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FINAL REPORT

**REDUCING CRIME AND DRUG DEALING BY IMPROVING PLACE
MANAGEMENT:
A RANDOMIZED EXPERIMENT**

August 30, 1997

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The research reported in this final report to the San Diego Police Department was supported under award 90-IJ-CX-K006 from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this paper are those of the authors and do not necessarily represent the official position of the San Diego Police Department or the National Institute of Justice.

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ABSTRACT

Retail drug dealing is a pressing problem in many cities. Considerable attention has been placed on the effectiveness of police enforcement against offenders. Evaluations of concentrated enforcement and crackdowns provided mixed results as to the long term effectiveness of these efforts. Recent evidence suggests that property owners and managers may have an important role in keeping drug dealing out of rental residential properties. This evaluation reports the results of a randomized experiment to test the effectiveness of police follow-up with landlords whose properties have already been the target of drug enforcement. The experiment randomly divided rental properties, following drug raids, into three groups: a group where the landlord only received a letter from the police; a group where the landlord was required to meet with police and codes officials; and a control group with no follow-up. The results were that offenders who were leaseholders were more likely to be evicted from properties in the meeting group than the other two groups. Further, the meeting group places had a greater decline in crimes and drug events six months following treatment than the places in the other groups. The report describes the methodology of the experiment, and its implications for policy and research.

ACKNOWLEDGEMENTS

The authors thank Chief Jerry Sanders of the San Diego Police Department for his support of this experiment. Because of the tone he sets, working with the San Diego police is always a pleasant and productive experience. Kimberly Glenn and Patrick Drummy of the Crime Analysis Unit deserve special praise for providing a home for this research and making data collection possible. They looked for and found opportunities to improve this experiment and found more reasons to say "yes" than we believed possible. Without the hard work and collaboration of Lieutenant Guy Swanger and Detective Kathy Healey this study could not have been conducted. They had the foresight and understanding to see advantages in participating in a highly structured experiment. Craig Uchida and Richard Titus have been intelligent, helpful, and gracious National Institute of Justice project monitors throughout this endeavor. We thank members of the Narcotics Unit for their help throughout the project. We want to thank Lawrence Sherman, David Weisburd, Lorraine Mazerolle, Al Reiss, Stephen Mastrofski, Michael Maltz, and Al Andrews for their advice during the Drug Market Analysis project. Finally, we must thank our former colleagues at the Police Executive Research Forum. In particular, Darrel Stephens, John Stedman, Deborah Weisel, Martha Plotkin, and Cliff Karchmer provided a working environment that was conducive to innovation and rigorous research. Though we had a great deal of help from many people, we alone are responsible for the errors in this report.

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EXECUTIVE SUMMARY
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Police may be able to increase their effectiveness at controlling drug dealing and crime by working with owners of rental property. Earlier Drug Market Analysis research in San Diego concluded that drug dealers seek out apartments in buildings with weak property management. This suggested that police interventions with owners of drug dealing places might reduce crime and drug problems at these sites. This report describes the results of a randomized experiment designed to test the effectiveness of this strategy.

Retail drug dealing creates many problems for the communities in which it takes place. With the profusion of retail drug dealing stemming from increasing use of crack cocaine, the public and the police realized that closing down drug places could improve the quality of life in the surrounding community. This has led to research examining how crackdowns (Sherman, 1991) at drug places influence crime and disorder at the location and in surrounding environments (Sherman and Rogan, 1995; Weisburd and Green, 1995; Green, 1996).

Police also began paying closer attention to crime and drug places as they began to adopt

a problem-oriented approach (Goldstein, 1990; Eck and Spelman, 1987; Hope, 1994; Weisburd and Green, 1995) and as criminologists began acquiring evidence that some addresses were the sites of a great deal of crime while most places had no crime (Pierce, Spaar, and Briggs, 1986; Sherman, 1989; Forrester, Chatterton, and Pease, 1988).

Why would crime be concentrated at a few locations? Explanations for crime clustering at places are based on routine activity theory (Cohen and Felson, 1979; Felson, 1996).

Brantingham and Brantingham (1995) explain that some places may attract large numbers of people, a few of whom are potential offenders. These crime attractor places may have many crimes but have relatively few crimes per place user. Other places may attract motivated offenders who feel they can practice their misdeeds with relative impunity. Brantingham and Brantingham (1995) call these places "crime generators" and they may have high rates of crime per place user. Finally, some locations are crime-neutral (Brantingham and Brantingham, 1995). Crime-neutral places will have relatively few numbers of crime events and little crime per place user.

Most efforts to address drug sales problems have applied the crime generator hypothesis and have sought ways of arresting offenders through crackdowns and concentrated enforcement (Sherman, 1990). The evaluations of these efforts suggest that proactive arrest tactics against drug markets have mixed and probably limited effects (Sherman, 1997). Non-randomized studies of crackdowns have found that these approaches were successful in Lynn, Massachusetts (Kleiman, 1988) and New York City (Zimmer, 1990) against heroin markets, but had no detectable effects against Lawrence, Massachusetts heroin markets (Kleiman, 1988), or in Denver public housing projects (Annan and Skogan, 1993). Uchida and Forst (1994) reported

mixed results for strict enforcement programs in Oakland, California and Birmingham, Alabama. Similarly, an evaluation of concentrated drug enforcement against several New York City crack markets showed varying results (Sviridoff, et al., 1992; Sviridoff and Hillsman, 1994). Their relatively weak study designs (Sherman, 1997) and their contradictory results means that it is difficult to draw conclusions about the effectiveness of crackdowns and raids from these evaluations.

The Drug Market Analysis Project of the National Institute of Justice funded the two most recent and rigorous studies of police crackdowns on drug markets. Sherman and Rogan (1995) report on the results of a randomized experiment testing the effects of crack house raids in Kansas City, Missouri. They report small reductions in crime reports and calls for service following raids, but these positive results wore off within 12 days.

Weisburd and Green (1995) used a randomized design to evaluate the effects of a problem-oriented approach to drug markets in Jersey City, New Jersey. Police tried to tailor their crackdown and follow-up maintenance activities to the characteristics of the drug markets being studied. Some of the follow-up activities might be described as addressing the way places were managed (see below). Collectively, their problem-oriented interventions reduced disorder events, but seemed to have no detectable impact on violent or property crime.

Given these mixed and limited results from standard police actions against drug sales locations, what should be done? A suggestion comes from the first phase of Drug Market Analysis research in San Diego (Eck, 1994). In this study, the researcher compared the characteristics of drug places (addresses with evidence of persistent drug sales) to non-drug places on the same block. He found that there are some systematic differences between dealing

and non-dealing places and these differences suggest that drug dealers select locations where landlords are less likely to interfere than at nearby similar places.

This crime generator explanation asserts that owners and representatives of owners – collectively referred to as “place managers” -- control behavior of people who use places. When place managers closely monitor and regulate behaviors, there is less crime than when place managers do not attempt to control behavior. Perhaps addressing the role of place managers could help reduce drug dealing.

Although the concept of place manager is new to criminological theory (Eck, 1996), the importance of place managers for controlling drug dealing has been implicitly recognized by police. Often property owners and managers unintentionally facilitate drug dealing. Most property owners who have drug dealing on their property had no intention of assisting dealers, and may be victims of the drug dealing enterprise. Consequently, many police agencies have looked for ways to handle this problem.

In their attempts to eliminate drug dealing locations they have increasingly relied on nuisance abatement statutes (Green, 1996; Davis and Lurigio, 1996) and landlord training programs (Bureau of Justice Assistance, 1995). Implicit in these programs is a recognition that property owners have the power and responsibility to regulate the behavior of people using their property. Further, the absence of regulation of place user behavior makes places more susceptible to crime. Nuisance abatement involves threatening landlords found to have persistent drug dealing on their property. If a property owner does not cooperate with the police in getting rid of the drug dealers, then the police may, in some jurisdictions, go to civil court to close the property for a set period of time or to have a fine imposed on the owner. This is a time

consuming process that can only be applied to a few very persistent dealing locations.

Landlord training programs are the carrot to the nuisance abatement stick. These training programs are directed at small scale landlords. The programs teach rental property owners and managers how to recognize and eliminate drug dealing through property management procedures. Training programs target a much broader set of places than nuisance abatement. Landlord training is directed at all property owners so many landlords get trained who do not have a problem with drug dealing. Many of the trainees may not need the training because their properties may not be attractive to drug dealers. On the other hand, many of the landlords who have drug problems may not receive training. Clearly, effective targeting of landlords is critical.

One method of targeting is to focus on landlords with drug dealing on their property. Crime is often concentrated at places (Sherman, Gartin, and Buerger, 1989; Pierce, Spaar, and Briggs, 1986; Spelman, 1996). There is evidence that burglaries are concentrated at specific places (Farrell and Pease, 1993; Polvi, et al., 1990). Experiments targeting prior burglary sites have shown that addressing repeat victimization at places results in fewer burglaries (Forrester, et al., 1988; 1990).

The same strategy can be applied to drug places. Drug dealing is not randomly spread throughout neighborhoods because some specific site level features facilitate dealing and other features repel it (Eck, 1994). This suggests that the presence of drug dealers may be a good indicator that the property and the property owner should be targeted for preventive actions to forestall future drug dealing.

The San Diego Police Department was interested in determining if there was an effective way of preventing and eliminating drug problems at locations susceptible to dealing; an approach

that could be more widely applied than nuisance abatement, but was directed at the rental properties that were in greatest need of assistance. To this end, a small experimental program was established that addressed rental properties where police had already conducted some form of drug enforcement. To determine if this program worked as planned, a randomized experiment was designed. This report describes this experiment and its results.

PROGRAM AND STUDY DESIGN

From June through November, 1993 all residential rental properties that were subject to some form of drug enforcement by the narcotics unit, as well as a number from patrol, were randomly assigned to one of three groups. This yielded 121 residential rental locations for assignment in this study. Non-residential business sites, public places, and locations where the drug dealer owned the property were not included in this experiment.

Nothing further was done at a third of the places following the initial enforcement action. These places constituted the control group against which places in the two treatment groups were compared. There were 42 places in the control group. By comparing outcomes at these places to outcomes of places in the two treatment groups, the experiment could show whether police follow-up contacts with place managers were superior to drug enforcement alone.

A special unit of the police department, the Drug Abatement Response Team (DART), sent a letter to owners of another third of the places. The letter informed them of the police action (usually a narcotics unit raid based on a search warrant). The letter explained that the police would assist them if they needed help to get rid of drug dealers. The letter also warned the owner that under California Law, if repeated drug dealing was found, the City of San Diego

could take the owner to court. If this occurred, the property could be closed for up to one year and the owner fined up to \$25,000. The letter was designed to be an inexpensive informative reminder to property owners. Once the letter was sent, the special unit made no further follow-up with the rental property or its owner, unless the owner requested assistance (52 percent of the owners assigned to this group voluntarily contacted the DART unit, but only one owner met with DART). The letter group had 42 places in it.

DART sent owners of the last third of the places a letter emphasizing the legal action the City could take if the drug problem was not addressed. The letter asked that the owner contact the DART detective to schedule an interview at the property. At the meeting, the detective, a member of the City's Code Compliance Department, and the owner inspected the property and began developing a plan for preventing future drug dealing. The detective then worked with the property owner to assure that the changes were made. Thirty-seven places were randomly assigned to the meeting group.

