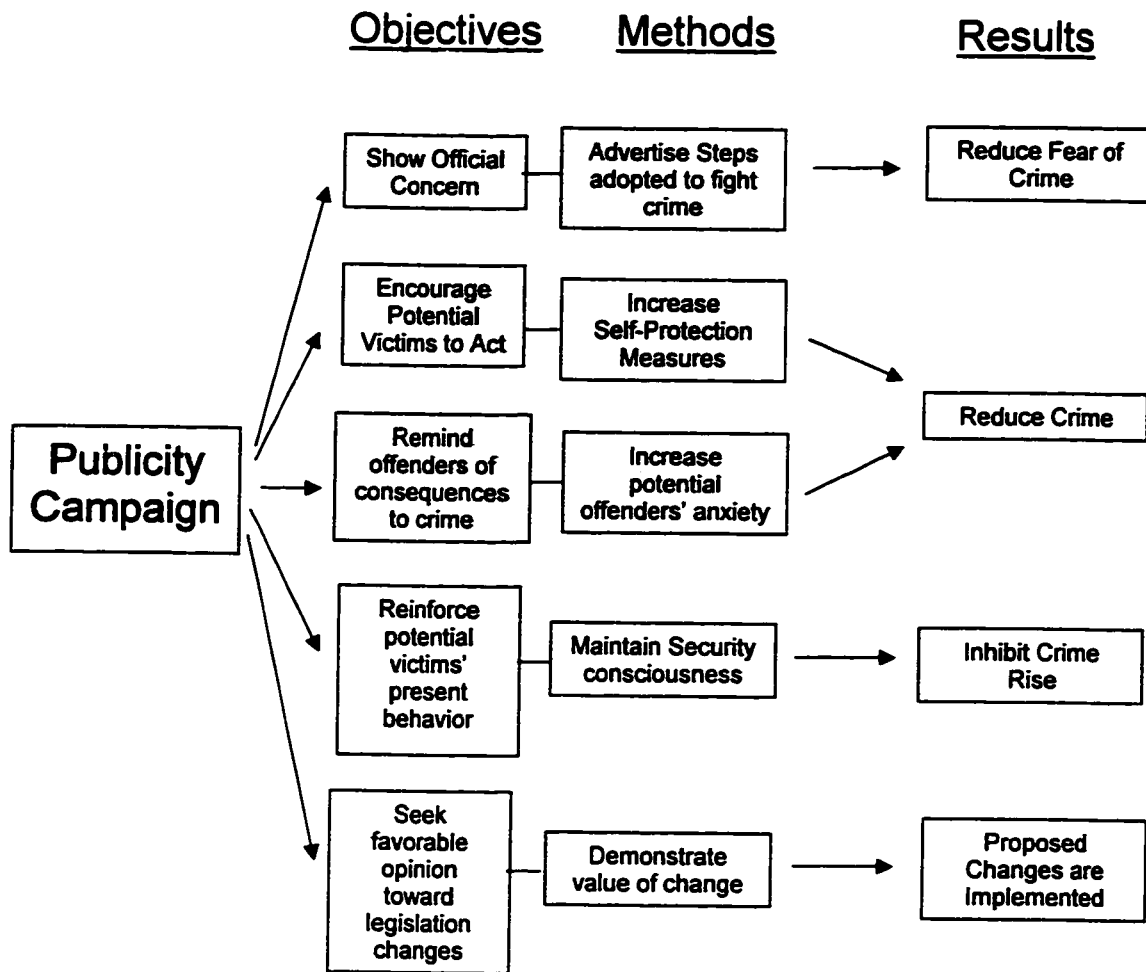


Exhibit 10 The Objectives, Methods, and Rewards of Crime Prevention Publicity Campaigns

(Adapted from Laycock and Tilley, 1995)

Intensive Police Patrols

Intensive police patrols to reduce the incidence of some crime types have become a common tool within the policing arena: "One of the most widespread developments in American policing in the 1980's has been the crackdown. Drunk driving, domestic violence, public drug markets, streetwalking prostitutes, illegal parking, and even bicycle riders have all been targets for publicly announced police crackdowns." (Sherman, 1990:2). Intensive police patrols have the dual purpose of reducing the extent of an existing crime problem and of showing potential offenders that there is now a higher risk of apprehension. In most cases, directed police patrols focus on long-ignored problems or ones that have not received adequate police attention. In his article entitled "Police Crackdowns: Initial and Residual Deterrence" (1990), Sherman explains that the term "crackdown" implies concepts that need to be examined when looking at this type of police action.

Nature of Patrols

Sherman differentiates between offense-specific and geographically focused police patrols. The first type targets a specific problem and attempts to give it special attention, while the second increases police presence in a given area, applying full police enforcement to a wide range of offenses without discretion (Sherman, 1990). Sherman also explains that how a department implements added patrols can be separated into three

different categories: through presence, through sanctions, and/or through media threats. Presence is achieved by simply increasing the number of police (plain clothed or uniformed) in a given area or situation. Sanctions are when the police actually carry out procedures that are relevant to the crackdown (identification checks, arrests, etc.), and achieve more than just high visibility. Media threats rely on using any media format that will properly advertise the present intensive patrols in an attempt to increase the offender's perception of apprehension (Sherman, 1990).

Effects of Directed Patrols

While short-term gains of directed patrols are common, long-term effects are harder to achieve and even harder to support empirically (Ross, 1982; Sherman, 1990). Sherman identifies the ways in which deterrence may manifest itself during police crackdowns: initial deterrence (usually observed in the immediate wake of a crackdown), residual deterrence (the effect that lingers after a crackdown has stopped), and the decay factor (the speed at which the initial deterrence fades away during or after the crackdown) (Sherman, 1990). As an example, a drug-infested corner might be the target of a police crackdown. During a three-week period, the police aggressively pursue all buyers and sellers and many are removed from the area through arrests. A highly publicized campaign might also scare off potential buyers or other unwanted individuals from coming to the area. For the duration of the crackdown and sometime after, the police dramatically reduced drug market activity on that particular corner because the actors are

aware of the intensified police attention. One month after the crackdown is no longer in effect, the corner returns to its reputation as a drug hotbed. In this case, the initial deterrence is the lack of drug activity during the crackdown and in the weeks immediately following it, the residual deterrence is at work. Even without police presence, the crackdown still possesses its deterrent effect, and the slow decay of its effectiveness is witnessed during the month following the removal of the police since the corner eventually regains its original status. Obviously, this example is not typical of all crackdowns, as one could experience high initial deterrence, with little decay effect, and hence a high degree of residual deterrence.

Sherman states that keeping these concepts in mind when deploying police resources can affect the impact crackdowns can have on crime reduction. For example, if a department applies crackdowns of varying lengths of time to different areas, these might in fact be more beneficial as a crime-fighting tool than focusing on only one area for a prolonged amount of time: "By constantly changing crackdown targets, police may reduce crime more through residual deterrence than through initial deterrence" (Sherman, 1990:3). A study looking at the effectiveness of police raids on crack houses showed that there was no significant effect on crime reduction, and that "for the same person-hours of police time, a greater deterrent effect could be achieved through intermittent, ongoing uniformed presence than through a more intensive but short-lived crack house raid" (Sherman and Rogan, 1995:780). In short, by increasing the certainty of getting caught through the sporadic use of crackdowns, offenders will find themselves in a situation

where they have to seriously consider if the gains of the crime are worth the increased possibility of apprehension.

The type of police patrol determines the deterrent effect of the police, not the number of officers out on patrol. This rationale has become conventional wisdom across numerous settings, as police administrators are recognizing that they need to tailor patrols to specific crime problems, and that officers need to adopt pro-active and problem-solving techniques. "By stopping, questioning, and otherwise closely observing citizens, especially suspicious ones, the police are more likely to find fugitives, detect contraband (such as stolen property or concealed weapons), and apprehend persons fleeing from the scene of a crime" (Wilson and Boland, 1978, p.373). Other studies support the fact that the deterrent effect of police patrols increases when these patrols focus on very specific criminal or disorderly behaviors (Wilson and Kelling, 1982; Green and Taylor, 1988; Sampson and Cohen, 1988; Sherman, 1990; Koper, 1995; Sherman and Weisburd, 1995; Weisburd and Green, 1995; Greene, 1999).

Limits of Directed Patrols

Increased directed patrols may suffer from improper implementation, resulting in a poor or reduced outcome. "Crackdown decay" is when the initial enthusiasm of the police slowly fades away, limiting the intended rigor of the police intervention (Sherman, 1990). Such implementation problems may arise when officers lose interest in the

project, fail to carry out the special duties required by the crackdown, or when police practices are not applied to the proper problem or geographic area. Problems related to crackdown design are the length of the crackdown, the scope (area and problem type) of the crackdown, and the intensity of the crackdown. All of these ultimately affect the deterrent effect of the intended police action.

Police patrols have been the target of criticisms in terms of their crime reducing effectiveness. The Kansas City Preventive Patrol Experiment's results (Kelling et al., 1974) posited that police patrols had little impact on the level of street crime, alarming numerous academics and practitioners alike. The general sentiment after the Kansas City Experiment was that police patrols were waging a losing battle against street crime (Klockars, 1983; Skolnick and Bailey, 1986; Gottfredson and Hirshi, 1990; and Felson, 1994). The results "shook the theoretical foundations of American policing" (Sherman and Weisburd, 1995, p.1), and the value of police patrols for crime prevention purposes was questioned: "It makes as much sense to have police patrol routinely in cars to fight crime as it does to have firemen patrol routinely in fire trucks to prevent fires" (Klockars, 1983:130).

Weary of this fatalistic attitude, some researchers sought to explain why the Kansas City Experiment should not be proof of police patrol inefficiency. Sherman and Weisburd (1995) attributed the lack of effect not to the patrols themselves, but to research design flaws: weak statistical power (not allowing the experiment to detect an effect that may be present), measurement issues, and inappropriate units of analysis. They attributed the statistical problem to low incidences of crime in most neighborhoods among other things, and "that rarity creates a bias toward the null hypothesis for any crime-specific statistical tests of the impact of interventions" (Sherman and Weisburd, 1995:627).

The measurement issue is more problematic, but they summarize it by explaining how “in the absence of carefully measured levels of patrol dosage, it is almost impossible to interpret the Kansas City preventive patrol experiment”(Sherman and Weisburd, 1995, p 628). They further defend the measurement problem by claiming that other patrol experiments (Press, 1971; Schnelle et al, 1977; Chaiken, 1978) which monitored patrol dosages between experimental and control groups were able to claim a deterrent effect. The unit of analysis problem relates to the areas receiving the patrol intervention. Should traditional police beats be the subject of these crackdowns, or should police target high-crime generating hot spots?

According to Sherman and Weisburd, focusing on the hot spots increases the potential of the patrols having an impact. First, the hot spots produce a high proportion of crime allowing for statistical differentiation between experimental and control sites. Focusing on hot spots also eases sample size issues: “any city contains far more hot spots than control beats, so there is no difficulty in constructing a large sample of hot spot locations” (Sherman and Weisburd, 1995:630). Finally, by restricting the patrols to specific hot spots instead of broad beats, their monitoring becomes more feasible allowing for proper dosage measurement through systematic observations.

Intensified police patrols or crackdowns are problematic in other ways. Financially speaking, police departments carry out these patrols by paying officers on an

overtime basis, drastically raising the cost of these operations. During Washington's 1986 "Operation Clean Sweep", the program was conducted by officers on overtime, "some of whom doubled their salaries but suffered extreme exhaustion" (Wheeler and Horwitz, 1988:22). Displacement of the criminal operations due to the crackdowns can also have a costly impact. "Operation Clean Sweep" not only saw an increase in the homicide rate, but the nature of the victims also changed from participants in the illegal activities to innocent parties. The successful street drug crackdowns had made the drug markets much more competitive (increasing the risks the actors were willing to take), and the crackdowns displaced the drug operations to residential apartments where children and innocent bystanders became victims to violence that was once reserved for the street (Sherman, 1990).

Finally, there are the ethical issues that such police practices have to raise. Most law abiding citizens welcome strategies that will reduce crime in their daily communities, but relying on such strategies can be questioned: "Even the term crackdown itself connotes striking with a club and implies an acceptable level of brutality. The term target connotes wartime search and destroy bombing missions. All of these associations are troubling when discussing the policing of a free society" (Sherman, 1990:41). What are the criteria for the target selection? Whom do the police choose to place under such intense police scrutiny, what are the social, and political factors driving this decision? During their implementation, crackdowns also raise issues concerning police abuses. Hiding behind the stated objectives of the crackdown, overzealous police tactics may

flourish, resulting in questionable street sweeps, illegal search and seizures, and unnecessary arrests.

In conclusion, directed police patrols are successful because they increase the risk of apprehension. In terms of police activities, the field interview or field interrogation is an effective aggressive policing tactic to reduce street crime, including auto theft (Whitaker et al., 1985). Research states that such patrols are particularly effective when they focus on a specific crime problem and implemented in a well-defined geographic area. Finally, directed police patrols benefit from publicity advertising their presence increasing their deterrent value and ultimately, their efficacy.

Displacement and Diffusion of Benefits in Crime Prevention

Displacement

Displacement is “a change in offender behavior, along illegitimate means, which is designed to circumvent either specific preventive measures or more general conditions unfavorable to the offender’s usual mode of operating” (Gabor, 1990:66). In short, displacement refers to offenders finding new ways of doing old things. Displacement is more than a simple change in the location of a crime: six variants are now commonly discussed (Gabor, 1990):

Temporal Displacement: Offenders change the time of their criminal activities

Spatial Displacement: Offenders change locations to find their targets

Target Displacement: Offenders change the type and nature of their criminal targets

Method Displacement: Offenders change the manner in which they commit their crimes

Crime Type Displacement: Offenders abandon one crime for a different one

Perpetrator Displacement: New offenders replace ones that are no longer active

The concept of displacement is an elusive one. Studies that report it, like those that deny its existence, can be ambiguous in the criteria used to identify it (Barr and Pease, 1990; Eck, 1993). How much of an increase can be attributed to other causes before displacement is misdiagnosed? Until more stringent guidelines are used to quantify and accept or reject the presence of displacement, its identification remains partly subjective in nature. Even though the study of the displacement phenomenon is still in its infancy, rigorous methodology and research designs should provide some warranted objective measures. A recent review of the displacement phenomenon

examined 55 empirical studies to extract conclusions about its nature, extent, and research implications (Hesseling, 1990). Hesseling found that displacement was “possible, but not inevitable”. His review also supports the notion that offenders are rarely generalist (preferring instead to focus on one or two offense types), and their reliance on “choice structuring properties” in deciding upon future criminal ventures.

Hesseling (1994) reports displacement findings from a Dutch study that specifically addressed theft from cars (Versteegh, 1990). Using a combination of interventions that included formal police surveillance, public watches, increased police apprehensions, and property markings, the effort reduced thefts from cars by 25 percent. Once again, spatial displacement to the non-protected areas was not evident, although there was evidence of crime type displacement in the increase of auto theft, bicycle theft, shoplifting, and pocket picking. Poyner (1991) found no instance of displacement when he studied the impact of CCTV on reduce car crimes in parking lots in the United Kingdom.

Other research examined the effect of auto theft interventions and police patrols on displacement. In England, Mayhew et al. (1980) reported an increase in the theft of older cars not equipped with mandatory steering column locks. They conclude that new cars (fitted with the locks) made offenders target the more vulnerable, older targets.

Mayhew et al. (1980) also explored the occurrence of displacement when legislation changes, by studying the impact of the mandatory motorcycle helmet laws had on auto thefts. Since the law forced motorcycle riders to wear helmets, thieves could no longer steal a motorcycle and drive off into traffic: avoiding police detection now required a helmet. Would these thieves now turn to other forms of transportation, namely bicycles, or automobiles? Mayhew (1991) found only a slight increase in car thefts, and a significant drop in bicycle thefts, demonstrating a lack of displacement to these crimes. Burrows and Heal's (1980) publicity campaign in Plymouth demonstrated another example of displacement. The publicity campaign urged residents to lock their cars, but the intervention had little impact on the overall problem. While spatial displacement did not occur (to targets outside the publicity area), the study reported some temporal displacement. It appears that offenders choose the early morning hours to carry out their deeds, heeding the campaign's warning against getting caught at night.

According to Cornish and Clarke, the "choice-structuring properties" of various offenses play a role in the displacement phenomenon. They claim that displacement is more likely to be an issue within crime categories that offer the same benefits to the offenders (Cornish and Clarke, 1987). This might explain, for example, why Mayhew (1991) did not find displacement to auto theft after the motorcycle helmet law went into effect. Perhaps the offenders seeking to steal motorcycles were after more than just a means of transportation; maybe they were after something that an automobile could not offer them. It is plausible that the thieves were seeking fun through a motorcycle ride,

with the joys and excitement that only a motorcycle can bring (speed, noise, “wind-through-hair” feeling, etc.). Another possibility is that youths out in groups may all have their own motorcycles, but the individual without such transportation has to either hitch a ride behind a friend, or procure himself his own motorcycle. Following his peers in a stolen Volkswagen may not produce the same level of excitement.

In terms of the impact of police patrols, on displacement, Hesseling mentions two early studies testing police anti-crime campaigns. Hall and Lindgren (1971) looked at the District of Columbia while Stenzel (1977) studied St. Louis, Missouri. Both studies reported a drop in crime in their experimental areas, but both experienced a slight increase in adjacent areas. However, displacement was not responsible for the increases. In St. Louis, for example, even though there was a 2% increase in residential burglaries in the adjacent areas, Stenzel attributed the increase to a change in the opportunity structure (new houses were being built in the vicinity). Press (1971) examined the impact of increased foot patrols on street crime in a New York City neighborhood. While there was decrease in street crime after the implementation of the foot patrols, there was spatial displacement to adjacent areas. Chaiken et al. (1974) analyzed the temporal effects of police efforts on displacement. At what point did displacement occur, and if it did, how long did it last? Chaiken’s research found that an increase in day police patrols in the New York City subway system, reduced day robberies. Chaiken et al. also reported that temporal displacement did not manifest itself in the early evening or night hours, rather,

robberies continued to decrease after the patrolled day shifts, showing the total opposite of the expected temporal displacement. While the unintended benefit was not a permanent one, this study illustrated the occasional beneficial influence of an intervention to a neighboring area not subjected to the given intervention: diffusion of benefits.

Diffusion of Benefits

Chaiken et al. (1974) found an unintended benefit to the police patrols in the New York City Subway with robbery rates dropping even after the day patrols were no longer in effect. Sherman (1990) noted a similar phenomenon that he termed the “bonus” effect. While other studies also found drops in crime in areas adjacent to ones receiving a particular intervention, identifying and naming this occurrence remained a fragmented effort. Terms such as “drip-feed” (Pease, 1991), “free-rider effect” (Miethe, 1991), “halo-effect” (Scherdin, 1986) were all describing similar processes and they were ultimately synthesized into one common term. Diffusion of benefits was developed and defined as:

“the spread of the beneficial influence of an intervention beyond the places which are directly targeted, the individuals who are the subject of control, the crimes which are the focus of intervention or the time periods in which an intervention is brought” (Clarke and Weisburd, 1994: 169)

There are two identifiable types of diffusion of benefits, one due to deterrence, and the other due to discouragement. This differentiation is important because the added benefit of an intervention to “non-treated” areas is either because offenders are unable to

gauge the probability of apprehension due to the uncertainty of an area's "risk quotient", or because the cost benefit ratio discouraged offenders. Examples of the deterrence scenario are evident by the decrease in the theft rate of items not protected against theft (through electronic tagging) simply because other items in near proximity themselves tagged. Thieves did not know what items were tagged or not, and they were weary about the risk of detection (Scherdin, 1986; Masuda, 1992). Strategically placing CCTV's inside buses created similar deterrent effects to buses not wired with the watchful cameras since the passengers were never sure if their actions were being monitored or not (Poyner, 1988). Diffusion of benefits through discouragement is visible in interventions that simply reduce the rewards of crime. Interestingly enough, this type of diffusion of benefits can occur without any increase in probability of apprehension (unlike its deterrence counterpart). Without advertising the limit of the intervention, or environmental modifications, offenders face the possibility of reduced rewards, unable to identify profitable targets. Burglary reduction through the removal of pre-paid gas meters (Pease, 1991), reduction of parking meter slug use in New York (Decker, 1972), and market thefts (Poyner and Webb, 1987) are all examples of interventions that experienced benefits of crime reduction in "non-protected" areas through discouragement by making it less profitable for offenders.

CHAPTER THREE

Research Hypotheses

This research project seeks to examine several hypotheses. The effect of offender-oriented publicity on car crimes is the primary focus of this effort, but the research design will also allow the test of other hypotheses, such as the effect of combining police patrols and publicity. The following hypotheses test the other impacts of the publicity intervention.

Hypothesis One: There will be a reduction in car crime in the areas receiving the publicity treatment.

Previous research supports the merits of offender-oriented publicity (Wortley, 1998; Laycock, 1991; Poyner, 1988) and it has demonstrated that the nature of the publicity has a large impact on its effectiveness (Riley and Mayhew, 1980). Upon reviewing past publicity campaigns, they found that despite numerous failures, the “exceptions have been offender-oriented campaigns which have publicized changes in legislation or law enforcement intended to increase the risks of getting caught”(Riley and Mayhew, 1980: 3). The offender-oriented publicity used in this research follows this reasoning, and the message warns potential offenders of the risks they run in terms of police apprehension by informing them of the increased police attention in the concerned areas.

Hypothesis Two: There will be a greater reduction in car crime in the area receiving the publicity combined with added police patrols.

Other publicity studies have threatened sanctions, or risk of apprehension, but few have implemented an actual law enforcement component to render the threats credible (Decker, 1972). Without such a component, offenders might quickly realize that even though there is an advertised risk, it does not match the reality of the situation. This research seeks to add directed police patrols in some of the areas receiving the publicity treatment to see if the added real threat of enforcement affects their decision to commit car crimes. The literature supports the addition of this component. Beekman (1993) stresses the need to combine crime prevention with “intensified patrols” and investigation to make auto theft a “relic of the past”. Fleming et al., (1994) report that interviewed criminal justice personnel stated that the “apparent lack of consequences for getting caught stealing cars figured in the cognitive processes of young offenders” (p.56). Clarke and Harris (1992) found that very few felons convicted of auto theft actually served any time (6 out of 80) and report that the approximate clearance rate for this crime is around 15%, after other offenses have been confessed to.