Several types of data were collected for each place. Police records describing the offenders arrested during the first enforcement action were gathered. Police records also provided information on crime and drug events at the sites for three months prior to the original enforcement and for three months subsequent to that effort. Later, similar data for a 30 month period following treatment was collected. A log of DART interactions with the owners was maintained in this experiment. Observers collected data on the physical environment's characteristics of each site. A survey of owners was conducted between 45 and 60 days following the treatment to obtain information about owners' property management practices, their characteristics, and how they handled the tenant who precipitated the original enforcement.¹

Finally, the narcotics unit went to each of the sites no sooner than 45 days after treatment and attempted to buy drugs to find out if drugs were still available.

FINDINGS

This experiment reached the following conclusions.

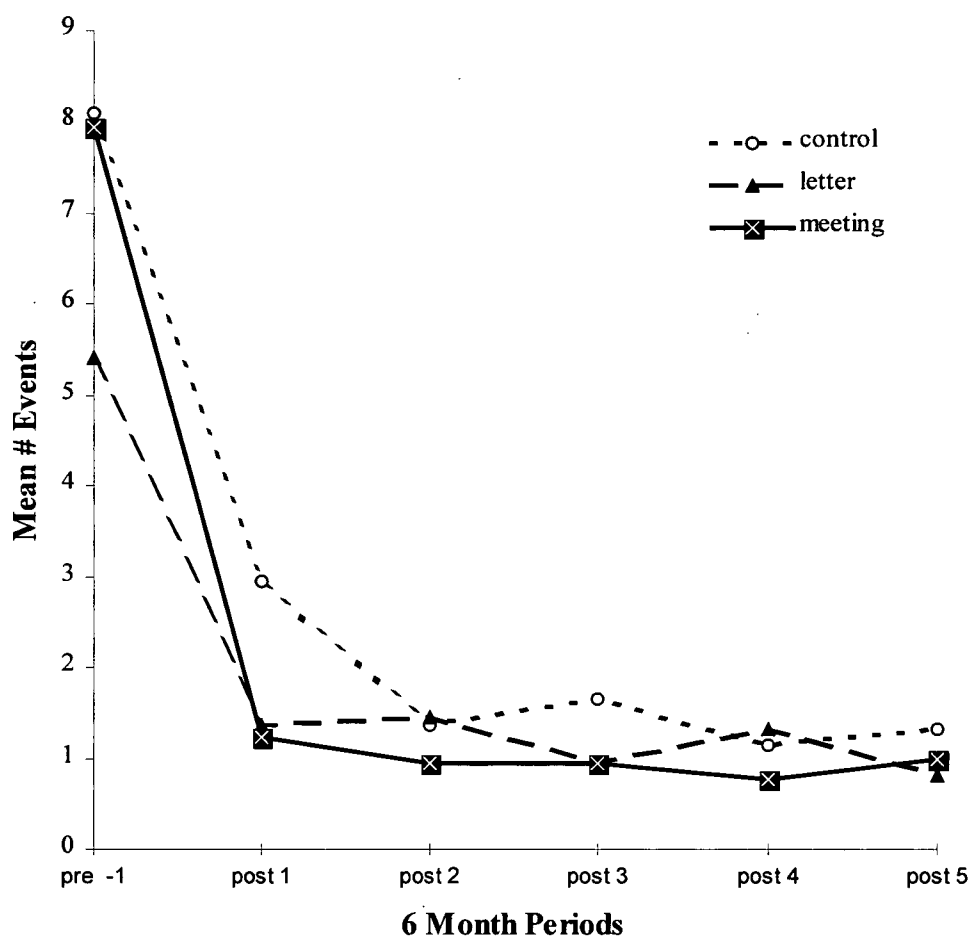
- Many landlords have limited resources to manage and improve their properties.
- Full time, on-site monitoring of rental properties by landlords or designated managers is rare and screening of tenants is limited.
- Follow-up meetings with rental property owners increased the evictions of drug offenders who were leaseholders.
- Follow-up meetings with rental property owners reduced crime at these locations more than at places without such meetings.
- Letters to landlords also reduced drug and crime events at places following enforcement, but not as much as meetings.
- The enhanced crime reduction effects of letters and meetings became most evident after three months and disappeared some time after six months.

The decline in the relative effectiveness of meetings and letters is not because of rebound effects at the meeting or letter places. Rather it is because the control sites improved as well, but more slowly. Thus, there are maybe no additional benefits from the meetings (or letters) after six months, but the benefits that have already accrued do not erode over 30 months.

This can be seen in Figure A where the mean number of crime and drug events (drug arrests, other arrests, reported crime, and citizen calls) are plotted, for each group. The biggest decline occurs from the estimated six month pre-treatment period² to the first post-treatment six

month period, for each group. The meeting group means decline faster and further, than the control group means. The meeting group means stay down but do not change for any of the

Figure A: TIME COURSE OF TREATMENT EFFECTS



subsequent six month periods. The control mean continues to decline through the second post-period and then levels off. The mean for the letter group varies between the meeting and control group means, after the first six months following treatment.

This raises the question, why did the control group sites improve? There are three

possible explanations for the decline in crime and drug events at the control sites. First, drug enforcement efforts at places in San Diego may have reduced drug and crime related events at control sites. This explanation is consistent with two other randomized experiments of drug enforcement (Weisburd and Green, 1995; Sherman and Rogan, 1995), although it suggests that raids may have a longer impact than was found by Sherman and Rogan (1995) in Kansas City. If this hypothesis is true, then the following process may be at work.

In the absence of any further police effort, drug offenders leave the place after six months. Follow-up meetings or letters with landlords after enforcement accelerates this process. The primary effect of the follow-up meeting is to increase the chances that a drug offender who has a lease will be evicted. This gets them out of the rental property faster than they would on their own. Letters may not cause the primary effect. The follow-up meeting or letter may also have a secondary effect. It focuses the owner's attention on the problems of the rental property.

The evictions or increased attention to the property changes the behaviors of place users. These behavioral changes reduce crime at the location. The added benefits of the meeting and letters (over doing nothing after the initial enforcement) are temporary, however. Some time after the sixth month offenders will leave anyway or landlords will begin to pay greater attention to their places. In short, meetings and letters accelerate rental property improvement already stimulated by the initial enforcement.

The second hypothesis for the improvement in the control places is that the decline in crime and drug events may be the consequence of some citywide change in drug dealing that influenced offender behavior at all drug places. We have no evidence of such a cause. Though this second explanation seems less plausible than the first hypothesis, we cannot rule it out. If

this explanation is correct, then improvements in control groups are unlikely to be found in replications of this experiment. The relative improvement in the letter and meeting places might be greater and last longer.

A third hypothesis is that the improvement in the control group is due to the measurement methods used in the experiment, particularly the owner interviews and narcotics squad follow-up drug buy attempts. It is critical to keep in mind that this explanation for the improvements in the control sites has no bearing on the integrity of the basic findings from this study.³ It does have implications for the generalizability of the findings to other settings. If this explanation is valid, then improvements in the control group will not occur in replications of this experiment that do not use owner surveys or follow-up buy attempts. We have no evidence to refute or support this possibility.

IMPLICATIONS

This experiment focused on influencing the behavior of rental property owners and managers. Differences in rental markets may influence the efficacy of these follow-up treatments. Letter and meeting follow-ups may be most effective when rental markets are neither extremely unprofitable nor extremely profitable. If the rental market is so weak that many owners are on the verge of abandoning their properties, and many have already left them vacant, then police may have trouble enlisting the support of owners. Owners of these properties may not see much advantage in cooperating with the police. At the other extreme, if the rental market is strong, many people will be seeking housing and owners can charge high rents. To keep their properties attractive to renters (and to be able to charge high rents) managers of properties in

strong markets are likely to intervene to curtail drug sales without formal prompting by the police. In between these two extremes are marginal neighborhoods whose rental markets are not particularly weak or strong. It is in these neighborhoods where the interventions tested in this experiment may be most useful. Since rental markets often vary throughout a large city, a follow-up letter or meeting program may vary in effectiveness in different neighborhoods of the same city.

These experimental results support a police policy of working with landlords following drug enforcement at sites. If we assume that enforcement efforts that precede follow-up efforts are effective, then follow-up contacts should be conducted soon after the initial enforcement to maximize the improvement at the site. Substantial delays in follow-up are unlikely to produce additional improvements. Police agencies may want to experiment with coordinating enforcement with follow-up activities. For example, in preparation for a raid, a narcotics investigator could identify the landlord so that he or she can be contacted within hours, rather than days.

In this experiment letters were cheap and relatively non-coercive. Letters offered police assistance, if the landlord requested it. They were designed to provide landlords with information but not to be punitive. Though letters may appear to be cheap and effective, any letter program needs to be supported by police officials who can provide timely assistance, if requested. Offering assistance but having no one available is likely to antagonize the rental property owners who are most in need of assistance. Such assistance was available in San Diego, but in many police agencies special efforts may be needed to create backup support for a follow-up letter program. In these situations, a letter program may not be as inexpensive as it first

appears.

More generally, this experiment underscores the role of place managers in crime and drug control (Eck, 1995; 1996) and supports police and local government efforts to enlist the support of property owners. Such efforts range from providing training and assistance to property owners to coercive efforts such as nuisance abatement (Green, 1996). Though there are complaints that such efforts unfairly hold landlords responsible for the actions of their tenants (Davis and Lurigio, 1996), it is becoming increasingly clear that the most effective ways of controlling crime must involve people other than offenders. These findings are consistent with three other studies of interventions with owners of problem properties: a quasi-experiment in Oakland, California (Green, 1996); a randomized experiment in Oakland, California (Mazzerole, Roehl, and Kadleck, 1997); and a set of three quasi-experiment case studies in St. Louis, Missouri (Hope, 1994). A forth study, a quasi-experiment in Cook County, Illinois found that nuisance abatement had no impact on citizen perceptions of drug dealing, though researchers found that drug dealing may have been reduced in several circumstances (Lurigio, et al., 1993). One explanation for this anomaly is that the Cook County evaluation used a much weaker design than the other studies (Eck, 1997).

Place managers are only one of several types of people who can reduce crime if they are given the appropriate information, authority, and motivation (Felson, 1996). Until recently there has been no research on place managers and little recognition of the pivotal role they can have in improving public safety. This experiment has shown that place managers are important for controlling drug problems, and the police can improve the effectiveness of these people, if the police make the effort. Though police are becoming increasingly adept at working with

neighborhood residents, they should also recall that in communities afflicted with crime and retail drug dealing, most of the residents are renters. If the police only work with the renters, but not with the landlords, they will miss important opportunities to solve drug and crime problems.

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1. This survey was also analyzed in a concurrent study of the role of the landlord (Wartell 1994).
 2. As explained in Chapter 5 of the full report, only 90 days of information were available for the pre-treatment period. To allow comparison between the pre-treatment period and the 6-month periods following treatment, the mean for the pre-treatment period was doubled. This assumes that the number of crime and drug events was relatively constant for six months prior to treatment. Even if crime and drug events were half of this estimate, the number of events in the 6-month pre-treatment period would still be substantially higher than in any of the 6-month periods following treatment. This can be seen in the following table.