Hypothesis Three: No treatment area will experience a significant change in terms of the residents' "car protection" behavior.

Offender-oriented publicity might have an effect with regard to residents adopting more crime prevention techniques due to the new campaign against car crime in their area. It seems probable that a publicity campaign targeting a particular crime might awaken a sense of personal responsibility in terms of protecting the potential target. For example, joggers might refrain from late night runs if they hear about a special police operation to apprehend a potentially dangerous person in the vicinity. This has obvious methodological consequences because the adoption of crime prevention measures due to the offender-oriented publicity creates competing factors for the reduction of the crime problem. Conversely, car owners may also reduce their own crime prevention behaviors, thinking that the offender-oriented publicity is now present to protect them better. Monitoring the residents' behaviors will allow for a better explanation of the effect of offender-oriented publicity.

Publicity campaigns aiming to reduce car crime through public education have had limited success (Marplan, 1972; Monaghan, 1988; Wortley et al., 1998). These studies have shown that people do not pay attention to messages designed to help them better protect themselves. Inattentiveness, carelessness, and perhaps even disregard for one's property could be to blame. The more salient reason is that people do not think they will fall prey to the advertised crime type, and assume the publicity campaign is for the welfare of their neighbors. In this case, because the message targets offenders, there is even less

reason to think car owners will worry about the publicity campaign and change their routine activities.

Hypothesis Four: There will be a reduction in other types of crime in the treatment areas.

Are burglars afraid of offender-oriented publicity directed to auto thieves? The important element in this question is not that the publicity targets auto thieves, but that it advertises increased police attention in the area. In this case, burglars may be wary that their activities may come to the attention of the police. The claim is that the deterrent aspect of the publicity campaign may extend beyond the targeted population (in this case auto thieves). Raising the probability of apprehension (increasing the risk) factors into an offender's decision to carry out a crime (Cornish and Clarke, 1986). With the concentrated police patrols in an area, this becomes a salient issue for offenders: "These perceptions of increased risks may influence the behavior of an array of would-be offenders; for example, Kleiman (1988) credits the corresponding reductions of property crimes and violent crimes to the increased risks associated with the heightened police presence during the heroin market crackdown" (Braga, 1999).

In addition to the main hypotheses, this study will address other research questions regarding how the different treatments affect the nature of car crime.

1. *Will there be a geographical displacement?*

The impact offender-oriented publicity and police patrols may modify the location of hot spots or problem areas. Will new problem areas develop? Since the posters clearly delineate the geographical areas receiving the additional police patrols, perhaps the offenders will choose to avoid the “protected” areas, and select areas more removed from police attention. Temporal displacement is not a viable concern since the posters do not indicate the timing of the police patrols, and furthermore, the police patrols were designed to cover 24 hour periods, ensuring a constant temporal police presence.

2. *Will there be a change in the police recovery rate?*

Once again, absolute numbers may not decrease in terms of theft rates, but joyriders may not go as far, dumping the cars faster, allowing for quicker recoveries. The opposite may also occur, whereby youths successful in stealing a car from the area may seek “safer ground” by going as far away from the targeted areas as possible, taking the car further than they would under normal circumstances.

Furthermore, while this experiment was not designed to have a direct impact on police behavior, the nature of the police implementation may result in more recovered cars. This is because the patrol directives given to the officers included focusing

specifically on car as potential targets, asking them to check out any suspicious automobiles, and running motor vehicle checks (running license plates through the police computer to verify the legality of the automobile). These police would normally consider these activities as less important and perhaps even ignore them during routine police patrols given the amount of serious calls for service requiring attention. It is therefore possible that the increased police attention towards cars will lead to an increase in the recovery rate.

3. *Will there be a change in the level of damage found in recovered automobiles?*

Automobiles may be recovered with less damage during the *offender-oriented* • *publicity* intervention. Maybe fewer cars will be taken to professional chop shops as the demand for cars from this area will decrease, since the entire chop shop operation runs the risk of being discovered by police due to the extra police attention in the area. Where joyriders are concerned, the traditional reckless driving more prone to cause damage may be curbed for fear of police detection.

4. *Will there be a decrease in the overall severity of the car crime problem?*

The creation of a “harm index” of the total car crime will help answer this question. For example, instead of looking only at car crime rates, an index comprised of many different variables related to auto crimes will be used. Variables such as make,

model, and year of car, distance taken during the theft, damage incurred during the theft, items stolen from the car, approximate dollar value of the car, are examples of the possible make-up of this index. Aggregate "theft scores" will be possible to calculate for all the experimental areas, and comparisons made. This is a much more subjective exercise, but it should be part of this research because not all auto crimes are equal, and they should not be treated as such. In terms of overall severity, the theft of a car worth \$70,000 is more serious than the theft of a \$200.00 dented automobile. A new sports car recovered as a stripped shell many miles from the original theft location can be considered a more serious crime event than an older model being stolen and recovered free of damage a few blocks from the theft location. Only through the creation of such an index can one measure the extent of the harm caused by this type of crime. Perhaps offender-oriented publicity reduces the overall harm factor, even though the absolute number of car crime may not decrease.

CHAPTER FOUR

“OPERATION TARGET” Program and Methodology

The police department intervention named “OPERATION TARGET” consisted of additional police patrols advertised by publicity. This chapter examines the methodological components of the project.

Selection of Locations

Police officials selected the areas chosen for the interventions. Based on crime statistics and repeated complaints from local residents, the chief of police chose to implement a car crime intervention in the downtown section of Jersey City. “Downtown” is located on the easternmost part of the city, covers approximately 30 square city blocks, and is part of the East Police District, which is comprised of seven different police beats³.

In an effort to promote beat integrity, the chief of police required that the intervention be carried out within the boundaries of the respective police beats (ie. arbitrary zones could not be adopted for the implementation of the intervention).

Of these seven police beats, only five are considered to be within the informal

³ In 1995, the city was divided into 32 equal areas to better provide vital city services encompassing everything from public works, fire department response, parking needs, and of course, police services. The Jersey City Planning Bureau drew the boundaries of each NID (Neighborhood Improvement District) based on population, geographic size, economic activity and expected levels of growth. The creation of these zones was to promote geographic integrity and accountability when it came to delivering the required services. The police department adopted these zones as corresponding police beats, basing personnel, deployment, and equipment needs across these 32 areas.

“downtown” boundary line as the other two are inland. Of these remaining five areas, one was highly industrial in nature, housing a large commercial shopping center, an electronic store, and a large supermarket. In addition, this area included numerous routes that led to the Manhattan-bound Holland Tunnel, making it a less than a residential setting. Having eliminated three of the seven areas police beats in the East District, only four areas were chosen to receive the intervention. This allowed for the control of treatment integrity, especially since numerous officers were involved.

Exhibit 11 shows the experimental areas relative to the whole of Jersey City.



Exhibit 11 Jersey City and Areas Selected for Study, 1998

Allocation of Treatments

Having selected the areas, the next task was to decide the allocation of the interventions to the different areas. Instead of implementing the police patrols and warning posters to all of the areas, the police department decided to allocate the two interventions (police and publicity) differently across the four areas for two reasons. One, concentrating the added police in only some areas would increase the intensity of the police treatment, and two, it permitted the police department to test the value of publicity advertising police patrols. Finally, the police department agreed to a control group to make the project more evaluable and rigorous in terms of measuring the effects of the other two interventions.

While the flip of a coin determined what area would receive what intervention, could there have been a more favorable choice in treatment designation? As discussed later, there were few, if any problems related to treatment contamination, and hence the choice in treatment allocation would have gained little from a different assignment. Ideally, it would have been interesting to have more areas within the city available for the implementation of the intervention. For example, there could have been more than one area receiving the “publicity only” treatment, and while this might have allowed for a more stringent test of the intervention, lack of equivalence between all of these groups would have created other research design problems.

The police department decided to carry out the interventions for twelve weeks (three full months), because that was the amount of patrol funding allocated to the project. However, the intervention lasted for ten weeks because the operational component of the police intervention was no longer meeting the requirements of the project.

Experimental Design

When implementing an intervention, researchers have two primary questions to answer. The first has to do with whether or not the implementation was carried out as it was intended (process evaluation) and the second deals with the overall efficacy of the intervention in terms of achieving a reduction in the targeted problem (impact evaluation). The process evaluation reports if the practical elements of the intervention were carried out in a timely manner and highlights any problems that may interfere with the optimal performance of the intervention. The choice in research design, however, seeks to give the intervention some external validity, (i.e., how effective the intervention would be in a different setting). This is achieved by crediting the intervention with the change in the observed behavior by ruling out rival explanations. The experimental design is the optimal choice for this as the random allocation of subjects to treatment and control groups guarantees group equivalence and simultaneously controls for rival causal factors (Cook and Campbell, 1979). In this particular research, a quasi-experimental design was selected as there was no true random allocation possible with only four areas

available for treatment. The research design for this design is one commonly used in social science research, and is called the *Untreated Control Group Design with Pretest and Posttest* (Cook and Campbell, 1979). It is similar to the one used in the Kansas City Preventive Patrol Experiment (Kelling, 1974), where different police beats were assigned different types of patrol (reactive, proactive, or usual patrols) and the Minneapolis Domestic Violence Experiment (Sherman and Berk, 1984) where police officers administered different responses to situations of domestic violence.

While experimental research designs are commonly held as the best method to control for internal validity and support the value of a given intervention through the use of control groups, some researchers claim that these designs may not be beneficial for many situational crime prevention evaluations (Tilley, 2002; Eck, 2002). Eck states that many interventions are “context specific”, implying that some programs may be beneficial in some settings and yet ineffective in others: “many programs are crafted for very specific circumstances. They may be effective in the context for which they were created, but cannot be expected to be effective elsewhere without substantial tailoring to the new conditions” (Eck, 2002: 95). Furthermore, Eck questions the value of large scale, experimental designs for “small-scale, small-claim crime prevention interventions”. Seeking optimal internal validity (eliminating all other plausible explanations) through the systematic adoption of experiments or quasi-experiments may not always be the best as “simple evaluations examining whether change has occurred and attempting to eliminate obvious alternative factors make more sense.” (Tilley, 2002: 7).

In this particular research, the decision to adopt a quasi-experimental design as part of the evaluation was in large part due to the police department's agreement to include an untreated area (the control group) as part of the project. Other factors that facilitated the decision included the ability to control the implementation of the intervention (which allowed the project team to monitor treatment dosage and ensure a well-implemented program) and the access to pre and post intervention measurements and data.

Like most quasi-experiments, this study is still subject to a few methodological concerns, and the following section explores these. The proposed design, even with its methodological drawbacks however, should allow for a basic test of the interventions. As Eck states: "the evaluation's most important task is to show whether or not the problem has gone down." (Eck, 2002:108). Exhibit 12 describes the four areas involved in this particular research:

Exhibit 12 Description of the Four Experimental Groups and Scientific Notation

		PUBLICITY	
		YES	NO
DIRECTED PATROLS	YES	Area 2	Area 3
	NO	Area 1	Area 4

(All areas retained their normal levels of police patrols during the experiment)

(Area 1)	PUBLICITY	→	O ₁	X ₁	O ₂
(Area 2)	PUBLICITY & POLICE	→	O ₁	X ₂	O ₂
(Area 3)	POLICE	→	O ₁	X ₃	O ₂
(Area 4)	CONTROL	→	O ₁		O ₂

(O = Observation Periods, X = Intervention)

Design Issues

Size of areas

The power of an experiment is usually defined as “a gauge of the sensitivity of a statistical test, that is, its ability to detect effects of a specific size, given the particular variances and sample sizes of the study” (Vogt, 1993). Because power depends on the variances between the groups under study, the experiment’s design needs to show a difference if one actually exists. In this particular study, because the areas are relatively small, perhaps there will be not enough opportunity for this difference to manifest itself. Under ideal conditions, the chosen areas might have been bigger, allowing for more incidents of car crime in each area. In defense of the design, the police department selected the areas for this experiment for operational reasons, reducing the availability of larger areas. While some may consider them limited in terms of their geographical size, there were at least 150 car crimes during the same period as the intervention period in the previous year. The high rate of car crime incidents provided enough of a chance for variations to occur. Other settings need to compensate for low incidence rate with larger areas, but Jersey City’s crime problem reduces this need. Furthermore, the problem of not detecting the effect of an intervention is not only related to the number of cases or incidents, it is often linked to the implementation of the intervention. Larger areas or large-scale experiments run the risk of experimental breakdown, a much more serious

threat to the power of an experiment (Weisburd, 1993). In this study, the small areas facilitated the monitoring of the implementation (police patrol dosage, integrity of the publicity poster), and ensured a rigorous test of the research questions.

Proximity of areas and contamination effects

The lack of catchment zones or geographical buffers between the chosen areas presents the risk of treatment diffusion. Diffusion of treatment occurs when “the control group learns about and imitates the experimental group” (Hagan, 1989). In this particular study, because all of the areas are adjacent to each other, this issue is a concern. Car offenders in the control group may alter their behaviors because of the posters or extra patrols they encountered in the adjacent areas. Interestingly enough, this can be turned around and considered a diffusion of benefits (non-protected areas benefiting from the protection of the experimental areas). For the experimental design, however, the control group should remain free of any type of implemented treatment. In this case, the natural boundaries separating the areas offset the proximity of the areas. The control group has one adjacent side to the experimental areas (the other ones facing a major river, undeveloped land, and another non-experimental police beat). In addition to the isolated nature of the control beat, the beat boundaries are along major thoroughfares, many of them four lane boulevards. The boulevards dividing the different beats act as social boundaries by defining very particular neighborhoods (although they remain similar in social composition). These boundaries are, therefore, a good mechanism to ensure that

the treatment will not corrupt the control group. The aerial photograph below of the four experimental areas clearly shows the natural boundaries. This photograph shows the grid layout of the streets, and the density of the areas when compared to the surrounding areas. A description of these boundaries follows.

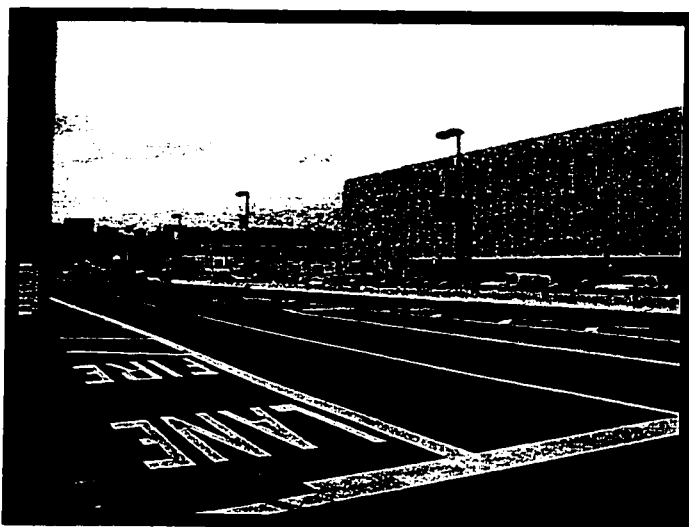


Exhibit 14 Aerial Photograph of Experimental Areas with Numbered Natural Boundaries

(Source: Jersey City Planning Bureau, New Jersey, 1998)

The pictures below depict the nature of the natural boundaries for each numbered boundary above.

Boundary (1): This is northernmost boundary, and the separating element is a seven-lane highway leading to the entrance of the Holland Tunnel that links Jersey City and Manhattan. The area north of this highway is a mostly industrial zone, composed of trucking depots, grocery stores, and a few gas stations.



For Boundary (2): The following boundary separates the area receiving only publicity and the area receiving publicity and the police patrols. The wall runs the length of the boundary. Once used as an elevated railroad track to provide rail access to industrial shipyards lining the Hudson River, it remains an imposing structure with little utility. It is easy to see why this wall creates a good natural boundary between the two adjacent neighborhoods.



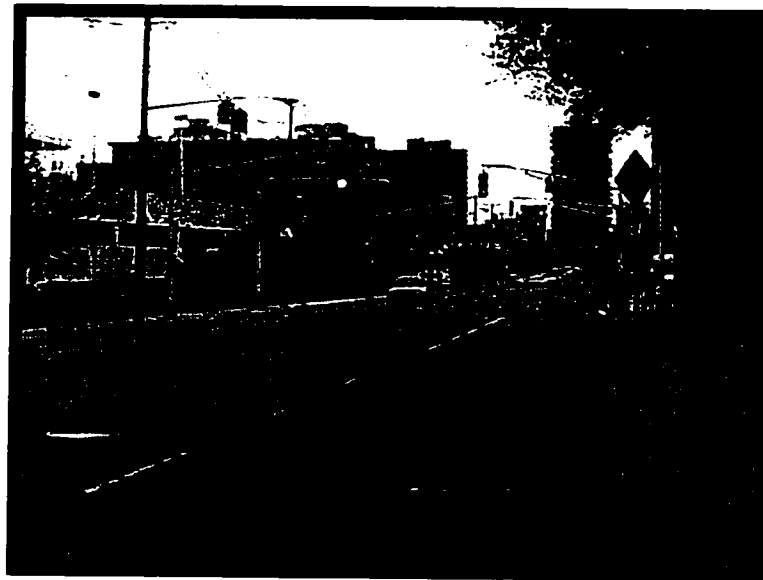
Boundary (3): This boundary covers the easternmost section of the experimental areas. It is characterized by an elevated highway (the New Jersey Turnpike extension leading to the Holland Tunnel) towering over vacant lots and makeshift parking areas. As one can see from Exhibit 6, this highway borders the entire experimental zones and its role as a geographic boundary is apparent. Finally, there are no access ramps to this highway in the immediate areas.



Boundary (4): Christopher Columbus Drive is the street that separates the “police only” area from the area receiving “police and publicity”. While it is possible to cross this street, this large artery separates the two neighborhoods. For instance, those people living on one side of Columbus Drive will rarely cross the street for necessities as each neighborhood has its own delis, bodegas, and convenience stores. The only time people will use Columbus Drive as a common thoroughway is to reach the PATH subway station at the end of the Drive to get to Manhattan. Even during those times, one can see people walking on their respective sides of the street until they reach the subway station.



Boundary (5): This is the second largest roadway found in the experimental area. It offers an alternate access route to the Holland Tunnel, but has also become a major route to the shopping mall, and large grocery stores. This road acts as an informal divider between the “waterfront” neighborhoods and those located more to the west.



These above natural boundaries serve as contrasts to typical streets found within the experimental areas. Below is an example of this type of street, characterized by its ample street parking and residential setting.



Reliability of the Control Group

To ensure that the chosen control area was not going to be “contaminated” by the relatively close proximity to the experimental groups, a second control group was chosen in the North District of the city (Control Two). The author chose this area for its similar geographic size, and street layout. This group was compared to the original control group and the two groups did not significantly differ in terms of the dependent variables. Car crimes, Incidents, and Calls for Service were compared and the results are in the Exhibit below. This shows that the proximity of the original control group did not affect the dependent variables. In all of the categories, the total percentage difference averaged 6.4% for the car crimes, 9.6% for the calls for service, and 6.4% for the incidents. This supports the premise that the original control group was not “behaving” differently than other non-intervention areas of the city. Since there is no difference between the two groups, the “Control Two” group not included in subsequent analyses and exhibits.

Exhibit 15 Similarities of the two control areas when comparing car crimes, calls for service, and crime incidents

	Original Control Group	Control Two	Raw Difference	Percent Difference
<u>CAR CRIMES</u>				
Pre Intervention	53	57	4	7.5
During Intervention	41	39	-2	-4.8
Post Intervention	43	40	-3	-6.9
<u>CALLS FOR SERVICE</u>				
Pre Intervention	620	589	-31	-5
During Intervention	791	703	-88	-11.1
Post Intervention	859	749	-110	-12.8
<u>INCIDENTS</u>				
Pre Intervention	83	80	-3	-3.6
During Intervention	66	69	3	4.5
Post Intervention	63	56	-7	-11.1

(Source: Jersey City Police Department Incident Reports, 1997-1998)

Intervention Length

Any intervention needs the opportunity to have an effect. When dealing with interventions in social settings, allowing enough time for the effect to take place is desirable, but the time of the intervention may be inversely related to the proper implementation of the intervention. Prolonged experiments run the risk of suffering from treatment breakdown, instrumentation problems, diffusion of treatment, etc., all of which harm the much sought after "effect" of the intervention. The ten-week period was long enough for the posters to send their message, and for the offenders to react to them. Previous successful publicity campaigns had similar intervention periods. A Dutch campaign to educate car owners lasted only eight weeks (Riley and Mayhew, 1980), while Barclay's work to prevent car thefts in Vancouver only had a one-month publicity intervention period (Barclay et al., 1997). A recent study targeting firearm violence in Indianapolis used a similar research design and the intervention lasted 90 days (McGarrell

et al., 2001). The small areas, however, did prove beneficial in this instance since the treatments were concentrated in finite areas, not requiring a lot of time to reach their intended targets.

Description of the Interventions

Publicity Posters

The publicity intervention was directed solely to potential offenders. While the public was exposed to the nature of the publicity/warning, there was no crime prevention information provided for their use. The posters warned potential offenders that car crimes will now receive special police attention, and that the police would investigate any suspicious activity. The poster design included the name of the police department as a header, to demonstrate the source of the warning and a detailed map of the concerned area, highlighting the “protected zone”. Instead of a broad general warning, specific police activities were also part of the poster layout: police surveillance, traffic checkpoints, and field interviews. The type used for the posters was large enough for people to read them as they traveled in the areas, be it by foot, bicycle, bus, or automobile. Finally, “OPERATION TARGET”, the name given to this project was printed on the poster, as were two drawings, each depicting anti-car crime illustrations. The posters measured 14 inches wide, and 22 inches long.