ALL EVENTS – MEAN NUMBER BY GROUP AND PERIOD			
	Control (42)	Letter (42)	Meeting (37)
actual 3 months pre	4.05	2.71	3.97
estimated 6 months pre	8.10	5.42	7.94
actual 1 st 6 months post	2.95	1.36	1.24
actual 2 nd 6 months post	1.36	1.45	0.95
actual 3 rd 6 months post	1.64	0.95	0.95
actual 4 th 6 months post	1.14	1.31	0.78
actual 5 th 6 months post	1.33	0.81	1.00

3. Campbell and Stanley (1968: page 18) refer to this as the “interaction of testing” and treatment, and it is a threat to external validity (generalizability to other settings) but not internal validity (whether the results apply to the subjects of the experiment).

CHAPTER 1

INTRODUCTION

Most drug enforcement is directed against drug sellers and buyers. The evaluations of these efforts suggest that proactive arrest tactics against drug markets have mixed and probably limited effects (Sherman, 1997). Non-randomized studies of crackdowns have found that these approaches were successful in Lynn, Massachusetts (Kleiman, 1988) and New York City (Zimmer, 1990) against heroin markets, but had no detectable effects against Lawrence, Massachusetts heroin markets (Kleiman, 1988), or in Denver public housing projects (Annan and Skogan, 1993). Uchida and Forst (1994) reported mixed results for strict enforcement programs in Oakland, California and Birmingham, Alabama. Similarly, an evaluation of concentrated drug enforcement against several New York City crack markets showed varying results (Sviridoff, 1992; Sviridoff and Hillsman, 1994). Their relatively weak study designs (Sherman, 1997) and their contradictory results means that it is difficult to draw conclusions about the effectiveness of crackdowns and raids from these evaluations.

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follow-up activities might be described as addressing the way places were managed (see below).

Collectively, their problem-oriented interventions reduced disorder events, but seemed to have no detectable impact on violent or property crime.

Given these mixed and limited results from standard police actions against drug sales locations, what should be done? A suggestion comes from the first phase of Drug Market Analysis research in San Diego (Eck, 1994). In this study, the researcher compared the characteristics of drug places (addresses with evidence of persistent drug sales) to non-drug places on the same block. He found that there are some systematic differences between dealing and non-dealing places and these differences suggest that drug dealers select locations where landlords are less likely to interfere than at nearby similar places. Thus, in addition to repeat drug sellers and repeat drug buyers, we also seem to have repeat drug sales locations. Perhaps addressing the places of drug sales may be a useful approach to controlling illicit drug transactions.

In this study we look at the effectiveness of supplementing drug enforcement with actions directed at the places where the drug dealers are located. Increasingly, police agencies are examining the role of property owners and managers in facilitating drug dealing. Owner facilitation of drug dealing can be intentional, as when a property owner knowingly rents to a drug dealer. Police have used asset forfeiture laws and nuisance abatement statutes to move against property owners who collude with drug dealers (Green, 1995, 1996; David and Lurigio, 1993). Citizens also have become active in closing down drug houses (Connor and Burns, 1991; Hardy, 1992; Cadwalder, Wichersham and Taft, 1993). Evaluations of nuisance abatement in

Oakland, California (Green, 1996; Mazerolle, Roehl, and Kadleck, 1997) and St. Louis, Missouri (Hope, 1994) indicate that these efforts can reduce drug arrests, incivilities, and public calls to the police. One evaluation, however, failed to find a significant reduction in drug activity (Lurigio, et al., 1996).

Often property owners and managers unintentionally facilitate drug dealing. Most property owners who have drug dealing on their property had no intention of assisting dealers, and may be victims of the drug dealing enterprise. Consequently, many police agencies have looked for other ways to handle this problem. This has resulted in the proliferation of landlord training programs run by police agencies around the country (Eck, 1994; Bureau of Justice Assistance, 1995).

Landlord training is geared to the problem of landlord ignorance of what they can do to prevent drug dealing. By providing them with a better understanding of their legal rights and responsibilities, how to recognize drug dealing, and what the police can do to help, this training may prevent future drug dealing.

A difficulty with landlord training is that it is simultaneously too broad and too narrow. By being directed at all property owners many landlords get trained who will never have a problem with drug dealing. Even in neighborhoods in which drug dealing is common, drug dealers appear to prefer some places over others so most places are drug free (Eck, 1994). On the other hand, many of the landlords who may have problems may not receive training. As will be shown later, many landlords who have dealers on their property do not know about the training, and most of those who have heard about it do not attend. Clearly, effective targeting of landlords

is critical.

One method of targeting is to identify landlords with a current problem with drug dealing. Research results are accumulating that show that crime is often concentrated at "hot spot" locations (Sherman, Gartin, and Buerger, 1989; Pierce, Spaar, and Briggs, 1986; Spelman, 1996). There is evidence that burglary victimization can be concentrated at specific places (Farrell and Pease, 1993; Polvi, et al., 1990). If a break-in increases the likelihood of a subsequent burglary, then targeting burglary sites for prevention could reduce future burglaries. Experiments based on this idea have been conducted in England, and evaluations have shown that addressing repeat victimization at places results in fewer burglaries (Forrester, et al., 1988, 1990).

The same strategy can be applied to drug places although the "victim" is not as obvious. Drug dealing is not randomly spread throughout neighborhoods because some specific site level features are conducive to dealing while other features are repellent (Eck, 1994). This suggests that the presence of a drug dealer may be a good indicator that the property and the property owner should be targeted for preventive actions to forestall future drug dealing.

EXPERIMENTAL DESIGN AND DATA COLLECTION

This study examines the findings from a randomized experiment to test the effectiveness of certain police follow-up contacts with rental property owners after enforcement actions at the owners' properties. In this section we summarize the evaluation design and data collection methods. We return to some of these topics throughout the report when it is appropriate to introduce additional details. Appendix A contains a more detailed description of the

administration of this experiment, including a timeline showing the scheduling of important task.

After a drug enforcement action at specific places, the property owners were randomly assigned to one of three groups. About one third of the places were randomly assigned to the letter treatment group. Owners of these properties received a letter informing them of the police action (usually a narcotics unit raid based on a search warrant). The letter explained that the police would assist them if they needed help to get rid of drug dealers and warned the owner that under California Law, if repeated drug dealing was found, the City of San Diego could take the owner to court, close the property, and fine the owner. The letter was designed to be informative but not coercive. This was the only special follow-up contact made with owners of properties in this group, unless the owner requested further police assistance. These places comprised the "letter" group.

Another third of the owners received a more strongly worded letter, emphasizing the legal action the City could take if the drug problem was not addressed. The letter also stated that a detective from a special unit would contact the landlord and schedule an interview at the property. The detective then called and scheduled a meeting with the landlord, the detective and a member of the City's Code Compliance Department. At the meeting, the detective, code official, and property owner inspected the rental property and began developing an action plan for preventing future drug dealing. The consequences of future drug dealing were also explained. This was called the "meeting" treatment group. A comparison of the "meeting" group to the "letter" group was designed to determine if the extra time and effort spent on meetings produces significantly better outcomes than simply sending a letter. The substantive difference

between the first group and the second group was the meeting between the owner, or manager, the police detective, and the code official.

The last third of the places received no follow-up treatment—letter or meeting. These places constituted the "control" group. Comparisons of outcomes of this group to the two treatment groups were designed to show if either treatment were more effective than drug enforcement alone.

Several types of data were collected for each place. Police agency records were collected describing the suspects arrested during the first enforcement action. Police records also provided information on crime and drug events at the sites for three months prior to the original enforcement and for three months subsequent to that effort. Similar data was collected for 30 months following treatment to assess long term results of the experiment. A log of police interactions with the owners in the two treatment groups was maintained. Observers collected data on the environmental characteristics of each site. A survey of owners was conducted following the experimental period to get information on their property management practices, their characteristics, and how they handled the tenant/drug dealer who precipitated the original enforcement. Finally, the narcotics unit went to each of the sites in the study and attempted to buy drugs as a method of determining if drugs were still available at the location.

Data describing several outcomes were collected. Police records provided data on the number of reported crimes (including all felonies and misdemeanors), citizen complaints about drug activity, calls for service, field interrogations, drug arrests, and other arrests at each place. A second outcome measure was the result of the follow-up attempt by the narcotics unit to

purchase drugs at each location. Finally, owners' actions, including evictions and physical environment changes, suggest the impact of the treatment.

This experiment was originally designed to compare a ninety day period following treatment to a ninety day period prior to treatment, for each property in the experiment. However, delays in producing the report allowed us to collect data for a 30 month period following treatment (it was impossible to collect comparable data for a similar period prior to treatment because much of it had been purged). As we will see in subsequent chapters, this additional time provided valuable information on the long run consequences of the treatments.

OVERVIEW OF THE REPORT

Chapter two provides statistical profiles of the people and places involved in this study. The nature of the original drug enforcement and prior police actions at the property give a history of these properties. This is followed by descriptions of the properties based on the environmental and owner surveys. Next we examine the property owners and their management practices. We close chapter two with a description of the offenders dealing drugs at the locations.

Chapter three describes the implementation of the experiment. Here we show what proportion of the places assigned to each treatment group received the type of treatment that they were supposed to receive. The chapter also looks at the landlords' responses to the various treatments.

Chapter four describes the short term (three months) results of the experiment. We begin with an examination of evictions and the presence of offenders, based on owner surveys. We

then compare the outcomes from the narcotics unit follow-up buy attempts. Finally, we examine the impact on crime, drug reports, arrests, and calls for service.

Chapter five examines the long term results (30 months following the treatments) of the experiment. Here we look at differences among groups for drug and other arrests, reported crimes, and citizen calls about drugs.

Chapter six summarizes the results, provides the experiment's conclusions, and policy implications. We also discuss how the study design may have influenced the findings and the implications of hypothetical design effects.

Appendix A provides a detailed description of experimental procedures and administration. Appendix B contains copies of the letters sent out to the letter and meeting place group owners. Appendix C provides the frequency distributions for crime and drug events for the 90 days prior and 90 days after the assignment. The final appendix (D) displays frequency distributions for DART activities.

CHAPTER 2

PROFILES OF THE ACTORS AND SETTINGS

One hundred twenty one rental drug places were examined in this study. A drug place was defined as an address at which the police had substantial evidence that drugs were being sold and had undertaken enforcement action. *Only rental residential places were examined.* We excluded non-residential commercial properties, vacant properties, and public properties from this study. We also excluded residences where the owner was known to be directly involved in drug dealing. The reason for this was simple. The more diverse the types of places, the more difficult it would be to discover if police follow-up with property owners had an effect. Additionally, according to police official consulted during the design stage of this study, of all the property types where drug dealing takes place in San Diego, rental residential properties constitute the largest single portion, by far. Prior police experience with properties owned by drug dealers suggested that simple follow-up activities with owners is ineffective, so such places would require a different type of treatment. During case assignment, only a couple of drug places owned by the dealer arose (these were not included in the study). So while such places exist, they are far from common. Thus the statistical profile of the drug places, dealers, property owners, and enforcement actions are probably representative of the most common drug places that come to the attention of police, and in particular, the narcotics unit, in San Diego.

POLICE ENCOUNTERS WITH DRUG PLACES

The vast majority of these 121 rental drug places (96 percent) were brought into this study as the result of actions by the Narcotics Unit. One place was entered into the study because of the actions of patrol officers. Four were entered because of the actions of uniformed Neighborhood Policing Teams, special squads in each patrol division that focus on neighborhood concerns.

The enforcement action taken against the drug dealer at the property in over half the cases was a search warrant based raid (Table 1). Three other tactics were used less frequently. Knock and talk actions take place when police officials go to a location, tell the inhabitants that they are police officials and ask to be allowed in to search for drugs. If the inhabitants consent to a search, then the police enter the structure and look for drugs. A buy-bust involves an undercover officer or informant making a controlled buy of drugs followed shortly by the arrest of the seller, usually by other nearby officers. Parole searches and Fourth Amendment waiver actions can occur when the suspected drug dealer is on parole or probation and the suspect's condition of parole or probation requires submitting to warrantless searches by officers.

Table 1: ENFORCEMENT ACTIONS AT THE PLACES (n=121)	
	PERCENT
Search Warrant	51.2
Knock and Talk	16.5
Buy-Bust	11.6
Parole Search/4th Amendment Waiver	11.6
Other	3.3
Unknown	5.8
Total	99.9

In the places subjected to these enforcement actions, drugs were found in all but three locations (97 percent). At 57 percent of these places only a single drug was found. Two or more types of drugs were found at over forty percent of the places. We see in Table 2 that crack cocaine was found in over a third of the places, and powder cocaine and methamphetamine were each found in over a quarter of the places.

Though marijuana and heroin are prevalent at the places, these two drugs were more likely to be found with other drugs than alone. Marijuana was associated with methamphetamine but not other drugs and heroin was associated with powder cocaine but not with other drugs. Though most of the correlations in Table 3 are not statistically significant, with the exception of marijuana and heroin, these drugs were negatively correlated.

Table 2: DRUGS FOUND AT PLACES (n=121)	
	PERCENT
Crack Cocaine	36.4
Powder Cocaine	27.3
Methamphetamine	27.3
Marijuana	30.6
Heroin	20.7
Other	2.5

Table 3: CORRELATIONS AMONG DRUGS (N=121)				
	Crack	Coca	Heroin	Meth.
Crack	1.00			
Cocaine	-.12	1.00		
Heroin	-.22	.28*	1.00	
Meth.	-.42*	-.21	-.22	1.00
Marijuana	-.28*	-.21	-.29*	.20
* Significant at .01 level.				

Table 4: PRIOR DRUG AND CRIME EVENTS AT PLACES (N=121)						
# PRIOR EVENTS	Drug arrests	Other arrests	Reported crimes	Field interviews	Citizen complaints	Calls for service
0	5.8	82.6	67.8	62.8	66.1	27.3
1	41.1	9.1	19.0	15.7	20.7	23.1
2	33.1	5.8	5.0	9.9	7.4	11.6
3	9.1	0.8	1.7	4.1	2.5	6.6
4	4.1	0.0	2.5	1.7	0.0	10.7
5	2.5	0.0	0.8	0.8	0.8	5.0
6	1.7	0.8	0.8	0.0	0.8	5.0
7+	1.7	0.8	2.5	4.9	1.6	10.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

We examined the frequency of police contacts with the properties in the three months preceding the experiment. The rental properties in the sample ranged from places with few prior indicators of drug or crime activity to locations with long histories of drug and crime problems.

The likelihood of a prior contact with the police and the frequency of prior contacts varies with the type of contact. Almost 95 percent of the places had at least one other drug arrest before the assignment to a treatment or control group. More than half of the places had two or more prior drug arrests. On the other hand, prior arrests for other crimes are relatively rare at these places; 82 percent had none. Prior reported crimes, police field interviews, and citizen drug complaints showed similar distributions. Roughly a third of these places had at least one prior event of these types. Finally, almost three quarters of the places had at least one prior call for police service. Over 12 percent of these places had seven or more calls for service. Clearly, most places in the study had come to the attention of the police in the past. But some of these places had longer histories of police involvement than others.

WHERE ARE THESE PLACES?

Environmental surveys of the drug locations and the surrounding area provided information on the physical environment of drug dealing. The data for the following discussion of the place characteristics come from these surveys.

These drug places are located on or very near main arterial routes (Table 5). Two thirds of the drug places were on an arterial route and another 13 percent were located within a block of an arterial. This finding is consistent with the earlier findings from one area within San Diego that much retail drug dealing is located near routes that carry a great deal of traffic (Eck 1994; 1996).

Table 5: DRUG PLACE PROXIMITY TO ARTERIAL ROUTES (n=121)	
	PERCENT OF STRUCTURES
On an arterial street	68.6
A block from arterial street	13.2
On an arterial or within a block of an arterial	81.8

Over three quarters of these places are located on streets with two lanes (Table 6). Another 21 percent are on streets with three or four lanes.

Table 6: NUMBER OF LANES ON STREET (n=121)	
	PERCENT OF STRUCTURES
1	1.7
2	77.7
3	12.4
4	8.3
Total	100.0

These streets were almost always two way (97.5 percent) and primarily carried residential

(71.9 percent) traffic. Nevertheless, about 98 percent of the places were next to or across the street from residential structures rather than businesses.

CHARACTERISTICS OF DRUG PLACES

The environmental surveys also provided data on the physical structure from which drugs were sold. Most of the drug places are in apartment buildings (Table 7). Of the remainder, about twenty percent each are in duplexes and single family homes.

Table 7: TYPE OF STRUCTURE (n=121)	
	PERCENT
Apartments	56.2
Duplex	24.0
House	19.8
Total	100.0

Of the drug places in apartment buildings, almost 56 percent of the drug places are in one building complexes (Table 8). Almost twenty percent of the places have three or more buildings in the complex.

Table 8: BUILDINGS IN APARTMENT COMPLEX (n=68)	
# BUILDINGS	PERCENT
1	55.9
2	23.5
3+	19.1
Total	100.0

Almost half of these complexes had only two entrances (Table 9). Relatively few had only a single entrance and over 40 percent had three or more entrances.

Table 9: NUMBER OF ENTRANCES TO APARTMENT COMPLEX (n=68)	
# ENTRANCES	PERCENT
1	10.3
2	47.1
3	22.1
4	20.6
Total	100.0

About as many apartment buildings were one story high as were three stories tall (none were higher). Three quarters of the buildings were two stories high (Table 10, column 2). Dealing was almost evenly split among the floors (column 3). The last column looks at distribution of floors: all buildings have a first floor, all two and three story buildings have a second floor, but only three story buildings have a third floor. If drug dealers randomly selected the floors they sold on, then the distribution of dealing floors would look like the last column. By comparing the third and fourth column we see that dealing is under represented on first and second floors but over represented on third floors. Dealers may be avoiding first floor units and seeking out upper floor units.

Table 10: FLOORS IN STRUCTURE (n=68)			
# FLOORS	PERCENT OF STRUCTURES	PERCENT OF FLOORS WITH DEALING	PERCENT UNITS ON FLOOR
1	13.2	38.2	50.4
2	75.0	27.9	43.7
3	11.8	32.4	5.9
Total	100.0	100.0	100.0

Table 11 shows that most apartment complexes with drug dealing are relatively small. Over 48 percent had fewer than eleven apartment units. About 79 percent had twenty or fewer units. Apartment buildings with over fifty units were rare. Earlier research in San Diego has

shown that cocaine and heroin dealers seem to prefer smaller apartment buildings over larger complexes (Eck 1994). The results here are consistent with this earlier finding.

Table 11: UNITS IN APARTMENT COMPLEXES (n=68)	
# UNITS	PERCENT OF STRUCTURES
< 11	48.1
11-20	30.9
21-30	8.8
31-40	5.9
41-50	2.9
> 50	2.9
Total	100.0

Though a substantial proportion of the places were in single family homes or duplexes, most drug places were apartment complexes. Of those places in apartment buildings, the apartment complex was likely to be on the small side. This finding is consistent with prior research in San Diego. Prior research has also shown the dealers may also have preferences for apartment buildings with two entrances over buildings with fewer or more. Again, the results shown here are consistent with that finding. Finally, drug dealers may prefer to be located above the first floor.

WHO OWNS THESE PLACES?

Though much can be learned from direct observations of the places, some details must be gleaned from other sources. In this study, interviews with owners, or representatives of the owners, provided additional data on the structures. No attempt was made in this study to verify

statements by owners. Owner interview data are used in the next few tables. Because some owners refused to answer some questions, did not know the answer, or could not be contacted, the number of cases missing data is greater than we have seen so far. Additionally, two of the owners had two properties (each) in the study. This was the only evidence of repeat ownership and to avoid double counting, they were only interviewed once. Thus, in the tables that follow the figures are provided for the percent of persons answering the question.

The overwhelming majority of these properties (94.9 percent of 119) were owned by individuals or partnerships (Table 12). Only six properties were owned by corporations or other entities.

Table 12: TYPE OF OWNERSHIP (n=119)	
	PERCENT OF OWNERS
Individual	73.9
Partnership	21.0
Corporation	2.5
Other	2.5
Total	100.0

Most of the owners interviewed were men (80 percent of 115 non-corporate cases without missing data). Since 21 percent of the places are owned by partnerships, it is possible that the proportion of women owners is higher than implied by this figure.

More than 60 percent of the owners were white Americans of European ancestry (Table 13). About 16 percent of the owners were Hispanic and almost 9 percent were African American. People from other ethnic groups from Asia and the Middle East comprise 11 percent of the owners.

Table 13: ETHNICITY OF OWNERS (n=117)	
	PERCENT OF OWNERS
European Americans	61.5
Hispanic	16.2
African American	8.5
Vietnamese	5.1
Middle Eastern	2.6
Other Asian	1.7
Filipino	1.7
Other/unknown	2.6
Total	100.0

The majority of owners (75.3 percent of the non-corporate owners without missing data) have more than a high school education (Table 14).

Table 14: EDUCATION OF OWNERS (n=109)	
HIGHEST DEGREE EARNED	PERCENT OF OWNERS
Less than high school	7.3
High school	17.4
Some college	27.5
Bachelors degree	29.3
Advanced degree	18.3
Total	99.9

More than two thirds of the owners owned other rental property (Table 15). Of those that owned other properties, about 60 percent owned three or more properties. Over 23 percent of the multiple property owners owned more than ten other properties.

Table 15: NUMBER OF OTHER PROPERTIES OWNED (n=119)	
OTHER PROPERTIES OWNED	PERCENT OF OWNERS
0	33.1
1 or 2	26.9
3 or 5	13.4
6 or 10	10.9
11 or 20	9.2
21 or more	5.9
Total	100.0

Most of the owners (80 percent of 119) or the persons/managers interviewed said that they had never been threatened by renters and do not fear retaliation from tenants.

Almost eight percent of the owners live on or near the property (less than a mile) and almost 70 percent of the owners live over five miles away (Table 16).

Table 16: DISTANCE OWNER LIVES FROM PROPERTY (n=116)	
	PERCENT OF OWNERS
On property	2.6
Less than a mile	5.2
1 to 5 miles	23.3
6 to 20 miles	43.1
21 to 50 miles	15.5
over 50 miles	10.3
Total	100.0

Few of the structures (apartments, duplexes or single family homes) were new; only four percent were less than six years old (Table 17). However, many owners had acquired the property recently; about 44 percent had held the property for no more than five years. At the other extreme, the majority of the properties were over 20 years old but less than about 10 percent of the owners had held the property for that time.

Table 17: AGE OF STRUCTURES AND YEARS OWNED		
	AGE OF STRUCTURE	YEARS OWNED
1 - 5 years	4.3	44.1
6 - 10 years	8.7	23.7
11 - 20 years	11.3	22.0
21 - 30 years	19.1	5.9
> 30 years	56.5	4.2
Total	100.0 (115)	100.0 (118)

The vast majority of the owners (86.4 percent of 118) said they had purchased the place while 4.2 percent had inherited the place, and 5.9 percent built the structure themselves. Most of the owners (55.2 percent of 116) said that they had made no substantial modification to the structure since its acquisition. Of the 52 owners who had made substantial modifications, 23.1 percent said they made modifications within a year of the interview and 71.2 claim to have made the modifications from one to five years prior to the survey.