To reduce cost, the posters were printed by the city print shop which was able to mass-produce them relatively quickly. A determination was made to produce these on cardboard instead of metal (like other city street signs) since this was going to be a temporary project with a finite period. Cardboard posters were also considered simpler to

attach and remove from the various posting locations. City workers were given a certain area of the experimental zones that were to be covered with these posters ⁴. Each worker was to place at least one poster on each block face, attaching them to telephone poles, storefront windows or other convenient locations. Each city worker noted the exact location of the poster placement in a binder that allowed these to be mapped. The idea was to maximize coverage so that in the target areas, a poster was always visible from any vantage point. Some of the posters were also placed in storefront windows. Exhibit 4.4 shows a sample poster, and exhibit 4.5 shows the location of each warning poster.

The city workers placed approximately 600 posters throughout the two experimental sites within the first 2 days of the start of the intervention. While each poster was attached to a discrete location, the viewing area went beyond that exact location. Measurements indicated that on average, the posters were visible from a distance of 25 feet. This 25 feet distance is therefore the circumference of the coverage provided by each poster.

⁴The Department of Neighborhood Improvement Districts, a city agency designed to target quality of life issues through rigorous code enforcement, carried out most of the poster placement process. This was beneficial to these workers because at the time, the office was in its development stage, and being out in public attaching posters gave them the public visibility city managers were looking for.

JERSEY CITY POLICE DEPARTMENT WARNING TO AUTO THIEVES

Persons in this area are subject to:

- .POLICE SURVEILLANCE**
- .TRAFFIC CHECKPOINTS**
- .FIELD INTERVIEWS**



OPERATION TARGET

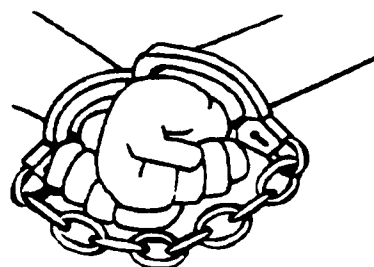


Exhibit 16 Warning Poster Designed for "Operation Target" Intervention, Jersey City, NJ. 1998

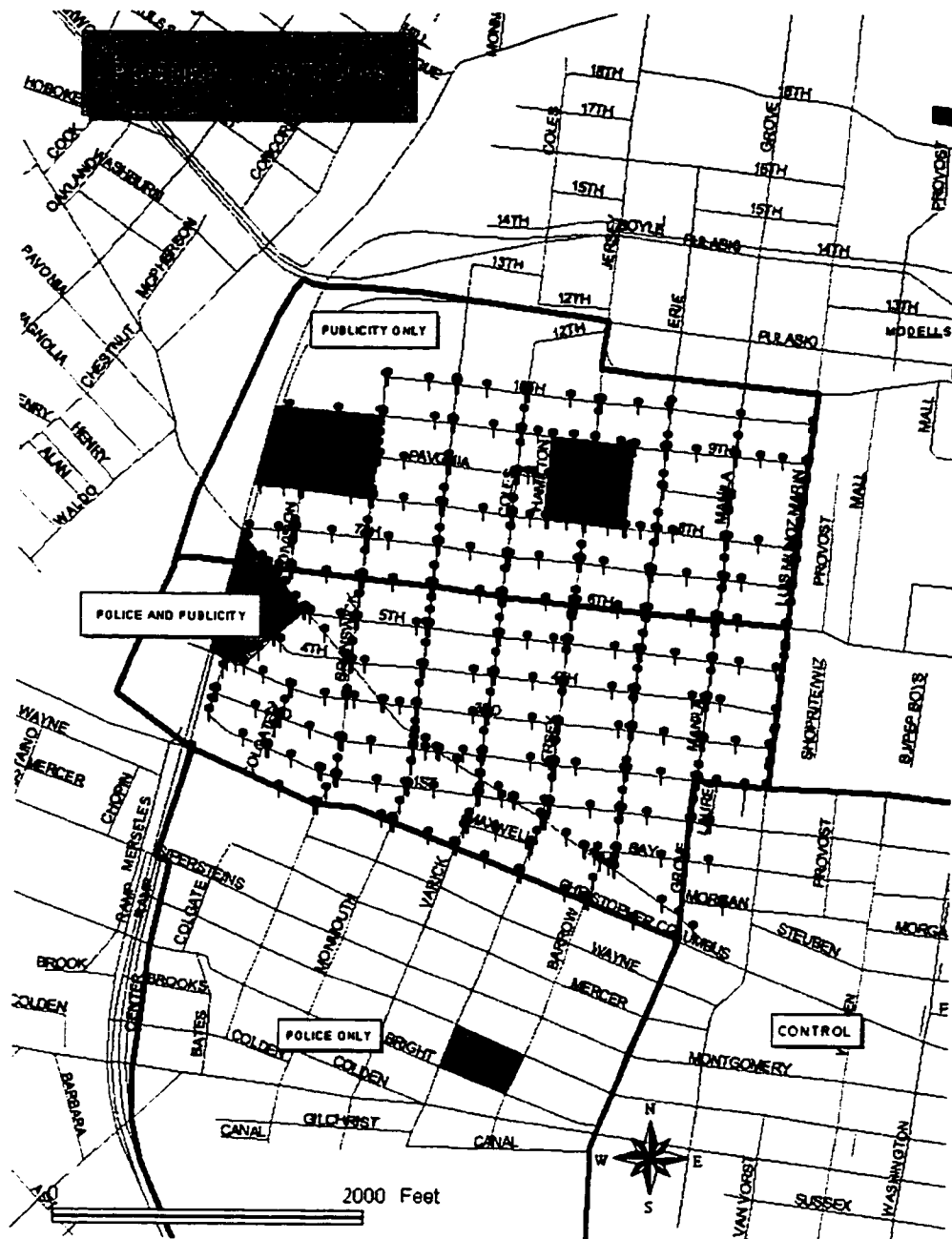


Exhibit 17 Locations of Posters during "Operation Target" across Publicity

Areas

Monitoring Plan for Posters

The project team expected that rain, weather elements, and residents would damage some of the posters. A monitoring system was devised that involved weekly drives through the areas to check on the condition of the posters. City workers from the department of Neighborhood Improvement were instrumental in the poster monitoring process as they routinely canvassed the relevant areas to check on the integrity of the posters. When they encountered damaged posters, they replaced them immediately, and this attention to the posters lasted throughout the length of the intervention. This was especially important because the posters needed to portray a consistent viable threat. Pictures of damaged posters were taken on a weekly basis, and were catalogued in a binder. Because of the small areas concerned, this monitoring was not a practical problem and produced a high treatment level. At the end of the intervention, the city workers promptly removed all of the posters within a few days.

The placing of the posters around the experimental areas was not without incident. The Police Chief was torn between addressing car theft in these areas and admitting the magnitude of the problem through such publicity. In addition to the Chief's concerns, many residents took offense at this intervention. In one instance, a young woman called the police department and asked if "the problem was really this bad?". Another woman called to comment that she was uneasy because her parents were coming to visit her an

upcoming weekend and she was afraid that her father would not approve of her choice of residential area given the advertised crime problem. In sum, she wanted to know if she could remove the posters in front of her house for the duration of the parental visit, after which she promised to put them back up. Indeed, that weekend she removed the posters.

Another alarm came from a local real estate agent stating that while she appreciated the police department's efforts to address car crimes, the posters were having a negative impact on her business as prospective buyers and renters questioned her as to the obviously high crime rate that necessitated such drastic publicity by the police department.

Local residents vandalized some of the posters. The rate of destruction was higher than expected, but the damaged posters were quickly replaced with new ones. Out of the 600 posters that were put up, approximately 350 (58%) had to be replaced. Part of the problem was that the posters included a piece of artwork drawn by a local artist that depicted hands in handcuffs. It appears that some local youths took a liking to the sketch and probably took the posters home. The posters were rarely destroyed, and only pieces of the poster were routinely targeted for vandalism. Some examples of the vandalized or destroyed pictures are presented below:

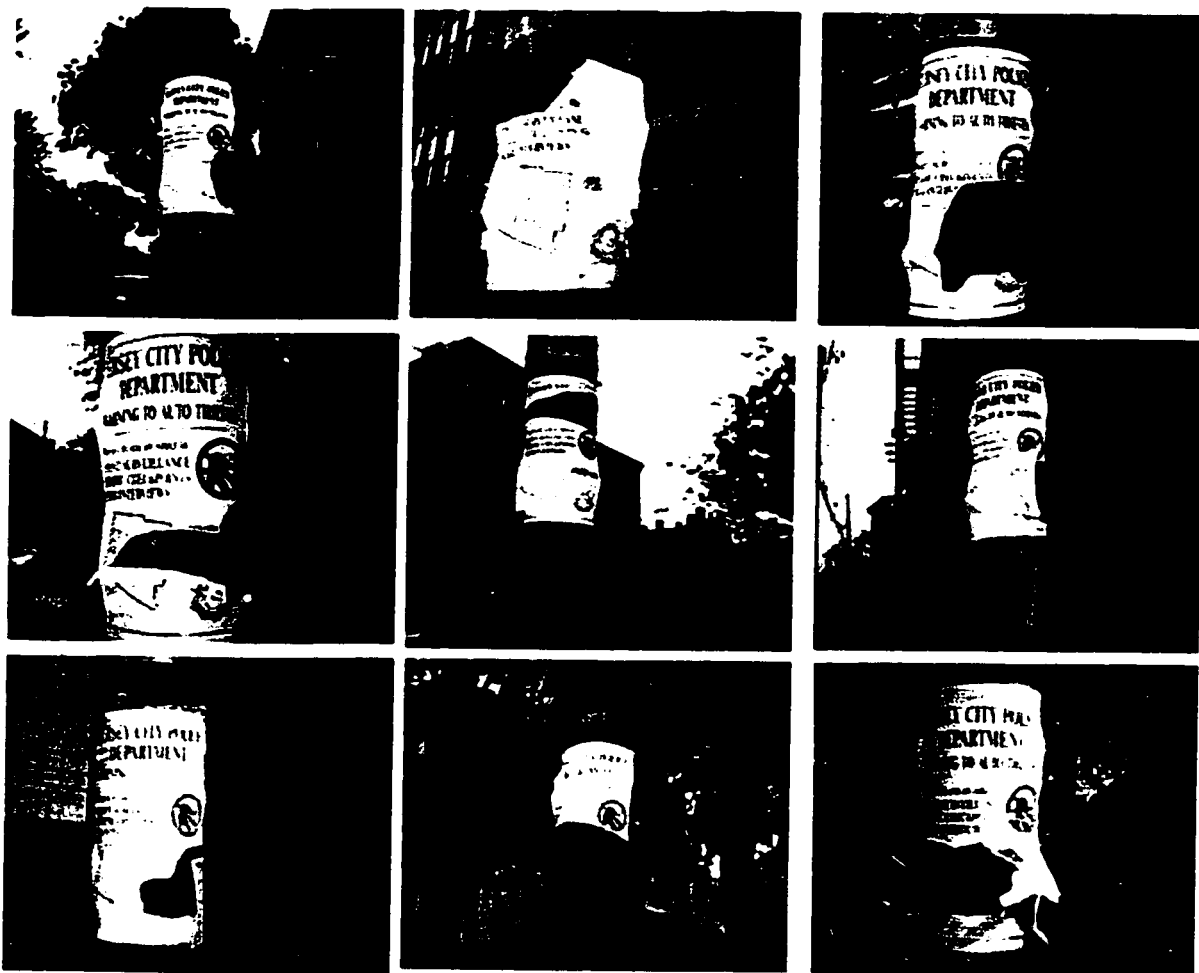


Exhibit 18 Some of the Damaged "Operation Target" Posters in the Publicity Area, Jersey City, NJ (Pictures taken by author, 1998)



**Exhibit 19 More Examples of Defaced "Operation Target" Posters in the Publicity Area
(Pictures taken by author, 1998)**

Police Patrols

The police treatment consisted of directed police patrols to impact auto crimes. These patrols were to focus solely on auto related problems by emphasizing constant vigilance, area saturation, high arrest levels, and surveillance. All of the areas under study retained *normal police patrol* levels and these patrols answered calls for service as usual. The patrols assigned for this project were, therefore, beyond the patrols already allocated to these areas. Given the current deployment of police in the areas, the directed patrols represented a significant increase in terms of patrol hours.

Fourteen officers in each of the four police districts (East, West, North, and South Districts) man a normal patrol shift (approximately 8 hours). Each day is divided into three separate shifts, the "day" shift (7:00 am – 2:59 pm), the "evening" shift (3:00 pm – 10:59pm), and the "midnight" shift (11:00pm – 6:59 am). Since there are seven designated beats per district, this averages out to two officers per beat per shift, for a total of sixteen patrols hours.

Part of the intervention was adding one officer per shift. While a normal shift covers eight hours, the additional shifts lasted six hours each. The shifts were planned as six-hour shifts to overlap the majority of the regular shifts, and police officials deemed the six-hour period as sufficient to achieve the increased police visibility. Additionally, reducing each shift by two hours allowed for more shifts without increasing the cost.

Therefore, with the two additional officers per shift, the amount of coverage increased by 25% in the police experimental areas.

Exhibit 20 Sample Deployment of Police Patrols during the Intervention Periods Across Shift.

SHIFT	Intervention Area	# of Officers	# of Patrol Hours
DAY	Police and Publicity	1	6
(9:00 am to 3:00 pm)	Police Only	1	6
EVENING	Police and Publicity	1	6
(4:00 pm to 10:00 pm)	Police Only	1	6
MIDNIGHT	Both Zones	2	12
(11:00 pm to 5:00 am)			

For the midnight shift, the officers carried out their patrols with a police car. The Jersey City Police Department has a policy stating that officers working the midnight shift need to work in pairs due to the increased dangers, and had the officers remained on foot, the project would have lost half of the patrol coverage for that shift since both officers would have been in the same location at all times. The car, therefore, allowed paired-up officers without losing coverage. The police car also allowed for a different type of patrol than those carried out during the day, as the officers were able to carry out more car stops. The decision for the unmarked car was also tied to practical considerations. The police chief stated that while he supported this program, he did not have a marked police car to dedicate to the project, but he offered an unmarked car. The unmarked car indirectly helped the implementation in that it incited the officers to work the midnight shift. In the beginning, the project team feared that too few officers would choose the shift with the

more difficult hours, but the officers saw the unmarked police car as a reward, and they felt as though they could finally carry out their police surveillance and apprehension activities with little detection.

The posters warn of traffic checkpoints, police surveillance, and field interviews. These warnings necessitated police action so that they would be credible. In the areas where directed patrols were instituted, extra patrols were added during the day, evening, and midnight shifts. To avoid design and treatment problems in terms of the added patrols, it was important to separate this type of patrol from the normal duties exercised by officers during a shift. The project team instructed the officers working on this project to remain focused on car crime issues, refraining from engaging themselves in other non-auto related police matters. The officers could not find themselves suddenly too overwhelmed with other crimes to pay any special attention to car crimes.

The officers chosen for this project worked on an overtime, and volunteer basis. The project team did not want to force reluctant individuals to participate for fear of finding out later that they failed to carry out their required duties out of spite. Because of their overtime status, the officers were free of their traditional "call-response" mode. The needs of the experiment came first, and the officers were not able to claim that this experiment and its requirements infringed or disturbed their regular responsibilities. The police department avoided the creation of a specialized "Auto Crime Task Force" for a couple of reasons. The first was that departmental procedures made it difficult to institute

and coordinate such a unit. Secondly, it was important that patrol directives remain somewhat within the project's control and guidance. Finally, a special unit would have been harder to direct and oversee since the officers would then have had to answer to the police chain of command for schedules and operational directives.

After the officers signed up for the project, special handouts explained the patrol directives and the geographical boundaries of their patrol areas. Police officials made it very clear that they were to carry out no police activities not related to the experiment, and that geographic integrity was crucial. This request respected the normal operating procedure of the police department, so that public safety would not be jeopardized. For example, if an emergency broke out within the experimental areas, the officers were allowed to respond. Otherwise, the officers were not to seek out police activities that would distract them from their auto related duties. These emergency situations were a minimal problem and were accepted as part of the police patrol component.

The patrol guidelines given to the officers were to establish high visibility in the areas through their patrols. Since all of the day and evening tours were foot patrols, establishing contact with people in the area was feasible. The officers were instructed to carry out numerous field interviews (asking questions of people who they might consider suspicious, recording this information on a field interview card). They were to question any suspicious behaviors related to car crime. The midnight shift officers were to carry

out numerous traffic stops (even for the most minor of infractions) and to check for driver and car credentials. In the area with the two interventions (police patrols and publicity), the officers were asked to mention the "Operation Target" program under way in the area so that the reason for their presence were known and spread about the neighborhood. This was not carried out in the area only receiving police patrols, since that area was testing police presence, not the advertisement of anti-car crime efforts. Cars with unlocked doors, open windows, or illegally parked were also checked for signs of break-in. In sum, these patrols allowed officers to focus on preventing and deleting a crime for which they would not normally have had much time.

Using officers on an overtime basis raises some issues. Most of the officers who decided to volunteer for this project were understandably seeking financial benefit. Critics may claim that the overtime basis of the patrols may not be feasible in other settings (complicating replication), and that having the luxury to pay for additional police patrols may create an artificially large police presence. The simple response to this claim is that this experiment is about testing the effect of directed police patrols in terms of car crimes. The point is not to simulate reality, but to test the true effect of the interaction of police patrols with offender-oriented publicity. Monitoring and insisting on consistent police work was crucial because many experiments relying on police patrols fall victim to the reality of police work (in terms of having officers pulled away from their required duties, hurting the impact of the treatment). In addition, the officers lacked patience for

patrol directions coming from the Planning and Research Bureau, researchers, or other civilian entities.

The two experimental sites receiving police treatments were allocated equal police resources. In terms of police deployment, measurement of the patrol dosage in the experimental areas was a primary concern:

Issue: Throughout the course of the experiment, the different patrol beats have to receive the same amount of coverage to avoid unequal treatment.

Solution: Daily assignments gave each experimental area an equal level of police attention. Monitoring the scheduling of the officers to work the different areas ensured proper and even dosage.

Issue: Finding the required balance between geographic coverage and patrol intensity (to maximize police visibility).

Solution: The officers covered large geographic areas with little time spent in anyone location (maximum coverage), and they patrolled a few given corners with numerous activities at these locations (patrol intensity). However, the risk was that this might have been at the expense of the unmonitored areas of the experimental beats. This was controlled by making the officers aware of this threat to the experiment, and by making sure that they maintained a healthy

balance between the two types of patrol (the officers had to fill out activity logs showing the nature and location of their patrol activities).

Issue: The patrols had to span through the three shifts of the day, avoiding only having certain times of the day covered by the patrols.

Solution: Officers were assigned to cover all possible shifts. Because these officers were working on an overtime basis, the discretion was retained to assign these patrols to whatever tour (day, evening, or midnight) was deemed necessary.

Monitoring Plan for Police Patrols

To reduce poor implementation practices, the project team developed a monitoring system. Activity sheets were given to the officers working a particular shift and the officers recorded all of the activities carried out during their shift. This avoided having the officers simply “out there somewhere”. The activity sheets recorded the nature, time, and location of all activities. This information was useful to monitor their activities while on the street and ensured that the directed patrols were carried out as planned. Having the officers note the location of their activities showed that they were in fact within the experimental areas, and not contaminating other surrounding areas.

In addition to the self-reporting police activity sheets, research assistants assigned to this project observed many shifts. During these observations, the assistants followed the officers during their patrols, also filling out their own activity sheets. For the observed shifts, two activity sheets were produced, one by the officer, and one by the observer. Congruence or divergence of the events that transpired during the shift was evident through the comparison of these activity sheets. The purpose of these observations was not only to monitor officer activities, but also to provide information about potential practical problems the police component may have encountered. For example, the observers reported that in the beginning, officers were experiencing some difficulty filling out certain parts of the activity sheets. Once identified, problems could be addressed. The observers therefore provided valuable information during the implementation of the intervention. Finally, in addition to their activity sheets, each observer provided a written

narrative of the entire observed shift, providing qualitative data about the police component of the intervention. The Exhibit below shows the percentage of observed shifts:

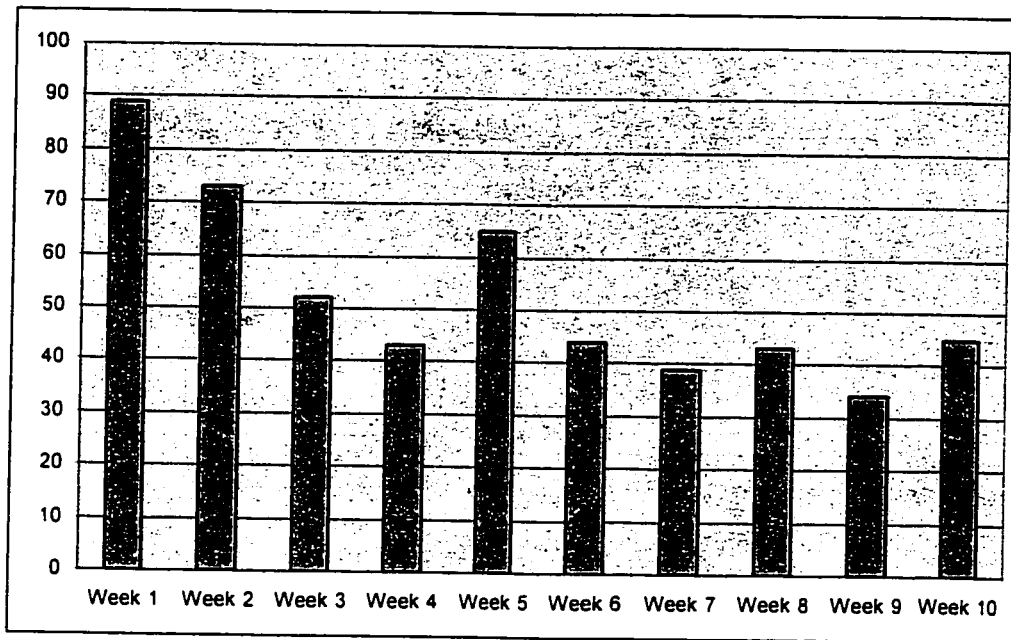


Exhibit 21 Percentage of Shifts Observed by Week of Intervention

While it was important to have the police shifts observed, the project team decided against having every single shift observed. Project staff thought that the police resentment over being “watched” and “followed” throughout this project would negate any methodological gains. It was easier to convince the officers that “occasional” observations were necessary to maintain the integrity of the project. Although there is a slight decrease in the level of observations as the intervention progressed, it was more important to have numerous observations in the beginning as this allowed for extensive

contact with the /officers, giving project staff opportunities to detect potential problems with early aspects of the project. Additionally, the high level of coverage in the beginning was used to re-iterate to the officers what elements of their patrols were crucial to this study (beat integrity, high presence; focus on car related items, etc.).