On average, these properties increased in value from the time of purchase to the interview. Mean purchase price of the structures was \$367,712 and owners' estimated current valuation had a mean of \$390,114. The mean change in the value of property in this study increased \$14,618. This change is relatively modest when one considers that the mean change as a percent of purchase price was seven percent and almost 57 percent of the properties (for which this information was provide, n=76) either had no change or dropped in value. Further, most (82.7 percent of 110) of the owners had some outstanding debt on the property.

These owners could afford to spend relatively little on their properties (Table 18). Almost 40 percent of the owners who answered this question claimed they could spend nothing to improve their property. Another 23 percent claimed to be able to afford less than a thousand

dollars. Under 10 percent of the owners could afford to spend over \$5,000.

Table 18: MAXIMUM AMOUNT OWNER COULD SPEND TO IMPROVE THE PROPERTY (n=103)	
	PERCENT OF OWNERS
\$0	37.9
\$1 - \$1000	23.3
\$10001 - \$5000	29.1
> \$5000	9.7
Total	100.0

The reason for this becomes apparent when one considers that 51 percent of the 110 owners answering the question stated that the rent either just covers costs or that the costs exceed the rental income. Of these owners, 89.3 percent (50) said that costs were greater than the rent.

Owners were asked how important it was for them to have all of the units rented all 12 months of the year (Table 19). Of those answering, 72 percent stated that it was "very" or "extremely" important.

Table 19: HOW IMPORTANT IS IT TO HAVE ALL UNITS RENTED ALL 12 MONTHS TO MEET FINANCIAL OBJECTIVES (n=108)	
	PERCENT OF OWNERS
not at all	0.0
not very	5.6
somewhat	21.3
very	50.0
extremely	23.1
Total	100.0

THE MANAGEMENT OF PLACES

The financial constraints owners face may have some influence on their management practices. Slightly over half of the owners said they did not have a property manager (52.1

percent of 117). Of the 56 who have a manager, 58.9 percent said that the property manager was not located on the property. This implies that 80.3 percent (of 117) of the properties do not have someone permanently located at the place.

Since property owners do not live near their property nor are they likely to have property managers on their property, they must visit their properties to monitor the behavior of tenants. About 45 percent of the owners visit their properties every week or more (Table 20). Another third visit their property monthly. Over a fifth of the owners visit their properties less frequently than monthly. Only a very few owners never visit their property.

Table 20: FREQUENCY OF VISITS TO PROPERTY BY OWNER (n=116)	
	PERCENT OF OWNERS
Weekly or more	44.8
Monthly	31.9
Every other month	11.2
Biannually	6.9
Yearly	3.4
Never	1.7
Total	100.0

When asked when they last visited the property in question (Table 21), owners' responses are consistent with those shown in Table 20. About 43 percent had visited the property in the week prior to the interview. Over a third had visited in the prior month. And for almost 19 percent of the owners, it had been over a month since the owner visited their property.

Table 21: WHEN DID THE OWNER LAST VISIT THIS PROPERTY (n=113)	
	PERCENT OF OWNERS
Past week	43.4
Past month	37.2
Past 6 months	14.6
Past year	4.1
Total	100.0

More than 70 percent (of 110) of the owners claim to be unaware of neighborhood complaints about the place. About 57 percent (of 110) of the owners claim that their tenants keep the property maintained or in good order. Interestingly, 85.5 percent (of 110) of the owners said that, apart from the enforcement action that precipitated this study, they were unaware of other problems with the property. This should be compared to the police data on prior crime and drug events at the places (Table 4).

Most of the owners (61.2 percent of 116) had not heard of the San Diego Police Department's Landlord Training Program (LTP). Of those who had, 15.6 percent (of 45) had attended the program and 22.2 percent said that they were planning to attend a session in the future. But 62.2 percent (of 45) had not attended the program and had no plans to attend. In other words, 93.7 percent (of 116) of the owners had not attended a LTP session.

Table 22: TYPES OF BACKGROUND CHECKS OWNERS CONDUCTED ON THE OFFENDER/LEASEHOLDER	
	PERCENT OF OWNERS
Credit check (n=110)	38.2
Reference check (n=112)	41.1
Bank check (n=110)	1.8
Employment check (n=110)	29.1
Criminal conviction check (n=110)	0.0
No check (n=110)	26.4

Background checks can help landlords determine whether an applicant for a rental unit will pay his or her rent and maintain the property they lease. Owners were asked whether they checked on the background of the person leasing the unit where the police thought drugs were being sold. Credit and reference checks were the most frequently conducted (Table 22). Employment checks were also conducted relatively frequently. No local criminal conviction checks were conducted. In over a quarter of the cases, no background check was conducted at all.

DRUG OFFENDERS AT THE PLACES

According to the owners, the overwhelming majority of the units used by the offenders were rented on a month-to-month rental agreement (Table 23).

Table 23: TYPE OF LEASE FOR THE UNIT THE OFFENDER USED (n=115)	
	PERCENT OF OWNERS
1 month	85.2
6 month	6.1
Yearly	7.0
Other	1.7
Total	100.0

Only about ten percent of the offender-tenants paid their rent by check (Table 24). The modal category was payment in cash, but a quarter of the offenders paid by money order. Whether this was due to offenders not having bank accounts or owners not trusting the solvency of tenants' bank account is not known. Of course, there are other explanations for the use of cash payments. A drug offender may prefer to conduct business in cash in order to avoid establishing a paper trail. The landlord may prefer cash payments because they are easier to underreport to

tax authorities.

Table 24: FORM OF RENT PAYMENT (n=101)	
	PERCENT OF OWNERS
Cash	64.4
Money Order	25.7
Check	9.9
Total	100.0

Most owners (73.9 percent of 88) claimed that the offender paid his/her rent on time and the offender was paying his or her rent until the time they left (87.8 percent of 90). Almost 71 percent of the owners (of 89) said that the offender no longer lived in the rental unit.

Since there could be more than one offender in each unit there are more than 121 offenders in this study. Table 25 shows the age distribution of the 218 drug offenders found at the drug places. Of the offenders, about 43 percent were in their twenties and over 31 percent were in their thirties. Almost 74 percent of the drug offenders were between the ages of twenty and forty nine, inclusive. Less than ten percent were in their teens and less than four percent were over 49 years of age.

Table 25: AGE OF OFFENDERS (n=218)	
	PERCENT OF OFFENDERS
12 to 19	9.2
20 to 29	42.7
30 to 39	31.2
40 to 49	13.3
50 to 70	3.7
Total	100.1

Almost two thirds of the offenders were Hispanic and another 24 percent are European Americans (Table 26). African Americans constitute under 10 percent of the offenders. Of the

offenders, 52.8 percent were U.S. citizens. None of the offenders were known to the police as documented gang members.

Table 26: ETHNICITY OF OFFENDERS (n=218)	
	PERCENT OF OFFENDERS
Hispanic	64.2
European American	23.9
African American	9.6
Other	2.3
Total	100.0

The profile of the offenders shown in these tables differs considerably from the profile of the owners seen in earlier tables. The owners are older and more likely to be of European ethnic stock.

Table 27: PRIOR ARRESTS OF OFFENDERS (n=218)		
	DRUG (%)	OTHER FELONY (%)
0	48.6	96.3
1	48.2	3.7
2	3.2	0.0
Total	100.0	100.0

We examined the police records of the offenders found in this study (Table 27). The group split almost evenly between those who had a prior drug offense and those who did not. However, less than four percent of these offenders had a prior felony (non-drug) arrest. Thus it seems that the places may be more prone to repeated contacts with the police than the offenders found at the places. This finding is consistent with the idea that some places are particularly attractive to dealers, while others are not.

CONCLUSIONS

In this chapter we examined a number of characteristics of the people and places involved in this study. These can be summarized by listing the basic findings.

About the enforcement actions against drug places.

- Most of the places came into the study as a result of narcotics unit activity, particularly warrant based raids.
- A variety of drugs were found at these drug places as a consequence of the enforcement action.
- Most of the places had at least two drug arrests prior to the assignment to a treatment or control group and one or more prior calls for service.

About the location of the drug places.

- These places were located on two lane streets close to arterial routes.
- These places were near other residential places.

About the characteristics of the drug places.

- The places were more likely to be in apartment buildings than in duplexes or single family homes.
- The apartment complexes tend to be small with a single building and one or two floors.
- The dealing apartments were more likely to be in buildings with two entrances rather than one or three or more entrances.
- Dealing was evenly distributed among first, second and third floors. But because there were so many more first floors than second and third floors, it appears that dealers may

have avoided first floors and sought out upper level floors.

About the characteristics of owners of drug places.

- Most owners were individuals, rather than corporations or partnerships.
- Owners were usually of European extraction, and had gone to college.
- Almost a third of the owners had no other rental properties and over 40 percent had from one to five other rental properties.
- Most owners lived over 5 miles from the dealing place examined.
- The rental properties were usually over 20 years old, though the owner had acquired the property within the last ten years.
- The value of the properties examined had increased seven percent, on average, between acquisition and the interviews for this study. Nevertheless, more than half of the owners reported no increase in value or a drop in property values.
- Most owners could afford to spend under \$1000 to fix up the properties.
- The majority of owners felt that it was important to keep paying renters in all of the units.

About the management of the properties with drug dealing.

- Almost 80 percent of the properties did not have someone permanently located at the place.
- Most of the owners visited their property at least once a month.
- A quarter of the owners did no background checks of tenants. When checks were made they were usually of employment, credit and references.

About the drug offenders at dealing places.

- Drug offenders were most likely to have had month-to-month rental agreements, paid by cash or money order, paid on time, and were paid up by the time they left. Owners were generally unaware of complaints about the drug offenders made by neighbors.
- Offenders were mostly under 40 years old, and either Hispanic or European heritage.
- Slightly over half were U.S. citizens.
- Though slightly over half of the offenders had a prior drug arrest, very few had a prior non-drug felony arrest.

There were several aspects of these places that seem to make them particularly susceptible to drug dealing. They were located near arterial routes and thus near a steady flow of potential customers. The properties themselves were economically depressed and the owners do not appear to be financially willing to make substantial alterations, or to afford to allow rental units to become vacant.

The characteristics of dealers and owners are marked by major differences. This, and the distance owners lived from their property may have made it difficult for owners to detect illicit behavior and to do something about it. The dealers, from the perspective of the owners, appear to be model tenants: they pay on time and in cash, and do not cause trouble.

In the apartment buildings, the dealers seem to seek out upper floor units in buildings with two entrances. Interestingly, the places in this study had a greater history of drug involvement, known to the police, than the offenders arrested at them.

CHAPTER 3

TREATMENTS

In this chapter we examine the treatments applied to the three groups. The control group received no actions from the DART detective -- the owners were not informed by letter or phone about the presence of drug dealing on their properties or the police actions. The owners of properties in the letter group were sent a letter informing them of the presence of drug dealers and offering police assistance if the owner wanted it. The DART unit did nothing further with the property or the owner, unless the owner requested assistance. Owners of properties in the meeting group received a more strongly worded letter, not only informing them of the drug dealing but explaining that the City of San Diego can sue the owner of properties with repeat drug dealing in civil court, close the property, and levy a fine. The letter also informed the owner that the detective from the DART unit would set up a time for a meeting at the property in question. The DART unit would then set up a meeting and at the meeting begin plans that would make the property less susceptible to drug dealing. The meeting was the substantive difference between the meeting group and the letter group.

The maintenance of experimental conditions was address in several ways. First, the DART unit was very small, a detective and a sergeant. This meant that there were only a very few people who had to comply with experimental conditions. No other units of the San Diego Police Department had a interest in following up with landlords. Follow-ups were not standard practice of either patrol officers or narcotics detectives. Second, the experimental conditions were carefully negotiated with DART. The sergeant and detective realized that under normal -- non-experimental -- conditions, they had more places to check than they had time to do work on

them. The experiment reduced their workload substantially. A third of the new cases would not require any effort because they were in the control group. Even the letter cases would not require as much effort as normal. Third, the on-site research assistant had daily contact with DART to discuss problems, answer questions, and observe potential violations of experimental conditions. Fourth, the experiment was simple so it was easy to comply with experimental conditions. The planning and administration of the experiment was also facilitated by the working relationship established between the sergeant and principle investigator established over several years of working on problem-oriented policing within the police department.

Finally, the DART Unit recorded the actions it took on each case on activity logs. These logs include actions initiated by DART (e.g., calling owners and making recommendations) and actions initiated by owners (e.g., the owner calls DART or the owner's attorney sends a letter to DART).

Table 28 shows the proportion of places in each group that received at least one action or no action. As planned, none of the places in the control group and all of the places in the meeting group received at least one action. The letter group was almost evenly split between action and no action. Though it is possible that some actions were taken that were not recorded, monitoring of cases by the on-site research assistant suggest that this was unlikely.

Table 28: DART ACTION BY TREATMENT GROUP			
	Control	Letter	Meeting
Action		52.4 (22)	100.0 (37)
No Action	100.0 (42)	47.6 (20)	
Total	100.0 (42)	100.0 (42)	100.0 (37)

Activity logs record 76 very specific activities for all of the meeting places and the letter cases where the owner contacted DART. These were grouped into 20 types of activities (see Appendix D for their frequencies). Within the letter and meeting groups, all activities revolved around gathering and exchanging information, or making recommendations. Letter group seldom exchanged information with the police and the DART seldom made recommendations to owners in this group. Most of the activity of DART, as planned, focused on the owners of the meeting group. Collectively, the activities suggests a series of discussions, much of it taking place over the telephone, with most of the activities involving DART information gathering from the owner. Most information gathering activities revolved around the tenants involved in drug dealing.

Contact with owners in letter cases was left to the owners' discretion, so the proportion of these cases with actions depends on the initiative of the owner or manager. So to compare the meeting and letter groups in the following tables of this chapter, we examine only the places with at least one action: 22 letter places and all 37 meeting places.

DART was to meet with property owners or managers at meeting treatment sites.

Gaining the cooperation of owners and managers for such meetings was not extremely difficult. For only two cases was DART unable to arrange a property inspection. Table 29 shows that in over 80 percent of the meeting places, the DART representative met with the owner or manager and that a representative of the Codes Compliance Department was also present. At only one of the letter places was the Code Compliance representative present. The activity log noted whether the inspector found illegal use of the property. The inspector never found such violations.

Compliance with the treatment conditions was high. None of the control group places had any contact with DART. Though half of the letter group had a contact with DART in addition to the letter, only one of these cases had a meeting. Finally, all but one of the meeting places had a meeting. All but two of the meeting places were inspected. And over eighty percent of the meeting places were inspected by a representative of the Codes Compliance Department. Following standard experimental procedures, we analyze places as they were assigned for treatment rather than by the type of treatment they received (Berk and Sherman, 1988; Sherman, 1992). This maintains the power of randomization.

Table 29: DART MEETINGS WITH OWNERS/MANAGERS		
	Letter (22)	Meeting (37)
Unable to inspect property	0.0 (0)	5.4 (2)
Meeting held with owner or manager	4.5 (1)	91.9 (34)
Includes building inspector	4.5 (1)	81.1 (30)

Assuring that the drug offenders were removed from the property was a high priority for

the DART unit. In almost 57 percent of the meeting places, the owner or manager was willing to evict the drug offenders. Only a minority expressed some hesitancy to evict (Table 30). Over a third of the letter treatment owners and managers expressed a willingness to evict, but only one was hesitant.

Table 30: EVICTION OF OFFENDERS		
	Letter (22)	Meeting (37)
Owner/manager willing to evict	36.4 (8)	56.8 (21)
Owner/manager hesitant to evict	4.5 (1)	13.5 (5)
Drug offenders have left	27.3 (6)	43.2 (16)

Table 30 also shows the percent of cases in each treatment category where the drug offender had left the property. This includes offenders who left prior to DART contact, were evicted, or left on their own accord. Offenders left in more than 40 of the meeting cases and in over a quarter of the letter cases in which the owner contacted DART. In the next chapter we will examine evictions in greater detail using another source of data – owner interviews -- that allow us to examine all three treatment groups.

DART made recommendations to owners as to how they could improve the management of their property. Over 51 percent of the meeting group and almost 23 percent of the letter group that contacted DART received such recommendations (Table 31). These recommendations ranged from suggestions that the owner attend a landlord management training course run by the police, to suggestions that the property manager be changed, to recommendations that the property be sold.

Table 31: MANAGEMENT AND RENOVATION CHANGES		
	Letter (22)	Meeting (37)
Dart recommends management changes	22.7 (5)	51.4 (19)
Owner renovation rental property	0.0 (0)	10.8 (4)
Changes in property management	0.0 (0)	10.8 (4)

Property owners did not make major physical changes in their property or changed their management practices (Table 31). Less than 11 percent of the meeting property owners told DART that they renovated their property or changed the way they supervise their rental property. Of the 22 owners of letter treatment properties who contacted DART, none told DART that they were making such changes.

The DART logs record that in almost 11 percent (4) of the meeting cases, and in two percent (1) of the letter cases, the owner expressed some dissatisfaction with DART (for example, "Owner questioned DART if it was the correct address") or with the narcotics enforcement (for example, "Owner questioned DART about excessive damage done by detectives" or "Owner told DART that suspect was not dealing, he was harassed by police department"). On net, it is not clear whether DART's actions provoked adverse reactions or whether it provided a way for owners to complain to the police about drug enforcement activities with which they disagreed. Damage to rental property is not uncommon in police raids and follow-up contacts with property owners might also serve the purpose of addressing their concerns.

CONCLUSIONS

The experimental treatments seemed to have been delivered as planned. Owners in the meeting group were willing to evict, in general, and in over 40 percent of these cases the offenders left the property, according to the logs. Since the activity logs can only describe activities known to DART, we will have to look at other data to determine if the meeting treatment caused these changes. It appears, however, that the biggest influence DART could have had was on moving offenders off of the properties, because in neither the letter nor meeting groups did owners seem willing to undertake other changes in their property management practices or the physical structure. In the next chapter we will examine the degree to which the treatments may have caused drug offenders to leave rental properties. We will also look at evidence that the treatment may have had a short term impact on drug dealing and criminal behavior at the experimental sites.

CHAPTER 4

SHORT TERM OUTCOMES

In this chapter we examine the relation between the three treatments and a variety of outcomes in the three months after treatment. We will begin by looking at actions taken by the property managers to rid their properties of the offenders. Information describing property management actions comes from interviews with owners and managers. We will then move on to evidence of drug dealing at the site. This information comes from attempts by narcotics investigators to make contacts with dealers at all sites following treatment. And we will conclude with an analysis of crime events following treatments. Crime information comes from geographically organized crime data maintained by the police department's Crime Analysis unit. Thus we will be looking at three different measures of treatment effects coming from three very different sources of information.

In the first nine tables in this chapter we use a chi-square test to determine if the outcomes observed are due to real differences in the treatments or due to random chance. In these tables we first report the distribution of the outcomes for the treatments compared. We then report the chi-square value and degrees of freedom (df) for the table, along with the significance level for the chi-square test. The last line of the table shows the Spearman correlation (appropriate for the dichotomous data being used) to show how closely treatments are associated with outcomes. The t-value and significance are reported to determine if the correlation is likely to be due to real treatment differences or random chance.

The significance values can be interpreted as the probability that the observed difference between the means is due to chance alone. Thus, a significance value of .45 indicates that there

is a probability of .45 that the difference is due to random fluctuations. We normally consider any significance level greater than .10 too high for the observed differences to be due to the treatments. Thus, a significance level of .45 gives us too little confidence in the efficacy of the treatments to consider them significant.

ARE THE OFFENDERS STILL AT THE PROPERTY?

The most direct influence the police can have with property managers is to increase the frequency with which they kick drug sellers off their properties. In the owner survey we asked property managers if the offender was still on the property. Table 32 shows the results. We see in Table 32 that there is no relationship between treatment and the presence of the offender on the property.

Table 32: IS THE OFFENDER STILL LIVING ON THE PROPERTY?				
	CONTROL		LETTER	
	MEETING			
NO	67.7 (21)		77.8 (21)	68.2 (15)
YES	32.3 (10)		22.2 (6)	31.8 (7)
TOTAL	100.0 (31)		100.0 (27)	100.0 (22)
	Value	df	T-value	Significance
Chi-square	.84900	2		.65410
Spearman Correlation	-.01909		-.16867	.86649

Drug offenders may leave the property for many reasons that have no relationship with the owners activities. Looking at evictions by property managers may suggest different results. Since offenders may be leaseholders or friends of leaseholders, there are two types of evictions

that could take place. If the offender is the lease or rental agreement holder, the offender can be evicted directly. If the offender is hanging out in the rental unit of the leaseholder, evicting the offender's associate can get rid of the offender. Table 33 shows the relationship between treatment group and both types of evictions combined. There is no significant relationship between evictions and treatment. Nevertheless, there is an increase in the percent of evictions as one increases the level of police follow-up from doing nothing after the raid to having a meeting with the owner. This is reflected in the weak positive correlation between treatment and eviction.

Table 33: WAS THE OFFENDER OR HIS/HER ASSOCIATE EVICTED?				
	CONTROL		LETTER	
			MEETING	
NO	61.5 (24)		53.7 (22)	43.8 (14)
YES	38.5 (15)		46.3 (19)	56.3 (18)
TOTAL	100.0 (39)		100.0 (41)	100.0 (32)
	Value	df	T-value	Significance
Chi-square	2.23642	2		.32686
Spearman Correlation	.14064		1.48991	.13911

The next two tables show the results of separate analyses of the two types of evictions. Table 34 shows the relationship between treatment and the eviction of offender-leaseholders. A much stronger relationship can be seen in this table. While the group with no follow-up had a 37 percent eviction rate when the offender was the leaseholder, the meeting group had a 65 percent eviction rate. Though the chi-square statistic is not significant at normally used levels, the correlation (.22) between the treatment and this outcome is significant at the .05 level. Thus, the more direct the follow-up by DART, the greater the chances the offender would be evicted, if the

offender was the leaseholder.