Summary of Police Patrol Intervention

The directed police patrols were an important part of this study as they represented a treatment in themselves for one experimental area and they complemented one of the publicity areas. For this reason, the level of dosage was quantified and the nature of the activities carried out was measured to demonstrate equivalence across the different experimental groups.

During the ten-week intervention period, there were a total of 279 additional shifts, each lasting six hours. The police patrols cost the police department approximately \$125,000 for the duration of the police intervention. While some interventions run the risk of treatment break down over time (Weisburd, 1993), the number of police shifts remained consistent throughout the 10-week intervention.

Exhibit 22 Number of Additional Police Shifts During Intervention Period of "Operation Target"

	Number of Shifts
<i>WEEK 1</i>	28
<i>WEEK 2</i>	30
<i>WEEK 3</i>	30
<i>WEEK 4</i>	30
<i>WEEK 5</i>	30
<i>WEEK 6</i>	29
<i>WEEK 7</i>	31
<i>WEEK 8</i>	26
<i>WEEK 9</i>	21
<i>WEEK 10</i>	24

Exhibit 22 shows that the number of police shifts remained relatively constant during the intervention. There was a 14% decrease in police patrols when comparing the first and last week of the intervention. The reason for this slight decrease in patrol frequency is two-fold. The project team canceled some shifts when the designated police officers arrived either late or were unprepared for the shift (out of uniform or lack of Operation Target paperwork), and others were cancelled due to technical problems (car was not working or could not be located). Another measure of the police implementation is the number of activities carried out by the officers over the ten weeks of the intervention. Exhibit 4.8 shows that each week consistently produced at least 150 activities related to car theft prevention. The last three weeks were a little lower because the officers chose to carry out only the activities they deemed fruitful to the project, ignoring some of the activities they had tested before. For example, “field interviews of non-suspicious persons” conducted by the officers decreased over time because it was not considered a fruitful activity by the officers.

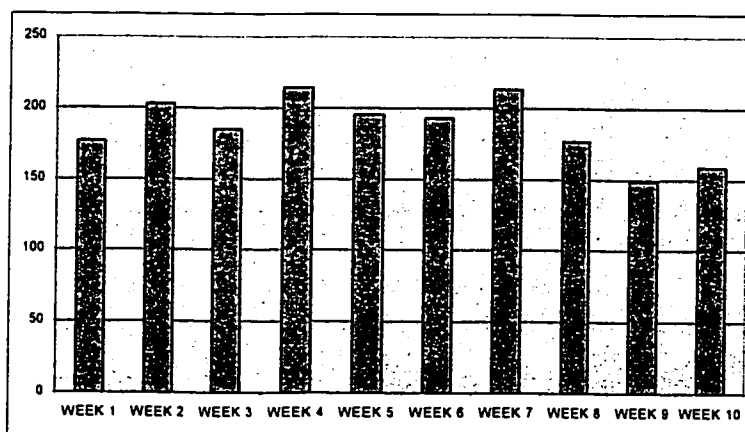


Exhibit 23 Number of Police Activities by Week of Intervention

In addition to the count of activities, this project relied on police presence and visibility, something that was sought through foot and car patrols. Exhibit 24 shows that while the last three weeks had a slightly lower rate of foot patrol activities, for two of those three weeks, the rate is still above 50%. The drop in foot patrols was linked to the officers the car during the evening shifts because it was determined that the car allowed for more effective anti-car crime activities, such as car stops and allowed for more geographic coverage. Overall, however, the police presence through foot patrols was relatively stable over the length of the intervention.

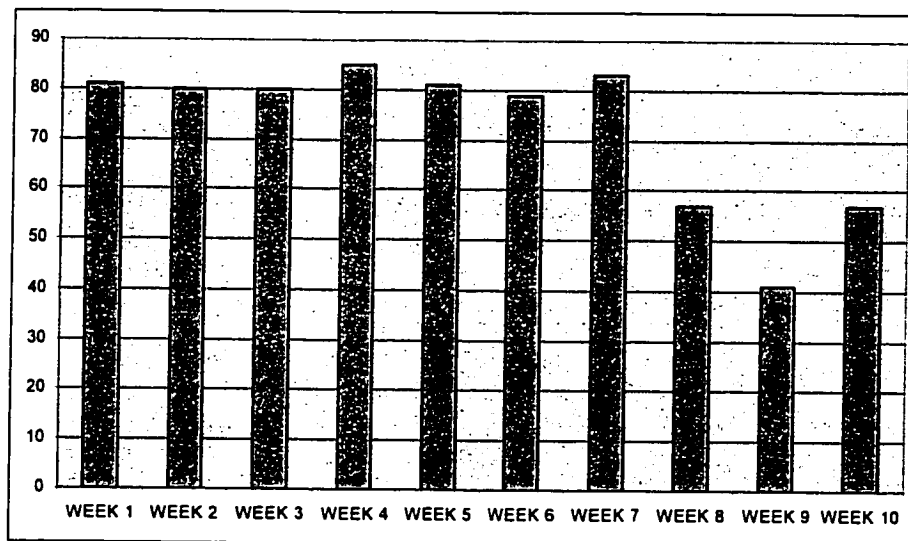


Exhibit 24 Percentages of Police Activities Carried Out Using Foot Patrols

The type of police patrol and the nature of the police activity were also monitored. The activities the officers could engage in could take one of two forms, "hard" or "soft" activities. Hard activities consisted of motor vehicle checkpoints, motor vehicle stops, field interviews of suspicious persons, or arrests, or any activity that resulted in an incident report. Soft activities included citizen contacts, running license plates, investigations of suspicious auto conditions, or field interview of a non-suspicious person. Activities whose outcomes produced official paperwork counted as "hard activities". For example, a summons issued for any traffic violation counted as a hard activity. However, having a casual discussion with a resident (while an acceptable activity) was considered a soft activity. This distinction did not give more value to one activity versus another, although summonses and traffic stops were in integral part of the intended police directed patrol. Monitoring the "hard" versus "soft" activities was important to show that the police presence and the nature of the activities were consistently applied throughout the intervention. Exhibit 25 shows that the majority of the activities were not "hard" by nature, but there is consistency across the intervention period. The intervention did not mandate a total focus on "hard" activities, but rather a strong police presence, which is possible through "soft" activities.

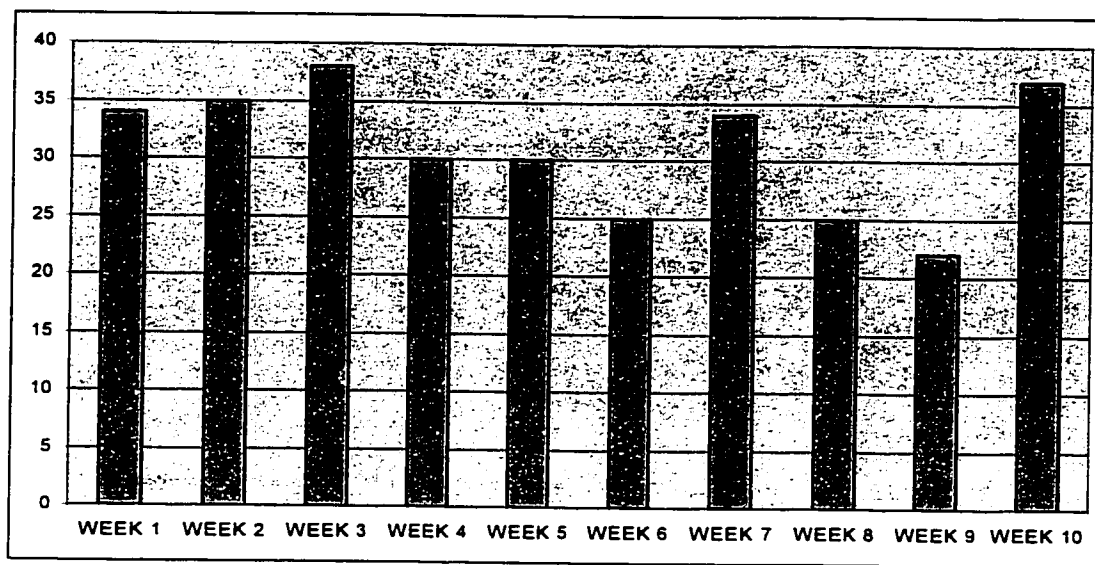


Exhibit 25 Percentage of "Hard Activities" Carried Out During Intervention Period

The patrol allocation between the Publicity and Police area and the Police only area were also monitored. This was to ensure that one group did not benefit more from the police treatment than the other did. Exhibit 26 shows that both groups remained equivalent throughout the intervention period except for week 6 and week 7, but the unequal patrol activities cancelled each other out by shifting from one group to the other for both weeks. For each week, the percentages do not add up to 100% because some activities began in the target zones, but the actual police activity occurred out of the experimental areas. For example, a car stop could have started in the experimental area, but by the time the driver pulled over, the officers were outside of the target area, and noted that address as the activity location.

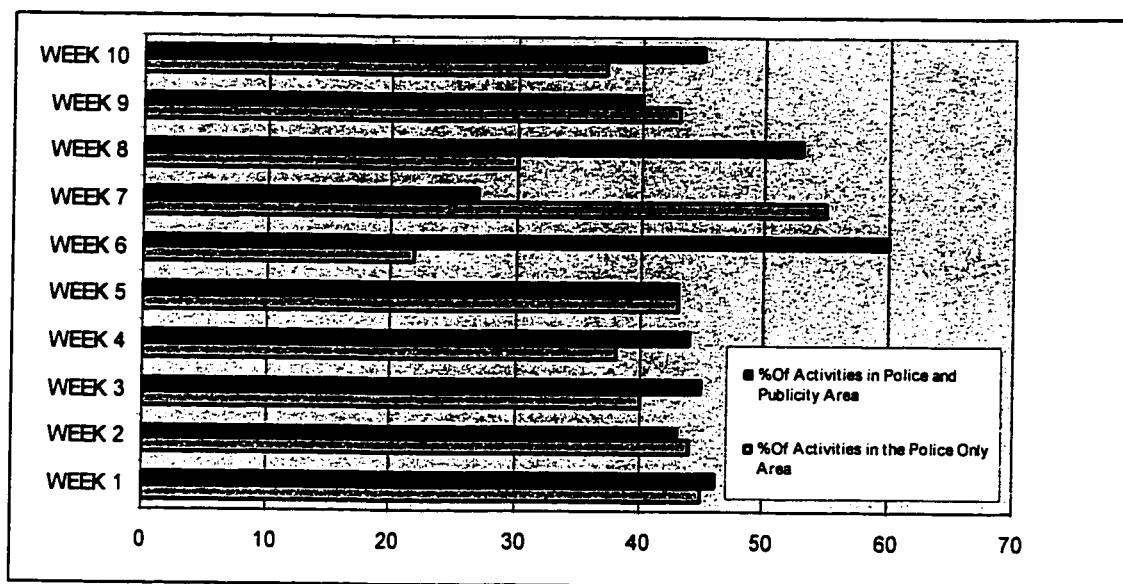


Exhibit 26 Comparison of Police Activities Within Each Experimental Group Receiving Police Treatment

Exhibit 27 describes the police activities by experimental area while Exhibit 28 describes them by the different weeks of the intervention. Once again, this demonstrates that the police treatment was equivalent across the areas both in nature and in degree of dosage. The slight decrease in the number of activities carried out by the officers should be noted, but is not alarming. At the beginning of the project, the officers were excited and carried out all types of activities, but that the enthusiasm would decrease slightly as time went on was expected by the project staff. What is important is that there was no sudden, drastic decrease in the police activities, as that could have jeopardized the integrity of the intervention.

Exhibit 27 Type of Police Activities Across Experimental Areas Receiving Police Treatment

POLICE ACTIVITY	POLICE		POLICE and PUBLICITY		OTHER		MISSING		TOTAL			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Total Percent		
Missing Information					1	50			1	50	2	100
Regular Citizen Contact	116	33	182	52	24	7	29	8			351	100
Field Interview Of Non-Suspicious Person	74	28	138	52	28	11	23	9			263	100
Field Interview Of Suspicious Person	67	36	92	49	20	11	9	5			188	100
Checked/Ran Plates Of Unattended Vehicle	70	47	62	42	11	7	5	3			148	100
Motor Vehicle Checkpoint	31	41	31	41	10	13	3	4			75	100
Motor Vehicle Stop	119	38	141	44	39	12	18	6			317	100
Investigation Of Suspicious Auto	150	39	171	44	41	11	25	6			387	100
Non "Target" Related Activity	26	30	51	59	6	7	4	5			87	100
Other	26	55	17	36	3	6	1	2			47	100
Total	679	36	885	47	183	10	118	6			1865	100

Exhibit 28 Number and Type of Police Activities by Week of Intervention

POLICE ACTIVITY	WEEK										Total
	1	2	3	4	5	6	7	8	9	10	
Regular Citizen Contact	0	12	39	50	33	63	48	38	38	30	351
Field Interview Of Non-Suspicious Person	35	46	22	24	26	21	27	32	16	14	263
Field Interview Of Suspicious Person	14	8	17	30	25	24	24	16	10	20	188
Checked/Ran Plates Of Unattended Vehicle	0	9	15	12	28	17	14	18	18	17	148
Motor Vehicle Checkpoint	8	9	6	13	7	7	9	4	2	10	75
Motor Vehicle Stop	37	54	47	21	26	17	40	25	21	29	317
Investigation Of Suspicious Auto Condition	50	46	27	49	37	34	45	32	37	30	387
Non-Auto Related Activity	0	5	12	15	13	10	6	10	7	9	87
Other	33	14	1	1	0	0	0	0	0	0	49
Total	177	203	185	214	195	193	213	175	149	159	1865

The final exhibit for the police component is the outcome of these patrols during the intervention period. Carrying out an activity such as a motor vehicle stop is useful, but what is the result? Out of the total 1865 activities carried out during the 279 additional shifts of the intervention period, 262 summonses were issued, more than 400 individuals were warned by the police and sent on their way, and 564 individuals were told of the project in the area where publicity was one of the interventions. Of importance is that the attempts to keep the officers focused on car related events succeeded as only 5.5 % of the activities involved non-auto related incidents. Exhibit 29 lists all of the outcomes for the police activities.

Exhibit 29 Outcomes of Police Activity During Intervention

OUTCOME	Percent
Missing	0.2
Arrest	1.1
Warning or Sent On Way	23.5
Impound Vehicle	2.8
Mention Of Operation Target	30.2
Recovery Of Stolen Car	0.5
Recovery Of Abandoned Car	0.6
Summons Issued	14.0
Condition Checked Out Ok	21.4
N/A	5.5
Total	100.0

Base N=1865

In terms of spatial integrity and the spread of the activities, one can see from the map below that most of the activities were well contained within the experimental boundaries. The few cases that fall out of the two police zones occurred when a decision

carry out a motor vehicle stop started within the proper police zone, but was completed outside the zone due to practical factors such as needing time to run the license plate before pulling over the automobile in question. Some of the other points outside the experimental areas may represent responses to severe emergency calls whose importance overrode the current project guidelines. Having small areas facilitated the monitoring of the police treatment, but it was not without the occasional complaint from the officers that the areas were just too small: "Do you realize that we have to drive 6 hours in what amounts to only a few square blocks? I am getting tired of this area; I drive past each house 12 times during my shift" (Conversation with Police Officer working Operation Target Detail, 1998). While the complaint was a valid one, it gave credence to the proper implementation of the police component.

Relative Impact of Police Patrol Activities

The above section describes the effective deployment of the police patrols and demonstrates the geographic integrity of the police intervention. It remains important, however, to measure the actual productivity of the officers to determine the degree of their deterrent effectiveness. During the 10-week intervention period, there were 1865 police activities, but instead of taking these as absolutes, this section looks at the officer activities relative to the total number of patrol hours and shifts dedicated to the

intervention. The Exhibit below shows the type of activities by shift.

Exhibit 30 Activity Type by Shift

ACTIVITY	SHIFT			TOTAL
	DAY	EVENING	NIGHT	
REGULAR CITIZEN CONTACT	181	147	23	351
FIELD INTERVIEW OF NON-SUSPICIOUS PERSON	106	125	32	263
FIELD INT OF SUSP PERSON	65	73	50	188
CHECKED PLATES UNATTENDED VEHICLE	77	53	18	148
MOTOR VEHICLE CHECKPOINT	34	36	5	75
MOTOR VEHICLE STOP	63	116	138	317
INVESTIGATION OF SUSPICIOUS AUTO	167	152	68	387
NON-AUTO RELATED ACTIVITY	33	42	12	87
OTHER	20	23	6	49
TOTAL	746	767	352	1865

From the above Exhibit, it becomes clear that the shift period had a lot of impact on the nature of the activities. Citizen contacts were lowest during the night shift, and while the hours of the shift (11:00pm to 5:00am) can explain the reduced contacts; it is more likely that the officers did not take the time to exit their patrol cars to engage residents in conversation about the nature of the project. Motor vehicle stops increased during the night shift because the officers executed these types of activities with more ease given the equipment they had at their disposal (flashing lights and sirens, computer to check credentials, etc.). However, non-auto related activities decreased during the night shift, which shows that the even though the officers were assigned to a patrol car, this did not increase their propensity to get involved in non project related activities.

The amount of time each activity took is an interesting element to consider. Having officers spend a lot of time per activity may not always be the best implementation choice as other responsibilities or activities run the risk of not being carried out. However, this type of experiment relies on police presence through police action and short activity times may reflect low levels of actual police dosage. The Exhibit below shows the nature of police activities relative to the length of time they took. It shows that the police only took a few minutes to complete the majority of their activities (78.7%).

Exhibit 31 Amount of Time Spent per Police Activity during Intervention Period

ACTIVITY	15 minutes or less	16 to 30 minutes	More than 30 minutes	Total
REGULAR CITIZEN CONTACT	300	45	7	352
FIELD INTERVIEW OF NON-SUSPICIOUS PERSON	218	38	4	260
FIELD INTERVIEW OF SUSPICIOUS PERSON	145	35	7	187
CHECKED PLATES OF UNATTENDED VEHICLE	105	20	16	141
MOTOR VEHICLE CHECKPOINT	62	8	6	76
MOTOR VEHICLE STOP	258	46	27	331
INVESTIGATION OF SUSPICIOUS AUTO	293	55	37	385
NON-AUTO RELATED ACTIVITY	53	20	13	86
OTHER	35	6	6	47
TOTAL	1469	273	123	1865
(Percentage)	(78.7%)	(14.6%)	(6.0%)	(100%)

While the police carried out the majority of their activities with some expediency, these activities did not require hours to be completed. In fact, had the police taken more time on each activity, an argument could be made that the police spent so much time per activity that it impeded their required presence on the street. In order to show police productivity, we need to look at the ratio of time spent on patrol versus the number of activities carried out. There were 279 total shifts, each of which lasted 6 hours, for a total of 1674 patrol hours. If the police carried out 1865 activities during the length of the intervention, the average number of activities ends up being approximately 1.1 per patrol hour, 78.7% of which lasted less than 15 minutes.

Perhaps the police could have been a little more rigorous and productive. However, there are two arguments to support the notion that this may not be as problematic as it appears. First, while the 1.1 activities per hour ratio appears low at first, the 1674 additional patrol hours supplied by this project (25% addition to regular patrol coverage) remains a significant increase in police presence. Secondly, the nature and number of car related activities carried out by the police department, albeit limited, remain an improvement over what the experimental areas would have received under regular patrol directives.

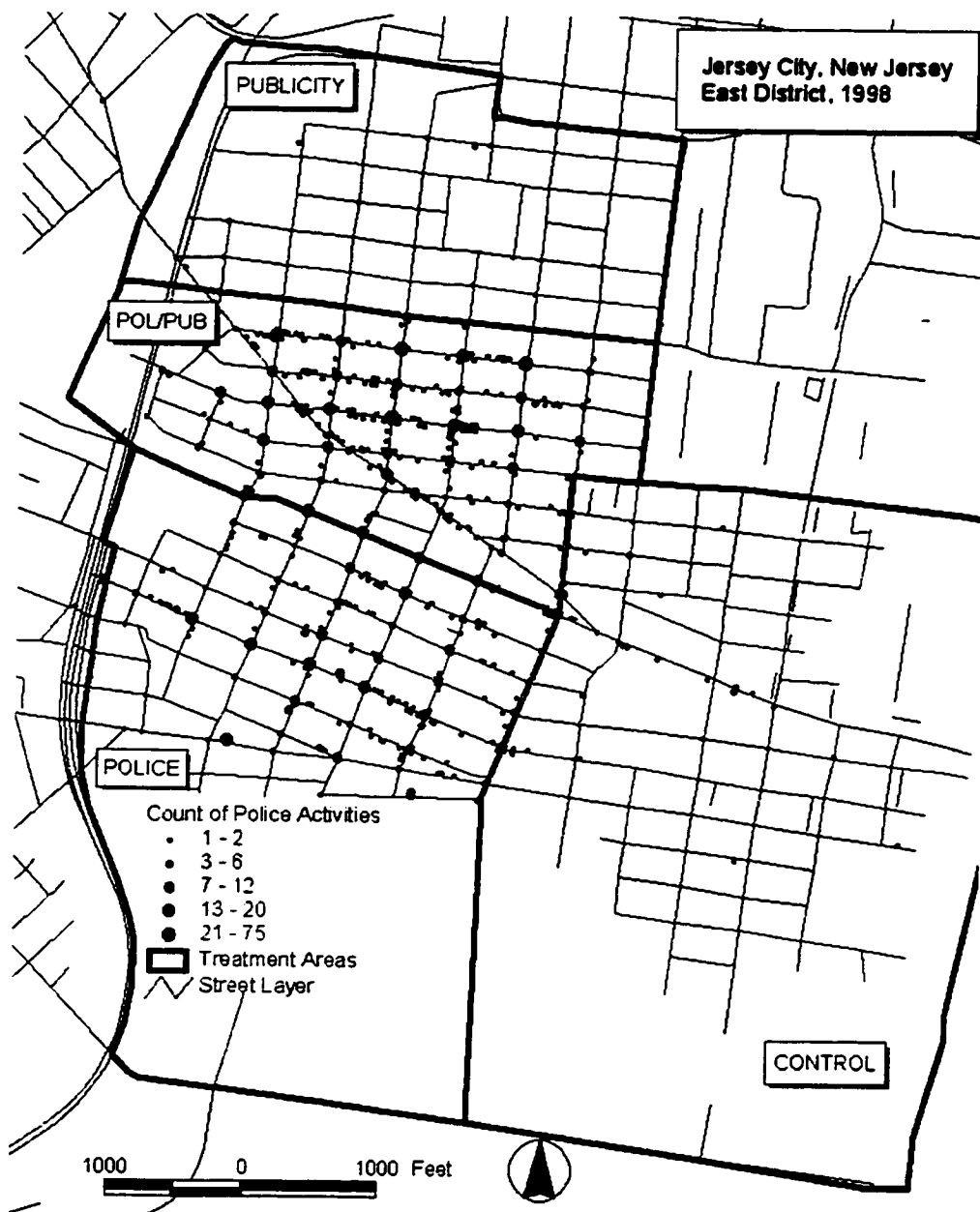


Exhibit 32 Location of Police Activities

Data Collected

This experiment sought to test the effectiveness of an intervention directed at reducing car crimes. The dependent variables consisted of official measures such as calls for service, incident data, and arrest information. These data were provided by the Jersey City Police Department, and were compiled from various operational databases. This study also collected additional information and all of these data sources are explained below.