Table 34: WAS THE OFFENDER EVICTED?				
	CONTROL	LETTER	MEETING	
NO	63.3 (19)	55.2 (16)	34.8 (8)	
YES	36.7 (11)	44.8 (13)	65.2 (15)	
TOTAL	100.0 (30)	100.0 (29)	100.0 (23)	
	Value	df	T-value	Significance
Chi-square	4.38944	2		.11139
Spearman Correlation	.22154		2.03203	.04547

Table 35 shows the relationship between treatment and eviction of the leaseholder when the leaseholder is not the offender. The first thing to notice is that the number of these cases is much smaller than the number of cases in which the offender was the leaseholder. Thus it is not surprising that the relationship between eviction and treatment for these cases is non-significant and extremely small.

Table 35: WAS THE OFFENDER'S ASSOCIATE EVICTED?				
	CONTROL	LETTER	MEETING	
NO	55.6 (5)	50.0 (6)	66.7 (6)	
YES	44.4 (4)	50.0 (6)	33.3 (3)	
TOTAL	100.0 (9)	100.0 (12)	100.0 (9)	
	Value	df	T-value	Significance
Chi-square	.58824	2		.74519
Spearman Correlation	-.08684		-.46127	.64817

We have examined the relationship between increasing follow-up intervention and the eviction of offender-leaseholders. We have found that following up after a drug raid seems to

influence the chances of an eviction if the offender is the leaseholder. In Table 36 we compare the no-follow-up group (control) to the two treatment groups separately. This will tell us which treatment is significantly related to evictions. The first row shows the results when the letter group is compared to the controls. We find significant difference between these two groups with regard to evictions. In the second row we find that there is a statistically significant relationship between meetings and evictions. Further, there is a moderate correlation between meetings and evictions. When comparing the meeting and letter groups (third row) we find that meetings increase the chances of an eviction, but this is not significant at standard levels of significance. The fourth row shows that by comparing the combined letter and meeting groups to the controls, there is no significant difference in evictions. However, in the last row we see that meetings compared to letter and control do significantly increase the chances of evictions.

Table 36: COMPARISON OF TREATMENTS FOR EVICTIONS OF OFFENDER LEASEHOLDERS (df=1)				
	Chi-square	Significance	Spearman Correlation	Significance
LETTER V CONTROL (n=59)	.40698	.52351	.08305	.53172
MEETING V CONTROL (n=53)	4.24641	.03933	.28306	.04000
MEETING V LETTER (n=52)	2.14578	.14296	.20314	.14864
MEETING & LETTER V CONTROL (n=82)	2.25126	.13351	.16569	.13683
MEETING V LETTER & CONTROL (n=82)	3.99567	.04562	.22074	.04627

The results shown in Table 36 clearly reveal that follow-up meetings improve the chances of the owner evicting the offender-leaseholder compared to no follow-up. Letters are less

effective in getting an eviction but are not significantly different from meetings. When one interprets these findings in light of the findings reported in Table 34 it would appear that letters also improve the chances of an eviction. However, the effect of letters is too small to be significantly different from doing nothing but large enough that it is not significantly different from having meetings with the owner.

The eviction results shown in Tables 32 through 36 suggest that there are many reasons for offenders to leave the property and many of them seem to be unrelated to the DART follow-up. However, when one examines evictions we see a stronger relationship between treatment and the removal of the offender, particularly when the offender is the leaseholder. Since the offender was the leaseholder in almost three quarters of the cases, this finding is important.

PRESENCE OF DRUG DEALING AT THE SITE

Next we turn to the effects of the treatments on drug dealing at or near the place. For each of the places in question, the narcotics unit sent investigators back no sooner than three months after the place was assigned to an experimental group. The narcotics detectives assigned were usually those who had investigated the location initially so they were familiar with the location and the drug dealers at the site. When they returned they were to make an assessment of the likelihood that 1) there was any form of drug dealing at the site, 2) the original dealer was still selling drugs at the site, or 3) the dealer was selling within a half mile of the experimental site.

Table 37: DEALING AT OR NEAR THE EXPERIMENTAL SITE				
Is there dealing at this location?				
	n	NO	YES	
DEALING	107	86.9%	13.1%	
Chances the same person is dealing				
	n	POOR	GOOD	DON'T KNOW
AT SITE	106	80.2%	7.5%	12.3%
WITHIN ½ MILE	106	35.8%	11.3%	52.8%

Table 37 shows that at the vast majority of sites the narcotics detectives could find no evidence of drug dealing by the original dealer or anyone else. They had more difficulty with determining if the original dealer was active nearby; at over 50 percent of the sites they did not know if this person was still active within a half mile. Nevertheless, the detectives thought the chances of this person dealing were "good" in about 11 percent of the cases.

There are two important implications we can draw from Table 37. First, the dealers were found so infrequently that for the experiment to detect an effect of the treatments, dramatic differences among the three treatment groups would have to be found. Second, judging from the last row in Table 37, there seems to be few displacement effects from either the original enforcement or the DART follow-up. Whatever displacement there is appears to be well hidden from the narcotics investigators.

When we examine the relationship between the treatment and the narcotics detectives' assessment of dealing taking place at the site we see that there is a slight decline in dealing as we move from no follow-up to meeting (Table 38). This is reflected in the negative correlation coefficient. This decline is not significant at any reasonable level of significance.

Table 38: DEALING AT THE SITE BY TREATMENT			
	CONTROL	LETTER	MEETING
NO	85.0 (34)	87.5 (35)	88.9 (24)
YES	15.0 (6)	12.5 (5)	11.1 (3)
TOTAL	100.0 (40)	100.0 (40)	100.0 (27)
	Value	df	T-value
Chi-square	.23353	2	.88979
Spearman Correlation	-.04640	-.47599	.63507

The next two tables show the relationship between treatments and the presence of the original offender at the site and within a half mile of the site. In these tables we only look at the sites for which the narcotics detective did not record that he or she did not know if the dealer was present.

Table 39: CHANCES THE DEALERS IS STILL SELLING AT THIS SITE			
	CONTROL	LETTER	MEETING
POOR	88.6 (31)	93.9 (31)	92.0 (23)
GOOD	11.4 (4)	6.1 (2)	8.0 (2)
TOTAL	100.0 (35)	100.0 (33)	100.0 (25)
	Value	df	T-value
Chi-square	.63828	2	.72677
Spearman Correlation	.05778	.55208	.58225

Table 40: CHANCE THE DEALERS IS SELLING WITHIN A ½ MILE OF THE SITE				
	CONTROL		LETTER	
	MEETING			
POOR	72.7 (16)		75.0 (12)	83.3 (10)
GOOD	27.3 (6)		25.0 (4)	16.7 (2)
TOTAL	100.0 (22)		100.0 (16)	100.0 (12)
	Value	df	T-value	Significance
Chi-square	.49176	2		.78202
Spearman Correlation	.09366		.65175	.51767

In both tables 39 and 40 the chances of dealing is slightly lower for the letter and meeting locations than the control locations. Though this is consistent with the desired impact of the DART follow-up, our confidence that these results are not due to chance is very weak; these results are far from being significant at any acceptable level.

We can summarize the narcotics detectives assessment of drug dealing at or near the sites as follows. Drug dealing was so seldom detected at or near the sites by the narcotics detectives that the DART effects would have to be extremely large to find them. We have some evidence that the letter and meeting treatments made some improvement. However, this improvement is so small that we cannot determine if the differences among the groups is due to the treatments or due to chance.

EFFECTS OF TREATMENTS ON CHANGES IN DRUG AND CRIME EVENTS

The last set of experimental results we will examine is the impact of the treatment on criminal events at the sites. We described the distributions of six police recorded crime events in Table 4 of Chapter 2. These six measures were: drug arrests; other felony arrests; reported

crimes; police field interviews; citizen complaints about drugs; and calls for service. Police records were used to measure these events at all study locations for the three months prior to the experiment and the three months following the experimental assignment. For each place, we calculated the change in number of these events from the pre- to post-experimental period. Differences in the mean changes among the three treatment groups will be examined next to determine if there are meaningful differences that can be attributed to either the letter or meeting treatments.

For each of the six measures we examine three comparisons: letter versus control; meeting versus control; and letter versus meeting. This gives us eighteen tables. We use a standard format for these tables. The upper part of each table compares the two distributions being examined. The first column shows the difference in crime counts from the pre-treatment period to the post treatment period. Positive numbers indicate an increase in crime events while negative numbers indicate a decrease in crime events. Zero indicates no change. The columns labeled "n" show the number of experimental places with each change, and the columns headed "Percent" show the percent of the group (control, letter, and meeting) with each change.

The bottom part of the table provides several summary statistics about the two distributions being compared. These figures include the mean and standard deviation for each distribution and the mean difference between the two distributions. To determine if the mean difference noted is unlikely to be due to chance (and therefore, likely to be the consequence of the treatments applied) a t-test was used to compare the means of the distributions. The t-value and the number of degrees of freedom (df) are reported. Finally, the table shows a significance

value for the t-test.

Changes in Narcotics Arrests at Sites

Tables 41 through 43 show changes in the number of narcotics arrests at experimental sites. The differences between the means of groups is very small, and the control mean shows a greater decline than either of the follow-up treatments. There are no statistically significant differences among any of the three groups for any of the three pairs of comparisons.

Table 41: NARCOTICS ARRESTS AT SITE -- LETTER V CONTROL				
	CONTROL		LETTER	
CHANGE	Percent	n	Percent	n
3	2.4	1	2.4	1
2	0.0	0	0.0	0
1	0.0	0	2.4	1
0	11.9	5	7.1	3
-1	38.1	16	45.2	19
-2	21.4	9	33.3	14
-3	16.7	7	4.8	2
-4	2.4	1	0.0	0
-5	4.8	2	2.4	1
-6	0.0	1	0.0	0
-7	0.0	0	2.4	1
Total	100.0	42	100.0	42
Mean		-1.71		-1.45
Std. Dev.		1.58		1.71
t-value	-0.79		mean difference	-.2619
df	82			
significance		.434		

Table 42: NARCOTICS ARRESTS AT SITE -- MEETING V CONTROL

CHANGE	CONTROL		MEETING	
	Percent	n	Percent	n
3	2.4	1	0.0	0
2	0.0	0	0.0	0
1	0.0	0	0.0	0
0	11.9	5	13.5	5
-1	38.1	16	35.1	13
-2	21.4	9	37.8	14
-3	16.7	7	5.4	2
-4	2.4	1	5.4	2
-5	4.8	2	2.7	1
-6	2.4	1	0.0	0
-7	0.0	0	0.0	0
Total	100.0	42	100.0	37
Mean		-1.71		-1.62
Std. Dev.		1.58		1.14
t-value	-0.30		mean difference	-.0927
df	77			
significance		.769		

Table 43: NARCOTICS ARRESTS AT SITE -- LETTER V MEETING

	LETTER		MEETING	
CHANGE	Percent	n	Percent	n
3	2.4	1	0.0	0
2	0.0	0	0.0	0
1	2.4	1	0.0	0
0	7.1	3	13.5	5
-1	45.2	19	35.1	13
-2	33.3	14	37.8	14
-3	4.8	2	5.4	2
-4	0.0	0	5.4	2
-5	2.4	1	2.7	1
-6	0.0	0	0.0	0
-7	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean	-1.45		-1.62	
Std. Dev.	1.47		1.14	
t-value	-0.57	mean difference		
df	77	-.1692		
significance	.573			

Changes in Other Arrests at the Sites

The next three tables (44 through 46) describe changes in non-drug felony arrests. The differences among the three groups are very small and not significant.