Official Data (Calls for Service, Incident Data, and Arrest Data)

This information was downloaded from the JCPD Computer Records management systems. The data included information about all crime types, not just car crimes. Three years of data was collected: 1996, 1997, and 1998.

All of the data was geocoded (assigning a geographical x and y coordinate to specific address locations) to a Jersey City street map to allow for crime mapping. The geocoding rate was 98% for two of the three databases, indicating that only 2% of the cases could not be spatially represented due to poor addresses (the arrest database was more problematic and was ultimately not used). Each case was also geoprocessed to a specific NTF post, or police beat. For the cases that fell on contiguous street segments, the blockface was identified through the mapping program and depending on the side of the street they fell on, they were assigned to the appropriate post. All of the cases falling exactly on an intersection where different posts met were randomly assigned to one of the

contiguous posts.

Poster Information

This information provided the exact location of the posters and the location of the damaged posters. City workers and project staff collected it throughout the duration of the experiment.

Officer Activities

Officers that were part of the directed patrol component of the study were required to record all their activities on activity sheets. These sheets provided information on the type of activities they engaged in (field interview, motor vehicle stops, investigating suspicious conditions, or other activities), the amount of time spent on each activity, the exact location of the activity, and the disposition of the activity. The activity sheets were crucial in terms of providing treatment integrity because the officers were told that their activities would be mapped by location, and any activity occurring outside the designated zones would be questioned. While some officers would “enhance” activity sheets to make-up for lack of aggressive performance, the random assignment of observers to meet the officers in their posts during their shifts also helped reduce poor police treatment.

Car Counts

To get a sense of the “targets” in this study, project staff catalogued the cars within each area during the experiment. Because this project focused on car crime, it was important to have more contextual information about the potential targets. For example, how many cars were in the areas at any given time? More detailed information was also considered important: what types of cars were they (make, model, years, in or out of state), were these cars benefiting from any type of protection such as the Club?⁵

The canvassing of cars was carried out before, during, and after the intervention. Each observer walked down identified block faces in the areas, noted the car information, whether a Club was attached to the steering wheel, and whether or not valuable contents that may attract thieves were left in plain view. This information was used to see if residents changed their behavior patterns (as far as protecting their cars or not) given the publicity campaign against car crime.

⁵ The anti-theft measure known as the Club was chosen as the indicator of car protection because it was the easiest to detect from plainview observations. Car alarms and other, more discreet theft methods were not easily observable, and hence not recorded.

Threats to the Design

This research does not claim to have all the benefits of the classic experimental design, yet it does not suffer from all the methodological pitfalls found in other designs since it does have relative equivalence between groups, a pretest, and a posttest, and separate experimental and control groups. Nevertheless, let us examine some of the common threats to this type of research.

Internal Validity Threats

Internal validity is a concern that a factor other than the treatment may produce a change in the dependent variable. Any one of the following factors can jeopardize a design's internal validity: History, Maturation, Testing, Instrumentation, Statistical Regression, Selection Bias, Experimental Mortality, Selection Interaction (Cook and Campbell, 1979). According to Cook and Campbell, the "untreated control group design with pretest and posttest controls for all but four threats to internal validity" (Cook and Campbell, 1979: 104). Let us examine the four possible threats to this design. The first threat to internal validity is selection-maturation. This occurs "when factors within the experiment other than the assumed predictor variable are responsible for the findings" (Hagan, 1989: 37). For example, if the residents in one of the experimental areas were to suddenly protect their cars through some anti-theft method, this would lead to differential posttest car crime measures that could not be solely attributable to the interventions. However, Cook and Campbell state that "if conditions indicate that no growth would be

expected in either group during the experiment...one need not worry too much about selection-maturation” (Cook and Campbell, 1979: 104). In this particular research, there is no reason to believe that there might be a sudden increase in residents protecting their cars, and this was monitored by regularly counting the number of cars with Clubs or with valuables inside throughout the intervention period in the various experimental areas.

The second threat to internal validity is instrumentation. This refers to “changes in the measuring instrument from the beginning or first period of evaluation to the second, later, or final evaluation” (Hagan, 1989: 35). The use of official data minimized this threat, as the manner in which the data was collected by the police department did not change over the course of the experiment. The short intervention period also limited this threat since there was less time for instrumentation problems to develop.

The third threat to internal validity is statistical regression. This is “the tendency of groups that have been selected for study on the basis of extreme high or low scores to regress or move toward the mean or average on second testing” (Hagan, 1989: 35). This threat would be likely if the areas chosen to receive the intervention had abnormally high car crime rates at the beginning of the intervention, making any drop in car crime an artificial success. Analysis of the historical car crime trends in the experimental areas was carried out to make sure this was not a viable threat.

The fourth threat to internal validity is local history: “events other than the treatment which affect the experimental group but not the control group or vice versa”

(Cook and Campbell, 1979: 105). This differs from global history, which are events that affect both the control and experimental areas. An example of local history could present itself if, for example, the control group or the groups not receiving the warning posters, complain that they are not receiving special police attention when it comes to protecting their automobiles. Project staff discussed this threat with police officials, and the conclusion was that this practice was appropriate by claiming that special police operations target certain neighborhoods, and that these operations rarely cover entire cities. Local history events can be anticipated, but cannot be predicted with any degree of accuracy. Therefore, one should be aware of the local events that occur within the experimental areas, ensuring that these will not pose a validity threat.

External Validity Threats

External validity is the extent to which the results of this research are applicable to other settings. Because the subjects are geographic areas, threats such as testing effects or reactivity are not quite as relevant (the areas cannot act in any way to produce reactivity to the treatment.) Perhaps the most serious threat to external validity is selection bias. The downtown area of Jersey City is demographically different from the rest of the city, many parts of which still experience serious urban problems. The intervention warning of increased police presence may not have the same effect in different sections. On the other hand, this study targets an urban setting, in a large eastern city, with all of the social ills that usually follow (poverty, drugs, and general disorder). Testing these interventions in

this setting does in fact provide external validity because no characteristic really distinguishes these experimental areas from other struggling urban areas.

Seasonality

In terms of seasonality, comparisons to the preceding year showed no evidence that the crime rate fluctuated across the months of the year for this particular area. Each intervention period of each treatment area was compared to the same period for the preceding year; this tested for seasonality. While efforts ensured that the data from the two years were comparable, the Jersey City Police Department was undergoing a change in their Information Management System, and some data elements were altered to accommodate the new computer system. For example, calls for service were no longer recorded in the same manner, and the report taking system was changed. There were some periods when there were no reports being entered at all into the main computer system, creating data voids, and severe instrumentation problems. Inevitably, this raises the concern that because information was collected, computerized, and tabulated differently over the two-year period, comparisons should be taken with caution. Because seasonality did not appear to affect the main index crimes for the concerned areas, the main analysis focused on same year comparisons. Exhibit 33 below illustrates the index crimes for the East District of Jersey City for 1998, and the lack of seasonal effects.

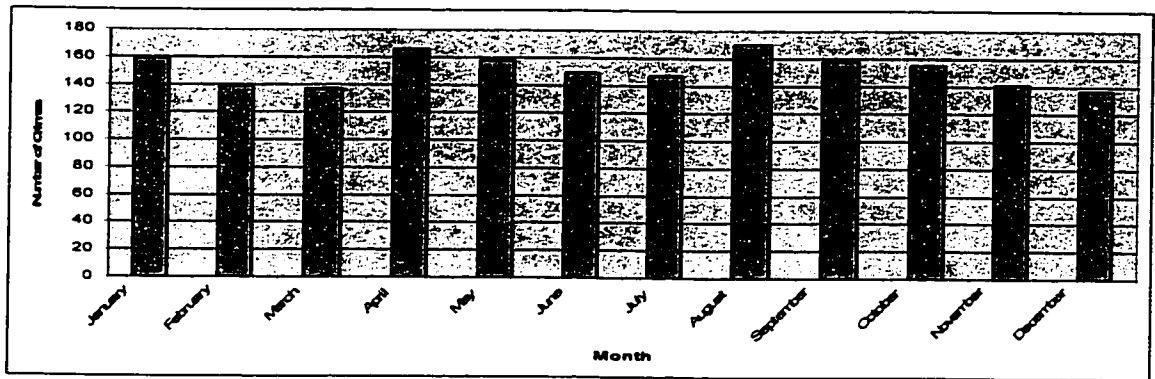


Exhibit 33 Index Crimes for Jersey City's East Police District, 1998

CHAPTER FIVE

“Operation Target” Program Results

To answer each research question, the dependent variables (car crimes, all other crime incidents, and calls for service) were compared across the pre, during, and post periods of the intervention for the different experimental groups. Analysis of variance was used to test the impact of the intervention on the different experimental areas.

“Analysis of variance is an exploratory test designed to detect evidence of any difference among a set of group means” (Agresti and Finlay, 1986: 400), and for more than two levels of the independent variable and a continuous dependent variable, “one-way ANOVA is the procedure of choice” (Levin, 1999: 47).

For each area, the intervention period was broken down by week, and the total number of incidents calculated for each week (dependent variable). One-Way ANOVA’s tested the dependent variable, using the period variable (pre/post/during) as the independent variable. Another set of ANOVA’s compared each area during the same periods.

ANOVA #1

The first set of ANOVA's compared the same areas over different intervention periods.

Experimental Areas

	Publicity	Police	Publicity	Control
Intervention	PRE	↕	↕	↕
	DURING			
	POST			

ANOVA #2

The second set of ANOVA's compared the different areas during the same intervention period

Experimental Areas

	Publicity	Police	Publicity	Control
Intervention	PRE	↔		
	DURING			
	POST			

For each hypothesis, the data sources are identified, a table with the number of crimes is presented (giving the percentage change), and the ANOVA results report statistical significance. After a brief explanation, a decision is made regarding the hypothesis. Where relevant, maps showing the geographic distribution of crimes are included in the findings.

Methodological note on the maps:

All of the maps present the data reported in the following section and exhibits. The incident and calls for service data were geocoded with a high rate of matches, 98% in both cases. (Generally, official data does not meet these geocoding rates, but careful data cleaning ensured a high match rate.) On the Calls for Service and Incident maps, two addresses were removed. 207 7th Street and 8 Erie St are the addresses of the East District Police Precinct, and Police Headquarters respectively. These two addresses appear often in the “location” field in both calls for service and Incident databases. This artificially creates a spot on the map when in fact, there are no actual crimes or incidents at those locations. Officers erroneously list that address when they lack the actual address of the incident at the time of the report.

Hypotheses

- Hypothesis 1:** Does offender-oriented publicity affect the rate of car
Hypothesis 2: Does combining offender-oriented publicity with police presence improve the deterrent effect of offender-oriented publicity?

Data Sources: Official Car Crime Incident Reports

Exhibit 34 Count and Percentage Change of Car Crimes for Each Experimental Area by Intervention Period

<u>PERIOD</u>	POLICE		PUBLICITY		POL/PUB		CONTROL	
	Count	% Change	Count	% Change	Count	% Change	Count	% Change
PRE INTERVENTION	46		49		31		53	
DURING INTERVENTION	38	-17	46	-6	27	-13	41	-23
POST INTERVENTION	46		46		31		43	

ANOVA RESULTS

<u>TREATMENT GROUP</u>	<u>F</u>	<u>Sig. p. <.05</u>
POLICE	.448	.644
PUBLICITY	.062	.940
POLICE AND PUBLICITY	.272	.764
CONTROL	.684	.513

Explanation:

To see if offender-oriented publicity had an impact on the car crime rate, the total number of car incidents was calculated for each area and time period (all car crimes were combined together). From the exhibit above, publicity had little effect on the overall car crime rate. In the pre-intervention period, the publicity alone area had 49 car crimes, and there were 46 crimes during the intervention and 46 during the post intervention. While the police and publicity group had a 16% decrease during the intervention, the police alone group and the control group had even greater decreases. The ANOVA found no statistical difference between each of the group's pre/during/post intervention comparisons, nor were differences found when comparing the three groups for each period, meaning that there was not enough variation in the dependent variable (car crimes) to conclude that the interventions had any significant effect. Even though there is no statistical significance, the percentage changes do show some interesting findings. Except for the control group having the biggest decrease in car crimes, the group with the lowest decrease is the group receiving only the publicity treatment. This supports the idea that having only a "bark" or a mere threat does not suffice. The police only group was second in terms of a decrease, showing that additional directed patrols had a some impact on the car crime problem (-17%) while the police combined with the publicity interventions did not do much better (-16%). Perhaps, this shows that these areas did not gain anything extra from the posters, and that the intervention that counted was the directed police patrols. The control areas had the greatest decreases in car crime, a

finding that makes it even harder to attribute any great value to the police or publicity interventions, and once again, it should be noted that even the control group had no statistical difference in pre/during/post car crime rates. Nothing was occurring in the control area that might have caused this result, and the decrease is simply attributed to an unexplainable fluctuation in numbers.

Perhaps the most perplexing outcome of this finding lies in the treatment area receiving the publicity combined with added police patrols. Many studies support the notion that while random, general police patrols do not necessarily reduce crime, those that target a specific problem, and those that are deployed to target crime hot spots meet more success (Press, 1971; Koper, 1995; Sherman, 1992; Sherman et al., 1997). In this particular case, the presence of police patrols was advertised on every concerned block for a period of ten weeks, during which there was a constant presence of some sort, be it on foot or car patrols. The activities of the police during the implementation of this intervention were well documented and observed; hence, the amount and quality of the police intervention is supported. The use of traffic stops as a method to advertise the police presence (and increase the deterrence factor) was prevalent in this project, and previous research supports their efficacy (Wilson and Boland, 1978; Sampson and Cohen, 1988; Weiss and Freels, 1996). Approximately thirty percent of the total police activity in this experiment was traffic related in one form or another. One explanation is that the people that the traffic stops targeted were not the people who needed a reminder that the police were in the area; hence, any benefit of the advertisement would be lost. There was

concern at one point, however, that various groups from neighboring towns would drive to Jersey City's better neighborhoods, looking for potentially lucrative cars as they drove down the street. In that regard, the high frequency of traffic stops was expected to have some impact on the problem. In addition to the traffic stops, those on foot were subjected to an equivalent form of police activity, the field interview. While some field interviews were probably carried out more in depth than others were, the police presence was still being advertised.

Finally, while the posters warned of increased police activity, there were very few arrests. Offenders were witnesses to numerous citizen contacts and some traffic stops, but the majority of the police activities did not produce fruitful results. Perhaps if the police had had focused more on apprehension techniques and had arrested more people, the warning posters might have had greater success, even in the areas not receiving police treatment.

Hypothesis test: The conclusion is that the publicity intervention and the police intervention had little, if any significant impact on the problem of car crimes in Jersey City, New Jersey.

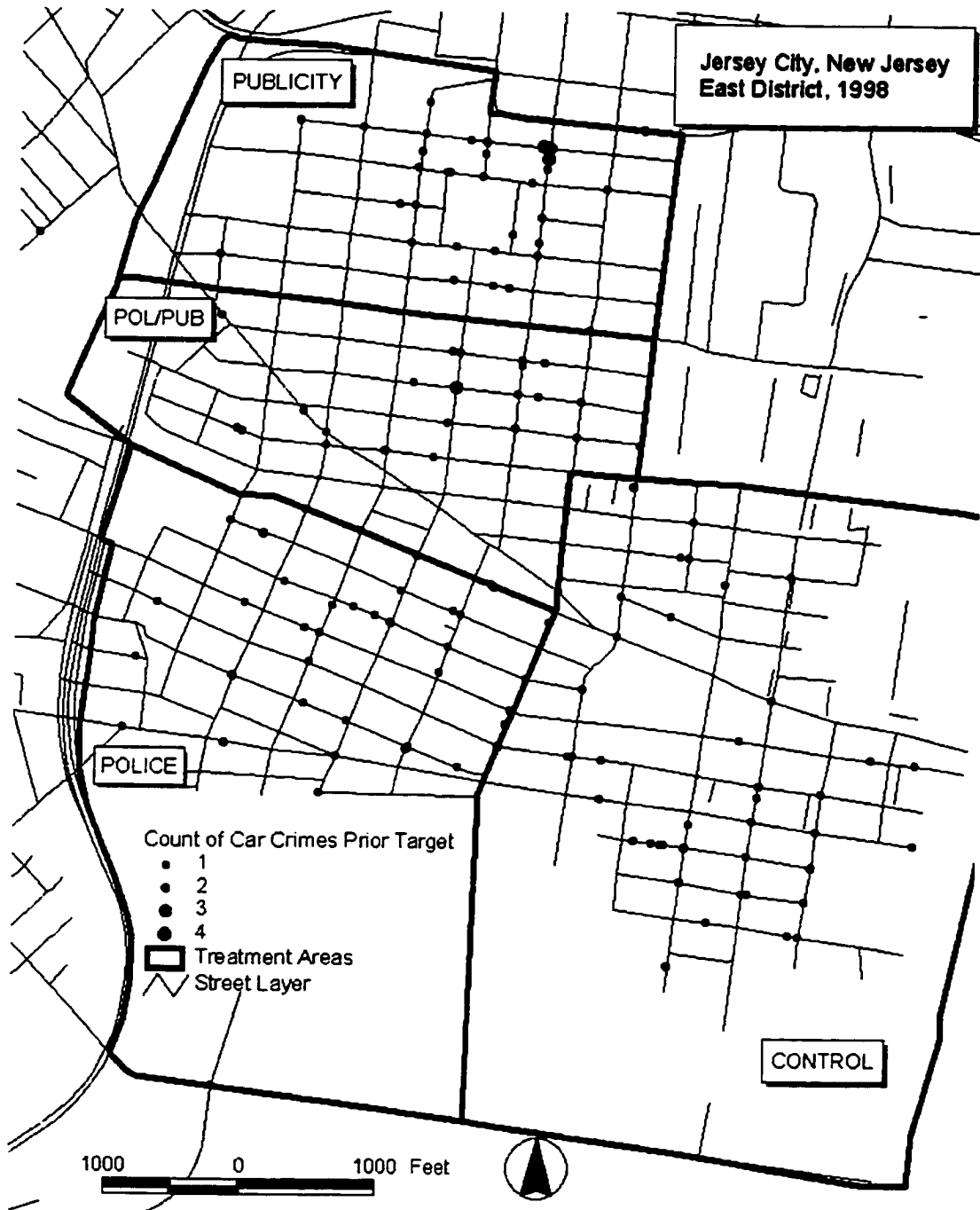


Exhibit 35 Car Crime Locations Prior to "Operation Target"

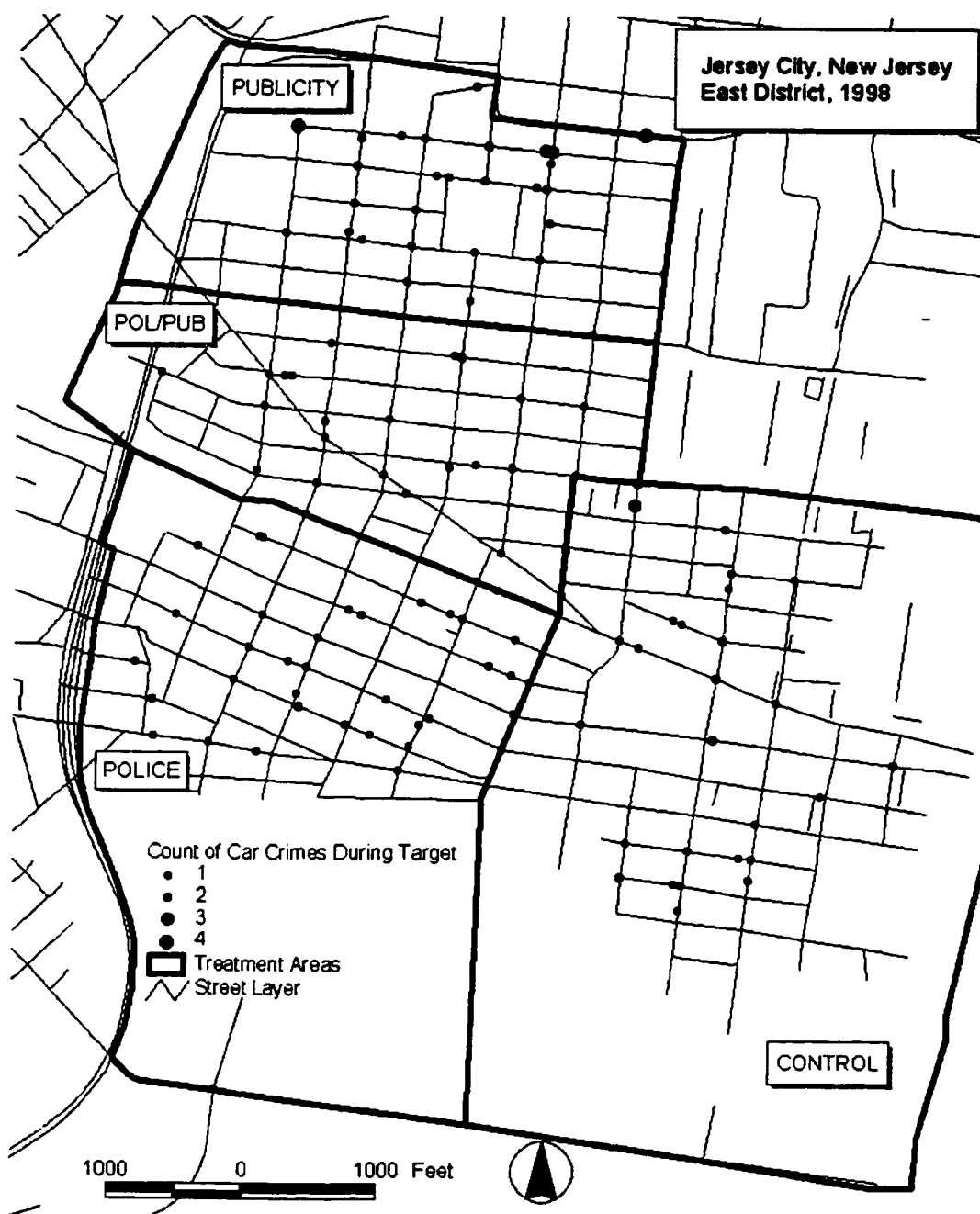


Exhibit 36 Car Crime Locations During "Operation Target"



Exhibit 37 Car Crime Locations After "Operation Target"

Hypothesis 3: Do residents change their security practices due to the offender-oriented publicity?

Data Sources: Street surveys of cars parked on the street, noting the presence or absence of valuables inside the vehicle, and extent of Club usage.

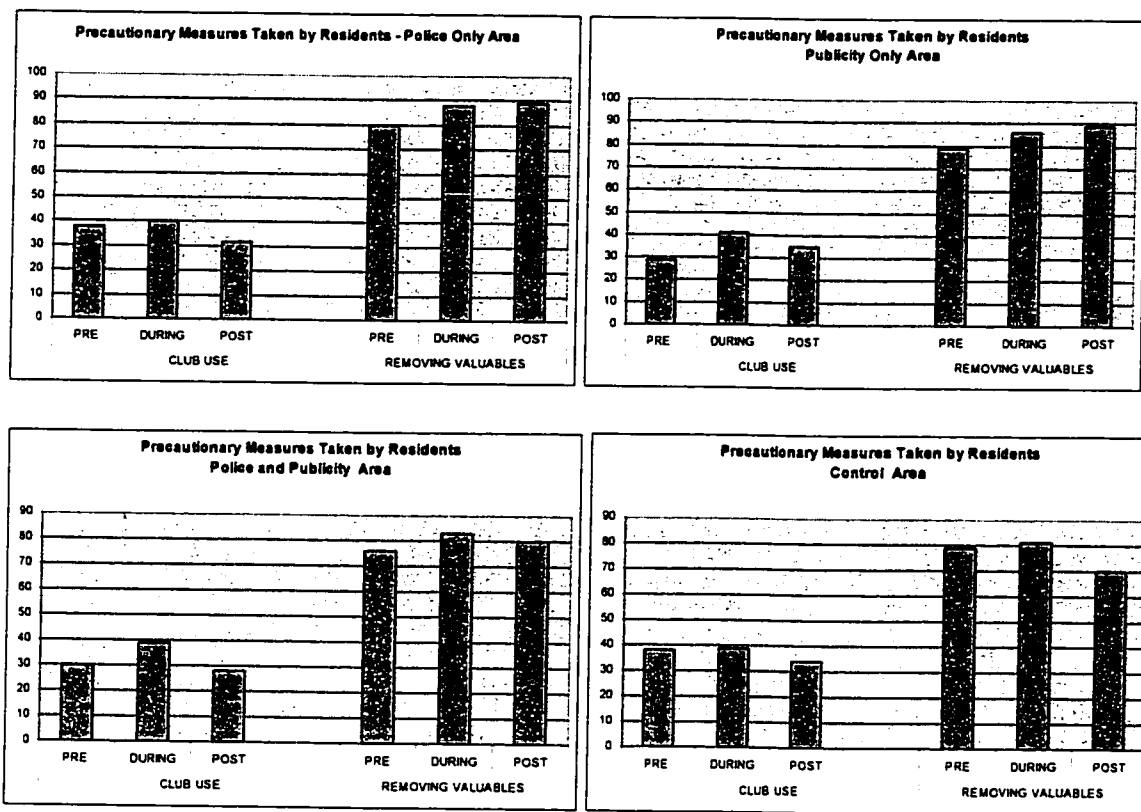


Exhibit 38 Percentage of Club Use and Removal of Valuables During Intervention Periods

Explanation: While the posters targeted offenders, residents also saw them. There was the possibility that residents taking more precautions against car crime would confound any treatment effects. The potential that the publicity would increase security measures taken by the residents living in the treatment areas was always a possibility. If the residents took it upon themselves to make their cars harder to steal, or less prone to other types of victimization, testing the true impact of the publicity would have been more difficult to do. However, like the offenders, the victims did little to change their behaviors. Street surveys documenting the level of opportunities left by the victims (by leaving briefcases in front seat, or cell phones on dashboard) and levels of protection (club use in this case), showed no change as the experiment went on. The car surveys carried out during the project allow us to test this hypothesis. Exhibit 5.4 demonstrates that there was no difference in the behavior of car owners parking their cars in each of the experimental areas. This failure to change regardless of the warnings given is amply supported by prior research (van Dijk and Steimetz, 1980; Riley and Mayhew, 1980; Sacco and Silverman, 1982; Wortley et al., 1998), especially in the arena of car crime prevention.

Hypothesis test: The conclusion is that residents did not alter their behaviors given the publicity warnings.

Hypothesis 4a: Does offender-oriented publicity targeting car crime affect all calls for service to the police?

Data Sources: Calls for Service to the police

Exhibit 39 Number of Police Calls for Service by Treatment Area and Intervention Period

		POLICE	% Change	PUBLICITY	% Change	POL/PUB	% Change	CONTROL	% Change
CALLS FOR SERVICE*	PRE INTERVENTION	748		559		868		620	
	DURING INTERVENTION	934	25	678	21	1040	20	791	28
	POST INTERVENTION	1148		633		991		859	

* Person Crimes, Property Crimes, Public Nuisance, Narcotics, and Prostitution Calls

ANOVA RESULTS

<u>CALLS FOR SERVICE</u>	<u>F</u>	<u>Sig. p. ≤ 05</u>
POLICE	12.1	.000
PUBLICITY	2.25	.125
POLICE AND PUBLICITY	2.79	.079
CONTROL	8.9	.001

Explanation: In terms of calls for service to the police, only two groups achieved statistical significance (the police only group and the control group). There is not enough information to explain why the control group would have an overall increase in calls for service, although all of the other groups moved in the same direction (all groups had an increase of at least 20% of calls for service). If the interventions had an effect, we would

expect an increase or a decrease in calls for service in the treatment areas, and not in the control area. The expectation is that the publicity would make residents aware that there was a special program going on in the area and that their calls for service would be given more attention, but then why would the control group also exhibit a higher call rate? Interestingly, the higher rates of calls for service are in the two areas not receiving some form of publicity. Perhaps the residents in these areas felt as though the “Operation Target” provided extra protection, and called the police less often. It is as if the publicity created a stabilizing effect, which led to no change in the call volume to the police. This is interesting because while some residents called to complain about the publicity, this shows that placing posters in some areas does not result in the police being inundated with more calls for service. This was a concern to police officials at the beginning of the project because the officers chosen to work in the experiment were excluded from the police pool allowed to answer calls for service (unless it was an emergency). Therefore, a disproportionate number of regular officers might have had to go to the experimental areas as a result of calls generated because of the posters.

Hypothesis test: The conclusion is that publicity posters warning of added police presence do not affect call volume.



Exhibit 40 Police Calls for Service Prior to "Operation Target"

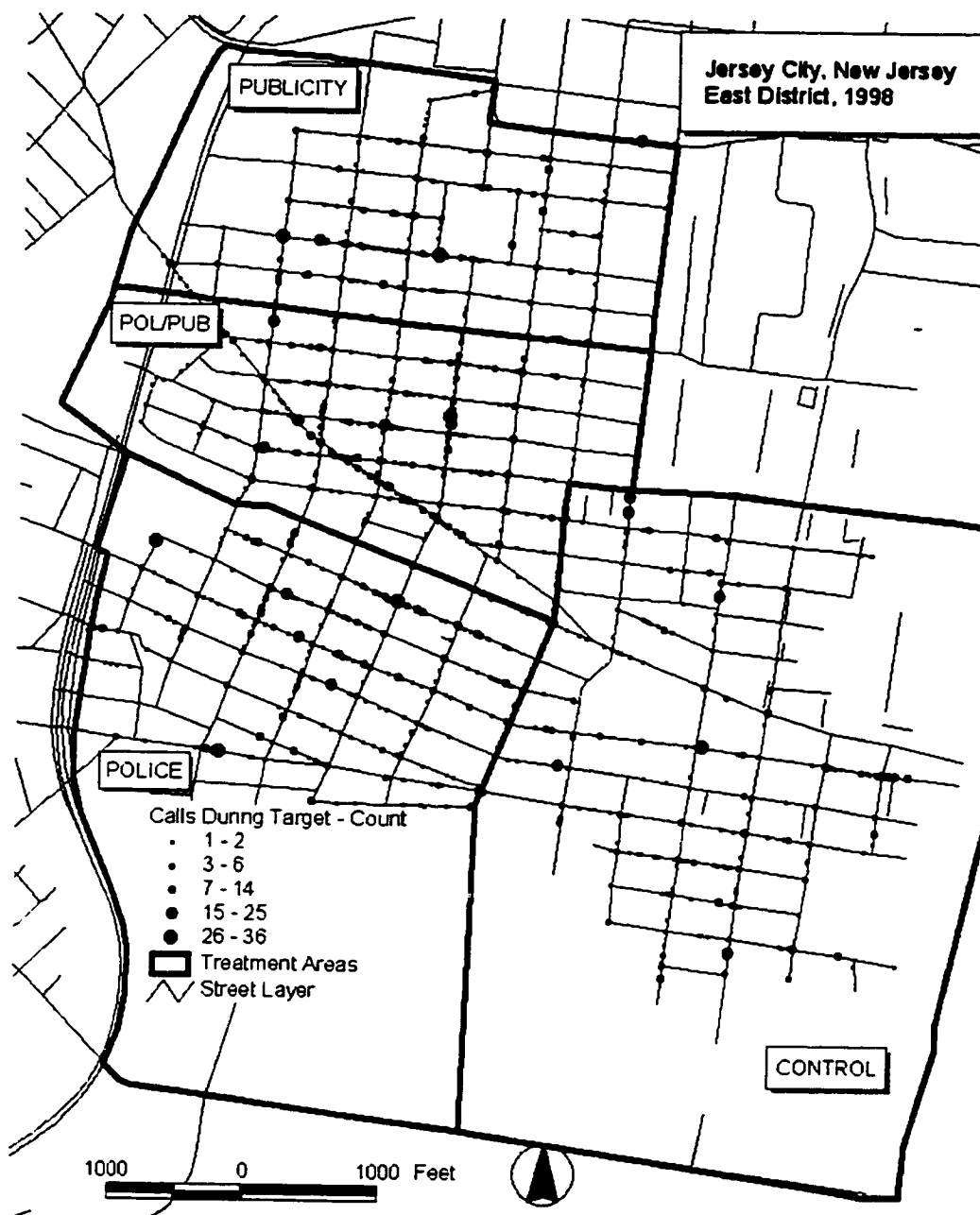


Exhibit 41 Police Calls for Service During "Operation Target"

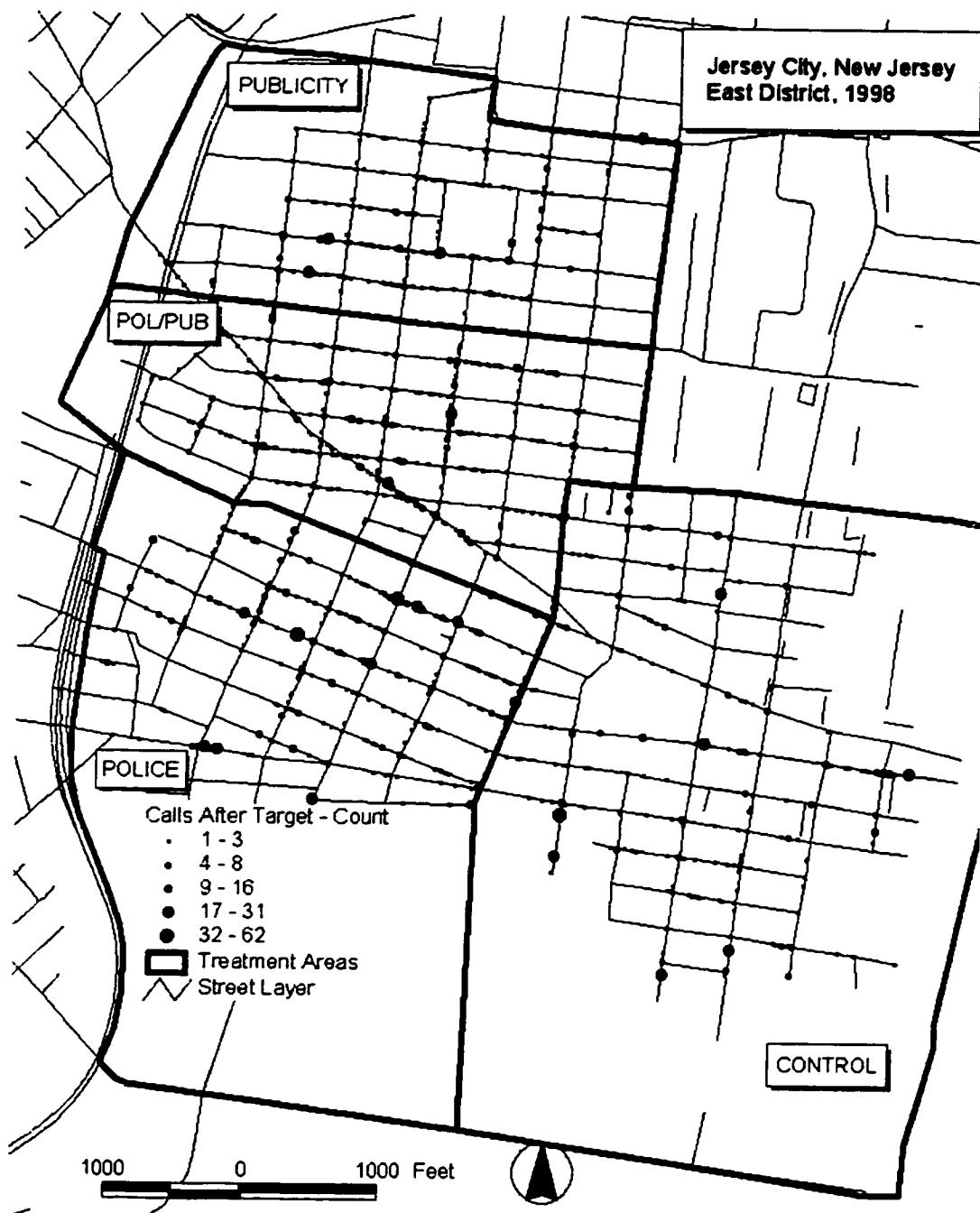


Exhibit 42 Police Calls for Service After "Operation Target"

Hypothesis 4b: Does offender-oriented publicity targeting car crime affect the rate of other street crimes?

Data Sources: Incident data
(Robberies, Aggravated Assaults, and Rape were combined to create the "Violent Crime" category, and Burglaries, Thefts, and Criminal Mischief were combined to create the "Property Crime" category)

Exhibit 43 Number of Crime Incidents by Crime Type and Intervention Period

CRIME TYPE	PERIOD	POLICE		PUBLICITY		POL/PUB		CONTROL	
		Count	% Change	Count	% Change	Count	% Change	Count	% Change
VIOLENT CRIME	PRE INTERVENTION	31		22		39		23	
	DURING INTERVENTION	41	32	22	0	29	-26	25	9
	POST INTERVENTION	38		7		27		26	
PROPERTY CRIME	PRE INTERVENTION	45		37		40		60	
	DURING INTERVENTION	49	9	25	-32	51	28	41	-32
	POST INTERVENTION	56		32		30		37	
TOTAL CRIME	PRE INTERVENTION	76		59		79		83	
	DURING INTERVENTION	90	18	47	-20	80	1	66	-20
	POST INTERVENTION	94		39		77		63	

ANOVA RESULTS

CRIME INCIDENTS	F	Sig. p. ≤ 05
POLICE	.548	.584
PUBLICITY	1.48	.244
POLICE AND PUBLICITY	1.42	.243
CONTROL	.774	.471

Explanation: An assumption was that additional police patrols would have some influence the non-car street crime and other property crime. It was not only the added police presence, but the additional police activity that was expected to affect other crimes. While the posters warned auto thieves, burglars or robbers still took risks when being present in the area. Special plainclothes units designed to fight street crimes were usually assigned to different areas of the city on a rotating basis, so no one area ever received continuous police protection. The posters warned offenders that surveillance and field interviews were to be common activities in the designated areas. Police officers carrying out field interviews often ask the purpose of one's journey to and from an area, the names of friends being visited, and other questions designed to establish the real reason as to why a person is present in a given area. When the answers raise suspicion, the police may question the individual further, leading to the discovery that a crime was indeed afoot. The expectation was that all offenders were going to be apprehensive about being seen in the designated areas with ill intentions or illegal proceeds. This was not the case, as no changes in any of the experimental groups were statistically significant, and the percent changes demonstrated a slight decrease in the publicity only area and the control group, the two groups that expected to see the least amount of decrease. These decreases are welcome, but this study cannot attribute them to the selected interventions.

There is one positive outcome to this finding. It lends support to the lack of effect of the publicity and police intervention on car crimes. It could have very well happened that the interventions had reduced street crimes, but not car crimes. This would have

raised questions as to why car crimes were not affected. In this scenario, any methodological problems associated with the low count of car crimes are attenuated by the above results in that even with a higher number of cases, the impact of the selected intervention is minimal.

Hypothesis test: The conclusion is that the posters had no effect on any other street crime.



Exhibit 44 Car Incidents Prior to "Operation Target"



Exhibit 45 Crime Incident Locations During "Operation Target"

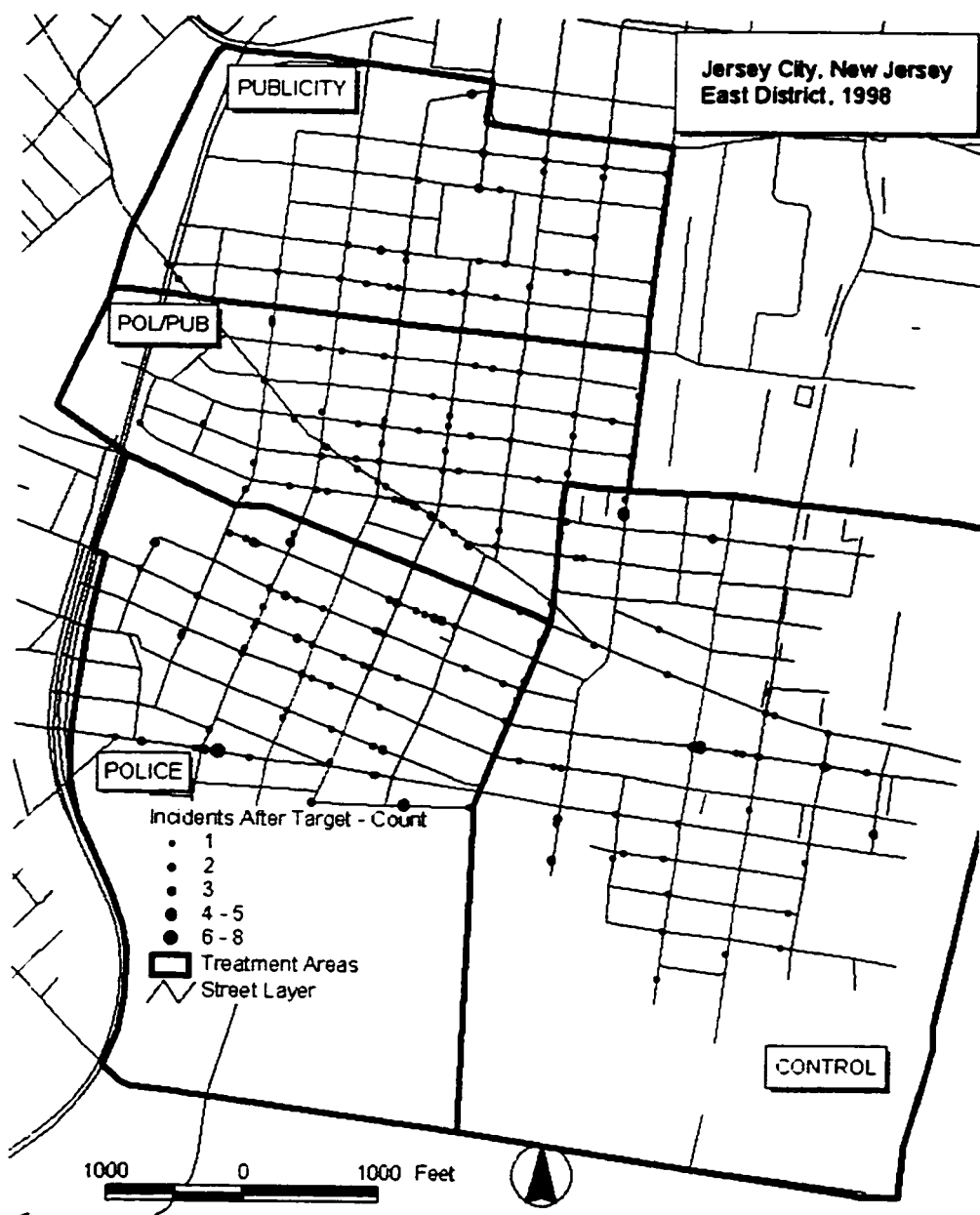


Exhibit 46 Crime Incident Locations After "Operation Target"

Hypothesis 5: Did the interventions affect the “value” of the crimes? For instance, did the type of target change from expensive cars to cheaper ones?

Data Sources: The make and model and year of the cars listed in the official incident report was noted and a dollar value was attached to each case from a trade book listing used car prices.

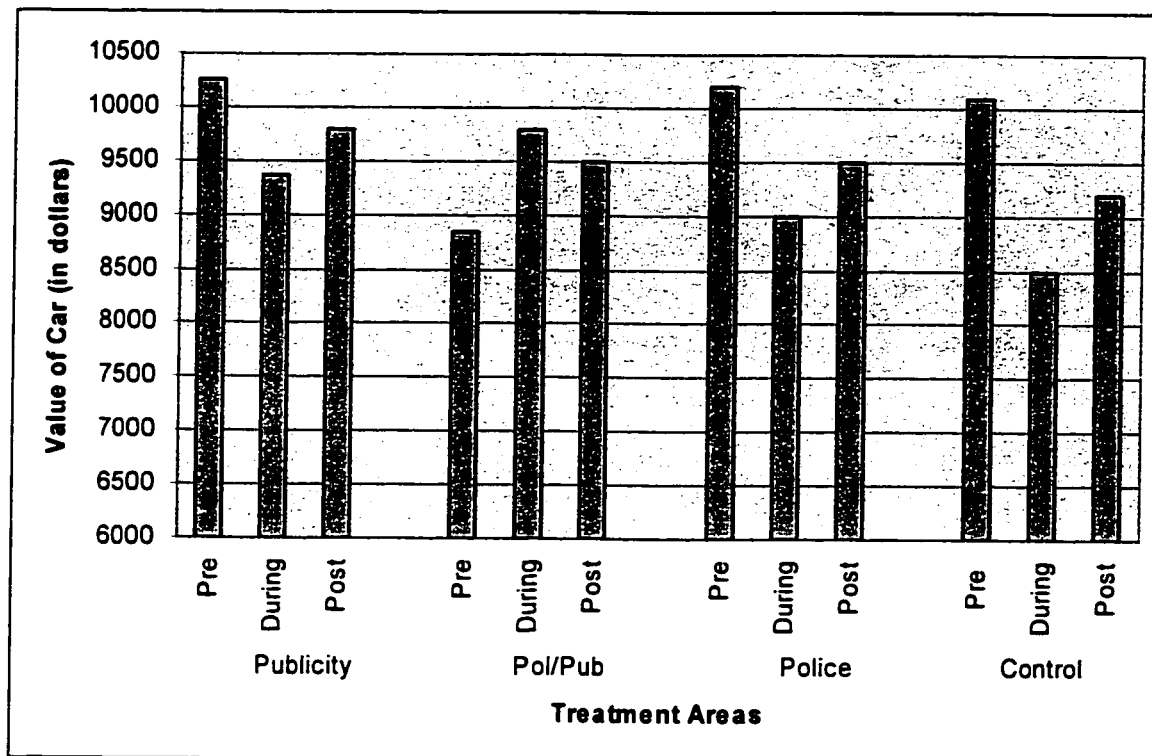


Exhibit 47 Average Value of the Cars Stolen Across Treatment Groups and Time Periods

ANOVA RESULTS

<u>VALUE OF CAR CRIME</u>	<u>F</u>	<u>Sig. p. < .05</u>
POLICE	3.71	.038
PUBLICITY	.715	.498
POLICE AND PUBLICITY	1.68	.206
CONTROL	.711	.500

Explanation: This was a simple test to see if while the actual count of car crime did not change, perhaps the nature of the crime would. Perhaps the thieves would target cars that would attract less attention, or that are easier to steal (older cars). Likewise, perhaps targeting older cars would lead to less penal severity than getting caught (if one were to be caught) with a more expensive car. Only the police/publicity group had an increase in the value of the crime. This could be attributed to the publicity on the street, but then, why is the same result not found in the police and publicity area? The ANOVA results validate that the value of the car is statistically insignificant across the three treatment groups. At this point, there is not enough contextual information to explain this phenomenon. This type of analysis, however, should be considered when looking at property crimes, as ultimately, the value of the crime determines its severity.

Hypothesis test: The conclusion is that the posters had no effect on the value of the car thefts.

Displacement

Did the selected interventions lead to a displacement of car crimes to surrounding areas? As mentioned before, the natural boundaries of the selected sites make it difficult to develop “catchment” zones, as these are either bodies of water, or vacant, industrial lots. Nevertheless, looking at the spread of the existing car crimes geographically can give some clues as to the existence of the eventual displacement of crime. Using a crime mapping technique known as Hotspot Analysis (Kernel Density Method), a geometric grid is applied to a map, and based on the number and proximity of incidents per each cell of the grid, a value or score is obtained. This method identifies where the most crimes are concentrated, and the map is shaded accordingly. This technique was carried out on the three periods of the intervention to test for spatial movement of car crime over time. In this research, there was no real evidence of displacement as the maps below show. This is partly due to the offenders not reacting to the interventions in the first place, and since they did not refrain from offending in the treatment areas, there was little need to seek targets out of the experimental zone. Displacement in general is not a forced consequence of situational crime prevention measures (Barr and Pease, 1990), and in this case, had displacement been a real concern, the natural boundaries would have played an important role in reducing the threat of displacement.

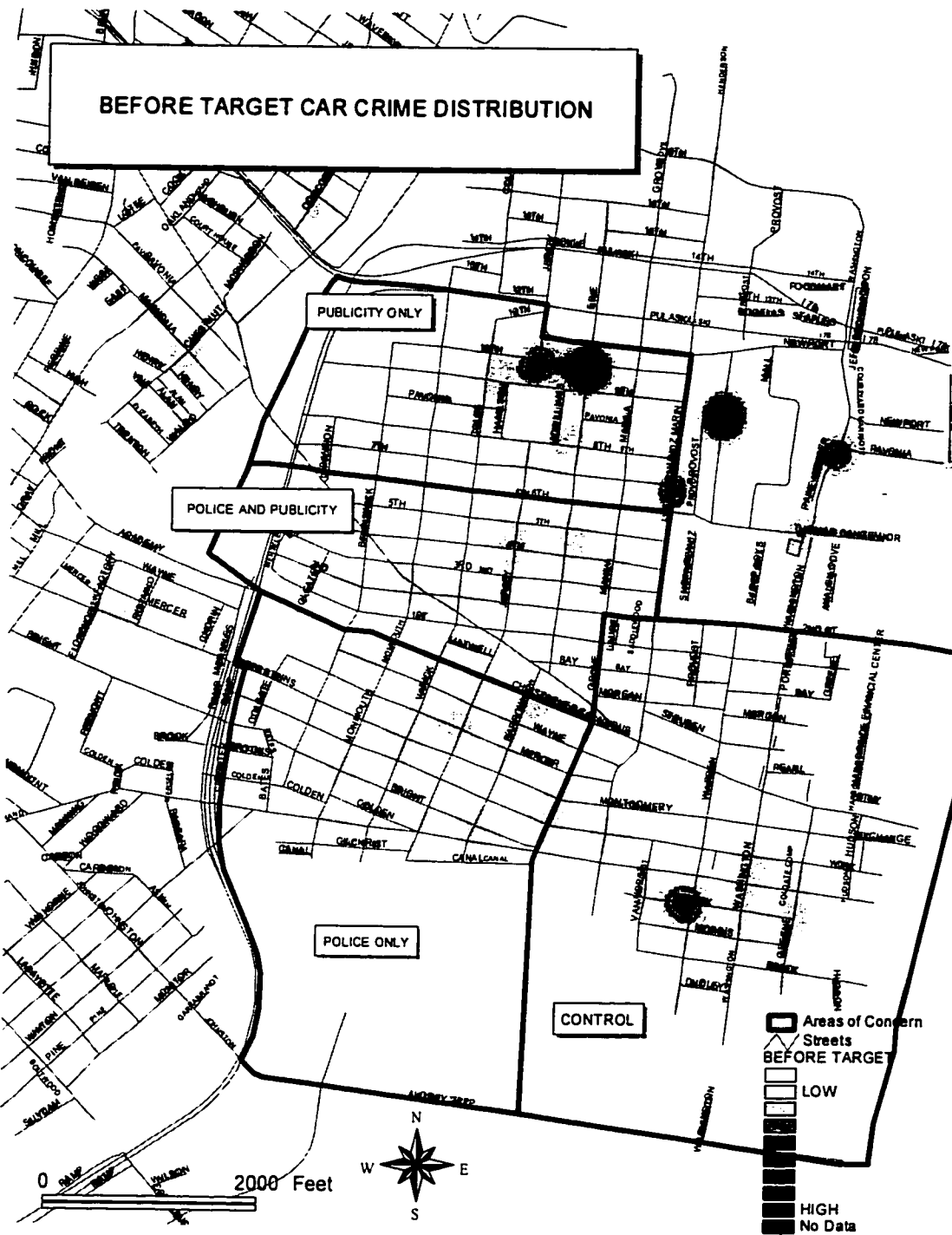


Exhibit 48 Spatial Distribution of Car Crimes Prior to "Operation Target"

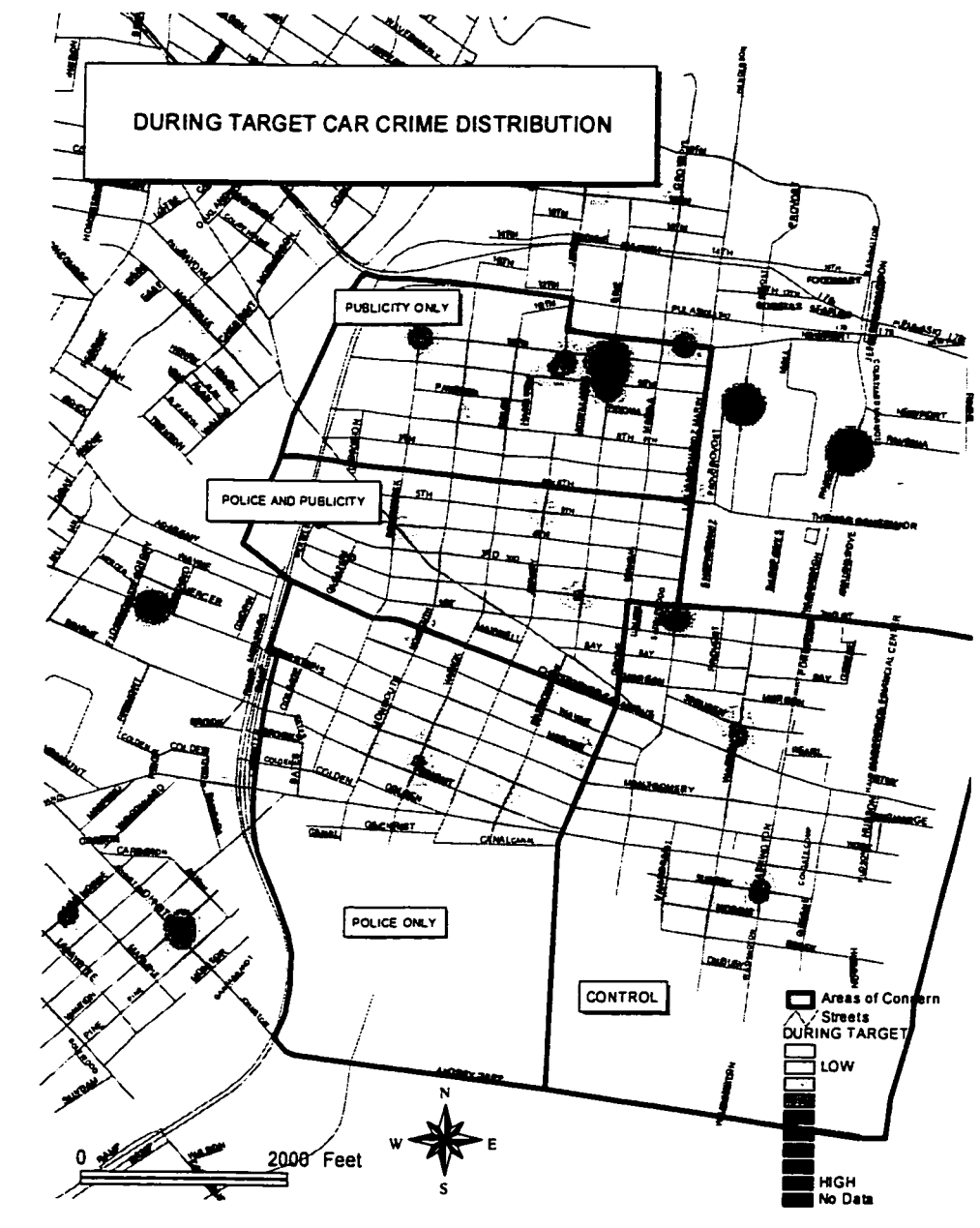


Exhibit 49 Spatial Distribution of Car Crimes During "Operation Target"

Was there a change in the type of targeted vehicle over the course of the intervention?

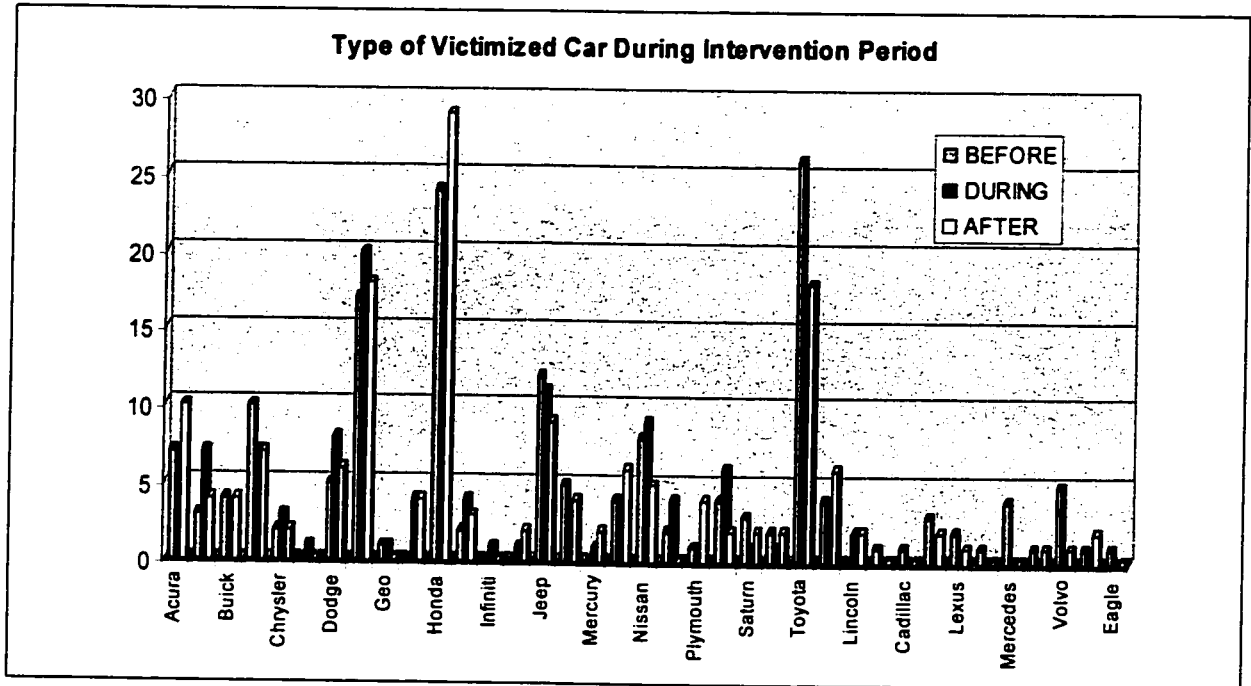


Exhibit 51 Number of Car Makes Targeted During the Intervention Period

Breaking down the Exhibit by make of car, intervention period, and treatment area would lead to too few number for each category. During the intervention, all treatment groups experienced a numerical decrease in car crimes, and this exhibit illustrates the general pattern of these decreases by car make. It is interesting to note that the two most targeted cars, the Hondas and the Toyotas, were less stolen or broken into during the

intervention, and then, both experienced an increase.

There were other research questions of interest to this study, i.e. is there a change in the recovery rate, the level of car damage to the cars, and do arrests increase due to the intervention? Unfortunately, many of these could not be answered with the current state of information being collected by the police department. Explanations concerning these problems are described below.

Recovery Analysis

When the police recover a stolen car, they fill out a recovery report and a common file number should link it to the theft report. Unfortunately, if officers cannot (for any reason) ascertain if an abandoned car has been stolen or not, they will simply create a new file number. This makes it very difficult to link the recovery report to the original theft report, and given the sheer number of reports, doing a manual reconciliation becomes a gargantuan, if at all reliable task. To complicate matters, there are thefts that occurred within Jersey City but recovered in another jurisdiction, creating only half of the relevant paperwork. With the NCIC, (National Crime Information Computer), recoveries and thefts can be tracked from one jurisdiction to another on a case-by-case basis, but there is not system in place keep track of these multi-jurisdictional cases. Finally, at times when all of the paperwork was located, the information it contained was a puzzle in itself.

Many times, officers left the recovery location field on the recovery report blank, or some officers listed the theft location while others listed the precinct address. Trying to guess the chaotic and at times random allocation of file numbers to car theft/recovery reports, and trying to guess theft/recovery locations, made any serious attempt to analyze recovery rates futile, and hence this was abandoned. The advent of crime mapping and crime analysis will hopefully lead to changes in the requirements for proper police data collection practices. Multi-jurisdictional crimes like car thefts that have four very important geographical pieces of information (offender address, victim address, theft location, and recovery location) need to be tracked differently than more stationary crimes like robbery that only have three points (offender address, victim address, and crime location).

Arrest Analysis

Here also, poor data gathering strategies on the part of the police department led to a lack of usable information. With every arrest, officers had to fill out two location fields to fill out on the report: the crime location and the arrest location. The arrest location was of interest due to the added police patrol intervention. Unfortunately, too many reports contained the improper information as the arrest location listed was the address of the police precinct where the officers filled out the arrest paperwork.

Damage, theft method, items stolen, and point of entry Analysis

This analysis was also not possible due to too much missing information. The fields on the police report designed to collect this information were routinely left blank and police administrators rarely addressed this problem. For example, simple frequencies revealed that 65% of the reports collected from the treatment areas lacked information about how the perpetrator entered the automobile (forced door, broke windows, etc.). For vandalism cases, close to 60% of the reports did not report the nature or extent of the vandalism, and finally, 77% of the reports failed to note whether or not the car was locked or not, even though there were designated fields on the report to gather this valuable information.

CHAPTER SIX

Discussion and Implications

Summary of Results

Across the different areas, the intervention did not appear to have a significant effect on car crimes or other dependent variables such as the overall number of calls for service. The area receiving the publicity treatment did not exhibit a lower rate of car crime, regular crime incidents (robbery, burglary, aggravated assaults, etc.), or calls for service. The threat of apprehension did little to deter the car criminals, and it failed to affect person and property crimes. When looking at the area receiving only the added police patrols, there was a similar lack of significant results, showing that the police patrols did not deter the criminal element. When looking at the area combining the police patrols and the publicity, the area where the threat of apprehension was the most salient, there was also no statistically significant change in the dependent variables. Perhaps there were too few car crimes in the analysis, limiting variation in the dependent variable, leading to insignificant statistical outcomes. However, the lack of significance in the other crime categories and calls for service (both of which had numerous cases) lends support to the lack of significant change in car crime rates.

Publicity as a Crime Prevention Tool

Publicity campaigns as crime intervention require extensive planning. While they appear to be an efficient and inexpensive crime prevention tool, the way they are designed and carried out needs to be clearly thought out before any type of serious benefit can be expected. Publicity can either target a particular “consumer”, (for example, having the police leave flyers on windshields of unlocked parked cars), or putting warning posters aimed at specific offenders in high crime areas. The other method is to cover more of the population with general messages, using radio or newspapers. These, remaining broad and impersonal, however, also have their shortcomings and have not been proven very effective (Riley and Mayhew, 1980).

In this project, the intervention was based on situational crime prevention techniques known as formal surveillance (Clarke, 1992), taking the form of publicity posters and additional police patrols. The findings of this study are somewhat of a surprise given the past support for the value of offender-oriented publicity. While past experiments attempting to use victim-oriented publicity to reduce crime have not had with much success, (Morris, 1972; Decker, 1972; Marplan, 1973; Heal and Burrows, 1979; Monaghan, 1988), research supports the use of offender-oriented publicity. Poyner’s CCTV buses, Laycock’s advertising of anti-burglary measures, and Wortley’s publicity of the HEAT program are all witnesses to the power of offender-oriented publicity. In the above-cited studies, the benefits of publicity were evident, and pointed to the potential efficacy of this type of intervention.

The publicity intervention was based on a theoretical foundation, drawing upon elements of the rational choice perspective, routine activities theory, situation prevention, and deterrence. In addition, previous research on effective publicity guided the development of this publicity campaign, leading to a medium that could not be ignored and one whose message was as salient as possible. For example, this study heeded an important component of offender-oriented publicity: it warned of increased apprehension risks. The message was accompanied with a geographic map showing the exact area of the intervention, and anti car crime drawings were included to make sure the message eluded no one.

The implementation of the publicity component was thorough and the intervention areas were literally saturated. There is no reason to believe there were factors that may have reduced or impeded the value of the publicity message. The residents and offenders in the area obviously saw the posters as they were either calling the police station to complain about their unsightliness, or they were vandalizing them by ripping them or by writing graffiti on them. The sheer number of posters (over 600 in all) in the experimental areas has to lead to the conclusion that the posters were seen.

Seen perhaps, but not heeded. The crux of the problem lies in people not believing the message, and it having little impact on criminal behavior. Even though the

posters warned of police activity (a step above much signage or publicity that only states the proscribed behavior), and clearly delineated the geographic areas under surveillance, they failed to have the desired impact. This lack of effect requires some explanation. The implementation of the interventions was thorough, monitored, and carefully quantified to ensure proper dosage. Therefore, other factors need to be considered as to why the publicity did not work:

- 1) Nature of the poster
- 2) No credible police threat
- 3) No use of local media
- 4) Setting of the intervention

Nature of the posters:

It is important to see the posters as a medium that seeks to convey a message. Just as an attractive brochure lures tourists to distant tropical beaches, a warning poster should exude authority and seriousness. In this particular case, while the project staff believed that these elements were present, perhaps they were lacking. The choice of cardboard was a two edged sword. Its temporary nature gave credence to the possibility of a real crackdown (as offenders know that any type of sustained police intervention is rare) instead of numerous rusting steel signs ironically threatening imminent action. On the other hand, perhaps the cardboard poster was not taken seriously, even with police department logos clearly displayed. In terms of the message, perhaps the warnings were not worded in a way that properly conveyed the police threat and legal consequences.

Posters should maybe contain information about *both* the risk of apprehension and the eventual legal repercussions.

Finally, maybe the posters could have been designed differently to include other potential “guardians”. For example, the warning could have been tailored more like “Neighborhood Watch” type signs, creating the perception of more eyes on the street, increasing the offender’s uncertainty.

No credible police threat:

While there was a police component implemented, this did little to increase the value of the publicized message. Through all of the warnings, the offenders remained confident that there was a low probability of police apprehension. The lack of threat was the result of an inadequate police presence or a sense that the police were not going to be effective in catching many people, regardless of what the posters may have warned. Perhaps the car crimes were easy to commit as the offenders only had to glance around and evaluate the risk of apprehension by looking out for police patrols. Adding additional patrols, even some plain-clothes officers might have created a greater saturation level in the area, but the aim of the project was not to seek total police saturation, it was just to advertise a slight increase in car-focused patrols. It should be re-stated that while the increase in police did not lead to drastic arrest numbers, it did spread the message that there was a special program underway, and the offenders had no way of knowing the exact extent of the police deployment. Nevertheless, had the police been more successful

in catching some offenders, the message of the publicity posters would have deterred more people.

No use of local media:

The interventions in this project were limited to a select few areas. To avoid contamination effects, it was decided not to advertise the program beyond the boundaries of the areas that were to receive a given interventions. However, using local media outlets such as newspapers and advertising in schools could have helped the publicity campaign reach its intended goal of car crime reduction. Simple posters attached to posts send a message, but perhaps people take this message more seriously when it receives additional media coverage. Furthermore, local media can provide ongoing reports as to the progress of the program. Publishing stories about people who were the subject of police attention for car crimes may help the message gain even more significance.

Setting of the intervention:

This section deals with the contextual surroundings of the study, and examines the impact of attempting to carry out a publicity campaign in an urban setting. The premise behind much of the rational choice school of thought is that offenders will consider risks, effort, and rewards before deciding to engage in a criminal act (Cornish and Clarke, 1986). While it is true that most offenders rely on "situational contingencies" (Tedeschi and Felson, 1994), perhaps some individuals accustomed to harsher urban conditions

place less importance on these situational contingencies, and engage in greater risk taking. In this study, perhaps the offenders discounted, or worked around the exact measure designed to make them not act. As an example, a police report listed the items stolen from a car and one item was the Club[®] attached to the steering wheel. Another report lists \$1.59 worth of grapes taken from a front seat. The routine activities theory states that crime will occur when potential offenders, suitable targets converge in space and time in the absence of a capable guardian (Cohen and Felson, 1979). At face value, this study significantly increased guardianship, as it even alerted residents to the problem of car crime, increasing their level of guardianship, and yet there was no impact on the targeted problem. Once again, perhaps the urban, impersonal nature of the setting, combined with a hard to detect crime, did not allow publicity to reap its intended benefits of guardianship. Had these exact interventions (police and publicity) been applied in a different setting, would the same results have occurred? Would the signs have been vandalized with the same intensity? In this case, it is clear that publicity, even when supported by police efforts have little impact on the offending population, in terms of car and other crimes. Despite all of this, publicity should still be combined with situational crime prevention efforts as it allows the intervention to “reach” many people that may not come in direct contact with the designed crime prevention method, multiplying the potential effectiveness of the prevention effort.

Police as an Intervention to Car Crime

To make the publicity more salient, and to try to increase its crime prevention benefits, police patrols complemented the warning message. These were to make good on the promise of "Operation Target", and its intent to deter auto thieves. In this case, this meant involving the police department and some of its officers on an overtime basis. The value of this relationship merits discussion because police patrols were part of the interventions, and their efficacy had a lot to do with the success of the publicity intervention. If the police failed to "bite", was the failure of the "bark" to blame?

The officers chosen for this project were regular patrol officers who elected to work extra paid shifts as part of the intervention. This avoided having to create an "Auto Crimes" squad because the intervention called for additional police presence, not the creation of a potentially bureaucratic entity that would have required the assignment of special supervisors, and other constraints. While the police component was implemented to the project's parameters (numerous traffic stops, high visibility, geographic integrity), the police presence failed to have the desired impact. Numerous officers would complain often to the shift observers that while the patrols had some benefits, they (the officers) were convinced they would never catch a thief in the act: "They see us coming two blocks away...and these cars and uniforms don't help, we need to be in plainclothes" (Conversation with Operation Target Officer, May 1998). To increase their apathy, they explained that even if they were to stop a stolen car, the occupants could only be charged with "receiving stolen property" (a misdemeanor) because legally, the officers could not

prove that the individuals driving the car had actually stolen it – they did not witness the act. This led to the officers relying on the softer activities and the more banal traffic enforcement. Although this was important to establish the police visibility, too few activities perturbed the offending community. The distinction between the total number of activities and the actual presence exuded on the street is a fine one, and one needs to remain cognizant of the realities of police work, police patrol behaviors, and police productivity as a whole. During one ride-along, an officer stated that he never gave out traffic violations, he only gave warnings. His reasoning was that violations only puts “points” on the driver’s license, increasing the insurance cost, making the insurance companies richer, and he refused to work for the insurance companies. This anecdote indicates that any police directives should take into account some of the prevailing officer philosophies as these will influence the outcome of the desired police activities. The police component was only a secondary, supporting intervention to the primary publicity, and since the police were deployed as planned in both temporal and geographical aspects, this research considers the police role as being properly implemented for the parameters of the study.

Conclusion and Future Research

Research evaluations test the effectiveness of interventions. As such, they run the risk of failing to show success in terms of the intended benefits. In this particular case, does the failure to reduce car crime mean that publicity should be abandoned as part of the crime prevention arsenal? No. As long as the project was properly implemented, the study's results are not in vain, and are nevertheless important. An evaluation that shows no success does not necessarily dismiss the intervention or crime prevention method as a whole (in this case publicity), it merely highlights the conditions under which it has more difficulty in achieving success.

Recommendations for future research:

Future research should focus on the elements that will enhance publicity as a crime prevention method in itself, or in its role as a supporting factor in other crime prevention techniques. The rational choice perspective, the routine activities theory, and the "broken windows" concept each rely on passing information to the offending population. Rational choice and routine activities seek to alter the offender's decision-making mechanism, and "broken windows" attempts to let offenders know that lawlessness (no matter how trivial) will not be tolerated. The role of publicity in these endeavors cannot but be complementary as the more effective information is passed on to potential offenders about eventual risks, the less likely they are to offend.

Testing Effectiveness of Publicity Efforts:

Publicity campaigns need to be empirically tested and evaluated to determine *when* and *why* it becomes effective as a crime prevention tool. Research should also test publicity on other specific crime types, and in different geographical settings. Only through systematic evaluations will we discover the benefits and shortcomings of publicity. In his study of bike patrols in Vancouver to prevent auto thefts, Barclay states that: "The introduction of the bike patrol was preceded by a media campaign which resulted in extensive coverage in local newspapers and in major regional daily newspapers..." (Barclay et al., 1997: 147). Unfortunately, the exact crime prevention value of the media campaign was never isolated and empirically tested. While the need to isolate the effect of publicity, future research should determine if there are interaction effects when used with various crime prevention methods. Perhaps publicity does little when applied to police patrols trying to address car crimes, but it may have more potency when combined with for example, anti-graffiti campaigns.

It is also important to adopt and develop research designs adapted to the needs of publicity-based research to isolate and measure the effect and extent of publicity. While some publicity ventures are concentrated in small, local areas, others are national campaigns affecting many more people, each forcing its own set of evaluation

requirements. As Eck states: “in the world of small-scale, small-claim prevention there are alternative scientific approaches that have greater epistemological validity and are of greater practical utility” (Eck, 2002: 96). This is especially relevant to this type of endeavor as many publicity campaigns are created and disseminated to the public (victims and offenders alike) only response to crime problems. This could impede the traditional evaluation models for two reasons. The first problem is because to test the medium in an experimental manner there is the requirement that some areas not receive the valuable information⁶. Officials vested in the publicity campaign may not always see the benefit of an evaluative component, and they may be reluctant to deprive some segments of the population of the intended message. The second problem that might hamper publicity’s effectiveness is its reactive nature. Relying on publicity to address a crime problem that has become a serious concern to the public and officials alike may be asking too much of posters and television campaigns. Perhaps publicity has more benefit when used more proactively, with its message spread over longer periods. Warning victims or offenders of impending consequences may not be the best use of publicity campaigns, and traditional experimental designs may not adequately identify how publicity works under these conditions.

⁶ This also raises some ethical issues, as it did in this particular experiment when a robbery victim called the police station to demand where these “car-cops” were at the time of her victimization. Unfortunately, she was in a treatment area that was not actually receiving additional police attention, but the signs were posted, and she expected it.

Increasing Publicity's Benefits:

Future research should consider increasing publicity's benefits by combining it with multiple crime prevention techniques. For example, the publicity used in this particular research only advertised the use of police patrols to potential offenders in an effort to impact car crimes. Perhaps the campaign could have been more general in its message and in its target audience by simply advertising an "Anti Crime Effort", and combining it with the implementation of simultaneous multiple crime prevention techniques (notifying owners of valuables left in cars, increased police patrols, increased steering wheel lock use, CCTV, etc.). Future research needs to test the benefits of publicity when it advertises single interventions versus its benefits in advertising more comprehensive crime prevention efforts.

In addition to measuring the impact of campaigns on crime problems, future research should consider examining the effect of "publicizing the publicity". This is when the successes of a particular campaign are publicized and discussed in the media, further enhancing the power of the initial campaign. For example, while this project warned of added police patrols, a follow-up in local media outlets showing the number of people arrested could have been beneficial in terms of giving credence to the warning posters. Without this sort of exposure, while a program may be beneficial, those that are targeted by the effort remain blissfully unaware of its progress and hence, its real consequences. Follow ups in local media have been identified as a powerful aspect of

crime prevention publicity as evidenced in Poyner's CCTV bus study and Laycock's "Operation Identification" study.

The context-specific nature of publicity campaigns also needs further research. Because publicity campaigns are, as Eck states, "place-focused interventions", evaluations need to identify the specific mechanisms that make publicity a success or not in particular settings: "the measures implemented may be highly effective for the problem they were designed to address and in the local context they were developed, but less effective elsewhere (Eck, 2002: 94). Conversely, perhaps the intervention tested in this research may find some benefit in another setting, under different conditions.

Future research on publicity should focus on the types of messages that offenders heed, and why they are effective. What elements of a publicity campaign are the most effective in achieving the deterrence or self-protection sought? Further studies should also determine the most appropriate method of information distribution when it comes to crime prevention efforts. Are television campaigns more effective than print media, or publicly placed posters? Research should also explore the length of time needed for a publicity campaign to have effect. Are there social and geographical settings that are more receptive to publicity? Finally, cities attempting to use street signs to deter offenders should borrow techniques from the private advertising industry more often, as it has developed efficient attention-grabbing and item-selling techniques that obviously have more impact on its consumers than steel signs with red lettering on white backgrounds.

Exhibit 52 ANOVA Results for Police Only Area

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p ≤ 05</i>
Calls For Service				12.1	.000
Pre Intervention	10	74.80	14.9		
During Intervention	10	93.40	19.3		
Post Intervention	10	114.80	19.7		
Incidents				.548	.584
Pre Intervention	10	11.90	4.4		
During Intervention	10	13.80	4.7		
Post Intervention	10	13.90	5.2		
Car Crimes				.448	.644
Pre Intervention	10	4.50	2.1		
During Intervention	10	3.80	2.5		
Post Intervention	10	4.60	2.6		
Value of Car Crimes				3.71	.038
Pre Intervention	10	10391	2572		
During Intervention	10	7041	3884		
Post Intervention	10	9297	1393		

Exhibit 53 ANOVA Results for Publicity Area

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p ≤ 05</i>
Calls For Service				2.25	.125
Pre Intervention	10	55.90	10.6		
During Intervention	10	67.80	15.4		
Post Intervention	10	63.30	11.2		
Incidents				1.48	.244
Pre Intervention	10	10.2	3.7		
During Intervention	10	9.30	3.4		
Post Intervention	10	7.60	2.9		
Car Crimes				.062	.940
Pre Intervention	10	4.80	1.5		
During Intervention	10	4.60	2.1		
Post Intervention	10	4.50	2.7		
Value of Car Crime				.715	.498
Pre Intervention	10	10807	2459		
During Intervention	10	9898	2843		
Post Intervention	10	9552	1868		

Exhibit 54 ANOVA Results for Publicity and Police Area

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p ≤ 05</i>
Calls For Service				2.79	.079
Pre Intervention	10	86.80	11.9		
During Intervention	10	104.00	18.8		
Post Intervention	10	99.10	18.5		
Incidents				1.42	.243
Pre Intervention	10	11.50	4.1		
During Intervention	10	12.20	3.1		
Post Intervention	10	9.20	4.7		
Car Crimes				.272	.764
Pre Intervention	10	3.10	1.7		
During Intervention	10	2.60	1.1		
Post Intervention	10	2.80	1.5		
Value of Car Crime				1.68	.206
Pre Intervention	10	7721	3007		
During Intervention	10	9428	1762		
Post Intervention	10	9257	1912		

Exhibit 55 ANOVA Results for Control Area

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p ≤ .05</i>
Calls For Service				8.9	.001
Pre Intervention	10	62.00	10.1		
During Intervention	10	79.10	14.7		
Post Intervention	10	85.90	13.5		
Incidents				.774	.471
Pre Intervention	10	12.00	3.1		
During Intervention	10	10.80	4.5		
Post Intervention	10	10.00	2.9		
Car Crimes				.684	.513
Pre Intervention	10	5.20	1.6		
During Intervention	10	4.10	2.6		
Post Intervention	10	4.30	2.8		
Value of Car Crime				.711	.500
Pre Intervention	10	10021	1868		
During Intervention	10	8516	1224		
Post Intervention	10	9079	4405		

Exhibit 56 ANOVA Results for Pre Intervention Period

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p ≤ 05</i>
Car Crimes				3.12	.038
Police	10	4.50	2.11		
Publicity and Police	10	3.10	1.44		
Publicity Alone	10	4.80	1.52		
Control	10	5.20	1.70		
Incidents				.450	.719
Police	10	11.90	4.43		
Publicity and Police	10	11.50	4.14		
Publicity Alone	10	10.20	3.76		
Control	10	12.00	3.16		
Calls for Service				13.00	.000
Police	10	74.80	14.9		
Publicity and Police	10	86.80	11.9		
Publicity Alone	10	55.90	10.6		
Control	10	62.00	10.1		
Value of Car Crimes				2.14	.112
Police	10	10391.70	2571.0		
Publicity and Police	10	8561.50	1299.0		
Publicity Alone	10	10807.70	2459.1		
Control	10	10021.00	1868.1		

Exhibit 57 ANOVA Results for During Intervention Period

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p < .05</i>
Car Crimes				1.286	.294
Police	10	3.80	2.57		
Publicity and Police	10	2.60	1.33		
Publicity Alone	10	4.60	2.11		
Control	10	4.10	2.68		
Incidents				2.27	.096
Police	10	13.80	4.70		
Publicity and Police	10	12.20	3.19		
Publicity Alone	10	9.30	3.46		
Control	10	10.80	4.54		
Calls for Service				8.47	.000
Police	10	93.40	19.39		
Publicity and Police	10	104.00	18.87		
Publicity Alone	10	67.80	15.49		
Control	10	79.10	14.78		
Value of Car Crimes				1.14	.346
Police	10	7041.70	3884.37		
Publicity and Police	10	9435.70	1743.34		
Publicity Alone	10	9099.70	4225.66		
Control	10	7733.60	3364.84		

Exhibit 58 ANOVA Results for Post Intervention Period

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p < .05</i>
Car Crimes				1.07	.374
Police	10	4.50	2.63		
Publicity and Police	10	2.80	1.59		
Publicity Alone	10	4.60	2.79		
Control	10	4.80	2.44		
Incidents				4.24	.011
Police	10	13.90	5.25		
Publicity and Police	10	9.20	4.70		
Publicity Alone	10	7.60	2.98		
Control	10	10.00	2.94		
Calls for Service				18.20	.000
Police	10	114.80	19.71		
Publicity and Police	10	99.10	18.53		
Publicity Alone	10	63.30	11.26		
Control	10	85.90	13.59		
Value of Car Crimes				.053	.984
Police	10	9297.30	1393.57		
Publicity and Police	10	9257.70	1912.06		
Publicity Alone	10	9552.20	1868.39		
Control	10	9079.50	4405.76		

Exhibit 59 ANOVA Results for Citywide Car Crime Totals During Intervention Period

	<i>N</i>	<i>Means</i>	<i>S.D</i>	<i>F</i>	<i>Sig. p ≤ 05</i>
City Car Crime Totals				2.12	.139
Pre Intervention	10	77.60	12.03		
During Intervention	10	83.20	10.77		
Post Intervention	10	89.20	14.61		

Exhibit 60 Anova Results for Period Comparisons

	<i>F</i>	<i>Sig. p ≤ 05</i>
PRE INTERVENTION PERIOD		
Car Crimes	3.12	.038
Incidents	.450	.719
Calls for Service	13.00	.000
Value of Car Crimes	2.14	.112
DURING INTERVENTION PERIOD		
Car Crimes	1.28	.294
Incidents	2.27	.096
Calls for Service	8.47	.000
Value of Car Crimes	1.14	.346
POST INTERVENTION PERIOD		
Car Crimes	1.07	.374
Incidents	4.24	.011
Calls for Service	18.20	.000
Value of Car Crimes	.053	.984

Appendix 1 Front Side of Police Activity Sheet

PLEASE USE THE APPROPRIATE CODES WHEN FILLING OUT THE ACTIVITY SHEET. BESIDES THE ADDRESS, THERE SHOULD BE NO WORDS IN ANY OF THE BOXES.

PLEASE USE MILITARY TIME IN BOXES.

Activity codes:

Origin of Activity	Activity Type	Disposition of Activity	Nature of Disposition
1. Officer Initiated	1. Regular Citizen Contact	1. Arrest	1. Criminal mischief (Auto)
2. Dispatcher Initiated	2. Field Interview of Non-Suspicious Person(s)	2. Warning/SOW	2. B & T (Auto)
3. Citizen Initiates	3. Field Interview of Suspicious Person(s)	3. Impound Vehicle	3. Auto Theft
4. Other	4. Checked/Ran Plates of unattended vehicle With further outcome	4. Conversation/Mention of "Target"	4. Traffic Violation
	5. M.V Checkpoint	5. Recovery of Stolen Car	5. No or Fictitious License/Insurance
	6. M.V Stop	6. Recovery of Abandoned Car	6. No or Fictitious Plate/VIN/Insp./Regist
	7. Investigation of a suspicious auto condition	7. Summons Issued	7. Arson (Auto)
	8. Non-Auto Related Activity	8. Condition checked out ok	8. Parking Violation
			9. Unattended automobile
			10. Other Auto Related Matter
			11. Non-Auto Related
			12. N/A

Note: Running/Checking Plates on unattended cars should be routinely done for this project and DO NOT count as an activity. HOWEVER, any result of running the plates (impound, recovered stolen, etc...) counts as an activity.

Date: ____/____/98

Quadrants being observed: (1A) (1B) (2A) (2B) (3A) (3B) (4A) (4B)
(5A) (5B) (6A) (6B) (7A) (7B) (8A) (8B)

Shift: (day) (evening) (midnight)

Type of Patrol: (1) Foot (2) Car (3) Other: _____

No. of officers working : (1) (2) Other: _____

Name of Officers: _____ Badge #: _____

Name of Officer: _____ Badge #: _____

Appendix 2 Back Side of Police Activity Sheet

ID #	Origin	Activity	Start Time / End Time	Address/Location of Activity	Disposition	Nature	File Number (if report made)
1			/				
2			/				
3			/				
4			/				
5			/				
6			/				
7			/				
8			/				
9			/				
10			/				
11			/				
12			/				
13			/				
14			/				
15			/				

Shift Starting Time: _____ Shift Ending Time: _____ Total Hours: _____

Appendix 4 Variable Table and Measurements**Variable Table**

Dependent Variables	Measurement
Car Crimes	Number of stolen, burglarized, or vandalized automobiles as recorded in Jersey City Police Department Incident Reports
Number of Violent Crimes	Robberies, Aggravated Assaults, and Rape as recorded in Jersey City Police Department Incident Reports
Number of Property Crimes	Burglaries, Thefts, and Criminal Mischief as recorded in Jersey City Police Department Incident Reports
Self Protection of Potential Victims	Observations and surveys of parked cars in experimental areas
Calls for Service	Computerized Jersey City Police Department 911 Calls for Service reports
Independent Variables	Measurement
Intervention periods(Pre/During/Post) for each experimental areas	10 weeks for each intervention period

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