Table 44: OTHER ARRESTS AT SITE -- LETTER V CONTROL

CHANGE	CONTROL		LETTER	
	Percent	n	Percent	n
3	2.4	1	0.0	0
2	7.1	3	0.0	0
1	4.8	2	11.9	5
0	61.9	26	78.6	33
-1	16.7	7	7.1	3
-2	4.8	2	2.4	1
-3	0.0	0	0.0	0
-4	0.0	0	0.0	0
-5	2.4	1	0.0	0
Total	100.0	42	100.0	42
Mean		-12		.00
Std. Dev.		1.23		.54
t-value	-0.57		mean difference	-.119
df	82			
significance		.568		

Table 45: OTHER ARRESTS AT SITE -- MEETING V CONTROL

CHANGE	CONTROL		MEETING	
	Percent	n	Percent	n
3	2.4	1	0.0	0
2	7.1	3	0.0	0
1	4.8	2	10.8	4
0	61.9	26	73.0	27
-1	16.7	7	2.7	1
-2	4.8	2	10.8	4
-3	0.0	0	2.7	1
-4	0.0	0	0.0	0
-5	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean		-12		-.22
Std. Dev.		1.23		.89
t-value	0.40		mean difference	.097
df	77			
significance		.692		

Table 46: **OTHER ARRESTS AT SITE -- LETTER V MEETING**

CHANGE	LETTER		MEETING	
	Percent	n	Percent	n
1	11.9	5	10.8	4
0	78.6	33	73.0	27
-1	7.1	3	2.7	1
-2	2.4	1	10.8	4
-3	0.0	0	2.7	1
Total	100.0	42	100.0	37
Mean		.00		-.22
Std. Dev.		.54		.89
t-value	1.33		mean difference	.216
df	77			
significance		.189		

Changes in Reported Crime at the Sites

There are no significant differences among the groups with regard to reported crime in Tables 47 through 49. Thus, we cannot assert, with confidence, that the mean differences reported are not due to chance.

Table 47: REPORTED CRIME AT SITE – LETTER V CONTROL				
	CONTROL		LETTER	
CHANGE	Percent	n	Percent	n
4	0.0	0	2.4	1
3	4.8	2	0.0	0
2	4.8	2	4.8	2
1	9.5	4	4.8	2
0	59.5	25	69.0	29
-1	9.5	4	14.3	6
-2	4.8	2	2.4	1
-3	0.0	0	0.0	0
-4	2.4	1	2.4	1
-5	2.4	1	0.0	0
-6	0.0	0	0.0	0
-7	2.4	1	0.0	0
Total	100.0	42	100.0	42
Mean		-0.24		-0.05
Std. Dev.		1.78		1.13
t-value	-0.59		mean difference	-.1905
df	82			
significance		.559		

Table 48: REPORTED CRIME AT SITE -- MEETING V CONTROL				
CHANGE	CONTROL		MEETING	
	Percent	n	Percent	n
3	4.8	2	0.0	0
2	4.8	2	5.4	2
1	9.5	4	10.8	4
0	59.5	25	59.5	22
-1	9.5	4	16.2	6
-2	4.8	2	2.7	1
-3	0.0	0	0.0	0
-4	2.4	1	0.0	0
-5	2.4	1	5.4	2
-6	0.0	0	0.0	0
-7	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean		-0.24		-0.27
Std. Dev.		1.78		1.39
t-value	.09		mean difference	.0322
df	77			
significance		.929		

Table 49: REPORTED CRIME AT SITE -- MEETING V LETTER				
CHANGE	LETTER		MEETING	
	Percent	n	Percent	n
4	2.4	1	0.0	0
3	0.0	0	0.0	0
2	4.8	2	5.4	2
1	4.8	2	10.8	4
0	69.0	29	59.5	22
-1	14.3	6	16.2	6
-2	2.4	1	2.7	1
-3	0.0	0	0.0	0
-4	2.4	1	0.0	0
-5	0.0	0	5.4	2
-6	0.0	0	0.0	0
-7	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean	-0.05		-0.27	
Std. Dev.	1.13		1.39	
t-value	.79		mean difference	.2227
df	77			
significance	.434			

Changes in Field Interviews at the Sites

The mean differences show that there were fewer field interviews at letter and meeting sites than control sites. Nonetheless, these differences were not significant. Neither was the difference between the letter and meeting treatment groups.

Table 50: FIELD INTERVIEWS AT SITES – LETTER V CONTROL				
	CONTROL		LETTER	
CHANGE	Percent	n	Percent	n
19	2.4	1	0.0	0
:	:	:	:	:
5	2.4	1	0.0	0
4	0.0	0	2.4	1
3	2.4	1	2.4	1
2	0.0	0	4.8	2
1	7.1	3	4.8	2
0	57.1	24	54.8	23
-1	11.9	5	16.7	7
-2	7.1	3	9.5	4
-3	2.4	1	2.4	1
-4	2.4	1	0.0	0
-5	0.0	0	0.0	0
-6	0.0	0	0.0	0
-7	4.8	1	0.0	0
:	:	:	:	:
-14	0.0	0	2.4	1
Total	100.0	42	100.0	42
Mean		-0.05		-0.45
Std. Dev.		3.62		2.49
t-value	0.60		mean difference	.4048
df	82			
significance		.552		

Table 51: FIELD INTERVIEWS AT SITES -- MEETING V CONTROL

	CONTROL		MEETING	
CHANGE	Percent	n	Percent	n
19	2.4	1	0.0	0
:	:	:	:	:
5	2.4	1	0.0	0
4	0.0	0	0.0	0
3	2.4	1	0.0	0
2	0.0	0	0.0	0
1	7.1	3	5.4	2
0	57.1	24	56.8	21
-1	11.9	5	18.9	7
-2	7.1	3	10.8	4
-3	2.4	1	2.7	1
-4	2.4	1	2.7	1
-5	0.0	0	0.0	0
-6	0.0	0	0.0	0
-7	4.8	1	0.0	0
-8	0.0	0	2.7	1
Total	100.0	42	100.0	37
Mean	-0.05		-0.76	
Std. Dev.	3.62		1.61	
t-value	1.10	mean difference .7091		
df	77			
significance	.275			

Table 52: FIELD INTERVIEWS AT SITES -- LETTER V MEETING				
CHANGE	LETTER		MEETING	
	Percent	n	Percent	n
4	2.4	1	0.0	0
3	2.4	1	0.0	0
2	4.8	2	0.0	0
1	4.9	2	5.4	2
0	54.8	23	56.8	21
-1	16.7	7	18.9	7
-2	9.5	4	10.8	4
-3	2.4	1	2.7	1
-4	0.0	0	2.7	1
-5	0.0	0	0.0	0
-6	0.0	0	0.0	0
-7	0.0	0	0.0	0
-8	0.0	0	2.7	1
:	:	:	:	:
-14	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean		-0.45		-0.76
Std. Dev.		2.49		1.61
t-value	0.527		mean difference	.3044
df	77			
significance		.527		

Changes in Citizen Drug Complaints at Sites

The differences between the groups with respect to citizen drug complaints were infinitesimal. Thus, it is not surprising that there are no statistically significant differences for this measure.

Table 53: DRUG COMPLAINTS AT SITES -- LETTER V CONTROL

	CONTROL		LETTER	
CHANGE	Percent	n	Percent	n
2	2.4	1	0.0	0
1	0.0	0	0.0	0
0	61.9	26	76.2	32
-1	21.4	9	14.3	6
-2	7.1	3	4.8	2
-3	4.8	2	0.0	0
-4	2.4	1	0.0	0
-5	0.0	0	2.4	1
-6	0.0	0	0.0	0
-7	0.0	0	0.0	0
-8	0.0	0	2.4	1
Total	100.0	42	100.0	42
Mean	-0.55		-0.55	
Std. Dev.	1.06		1.48	
t-value	0.000	mean difference		.0000
df	82			
significance	1.0000			

Table 54: DRUG COMPLAINTS AT SITES -- MEETING V CONTROL

CHANGE	CONTROL		MEETING	
	Percent	n	Percent	n
2	2.4	1	0.0	0
1	0.0	0	0.0	0
0	61.9	26	64.9	24
-1	21.4	9	27.0	10
-2	7.1	3	5.4	2
-3	4.8	2	2.7	1
-4	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean	-0.55		-0.46	
Std. Dev.	1.06		0.73	
t-value	-0.42		mean difference	-.0882
df	77			
significance	.673			

Table 55: DRUG COMPLAINTS AT SITES -- LETTER V MEETING

CHANGE	LETTER		MEETING	
	Percent	n	Percent	n
0	76.2	32	64.9	24
-1	14.3	6	27.0	10
-2	4.8	2	5.4	2
-3	0.0	0	2.7	1
-4	0.0	0	0.0	0
-5	2.4	1	0.0	0
-6	0.0	0	0.0	0
-7	0.0	0	0.0	0
-8	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean	-0.55		-0.46	
Std. Dev.	1.48		0.73	
t-value	-0.33		mean difference	-.0882
df	77			
significance	.744			

Changes in Calls for Service at Sites

In this last set of tables we see a pattern that is very familiar; the differences among the groups is small and not significant.

Table 56: CALLS FOR SERVICE AT SITES -- LETTER V CONTROL				
	CONTROL		LETTER	
CHANGE	Percent	n	Percent	n
23	2.4	1	0.0	0
:	:	:	:	:
10	0.0	0	2.4	1
9	2.4	1	0.0	0
8	2.4	1	0.0	0
7	2.4	1	0.0	0
6	0.0	0	2.4	1
5	0.0	0	0.0	0
4	2.4	1	0.0	0
3	4.8	2	4.8	2
2	0.0	0	9.5	4
1	19.0	8	2.4	1
0	19.0	8	38.1	16
-1	11.9	5	21.4	9
-2	14.3	6	4.8	2
-3	2.4	1	7.1	3
-4	2.4	1	4.8	2
-5	11.9	5	0.0	0
-6	0.0	0	0.0	0
-7	2.4	1	0.0	0
Total	100.0	42	100.0	42
Mean	0.21		0.05	
Std. Dev.	4.92		2.46	
t-value	0.20	mean difference		.1667
df	82			
significance	.845			

Table 57: CALLS FOR SERVICE AT SITES -- MEETING V CONTROL

CHANGE	CONTROL		MEETING	
	Percent	n	Percent	n
23	2.4	1	0.0	0
:	:	:	:	:
10	0.0	0	0.0	0
9	2.4	1	0.0	0
8	2.4	1	0.0	0
7	2.4	1	0.0	0
6	0.0	0	2.7	1
5	0.0	0	0.0	0
4	2.4	1	2.7	1
3	4.8	2	0.0	0
2	0.0	0	10.8	4
1	19.0	8	10.8	4
0	19.0	8	32.4	12
-1	11.9	5	18.9	4
-2	14.3	6	8.1	3
-3	2.4	1	5.4	2
-4	2.4	1	2.7	1
-5	11.9	5	2.7	1
-6	0.0	0	2.7	1
-7	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean		0.21		-0.32
Std. Dev.		4.92		2.25
t-value	0.61		mean difference	.5386
df	77			
significance		.542		

Table 58: CALLS FOR SERVICE AT SITES -- LETTER V MEETING

CHANGE	LETTER		MEETING	
	Percent	n	Percent	n
10	2.4	1	0.0	0
9	0.0	0	0.0	0
8	0.0	0	0.0	0
7	0.0	0	0.0	0
6	2.4	1	2.7	1
5	0.0	0	0.0	0
4	0.0	0	2.7	1
3	4.8	2	0.0	0
2	9.5	4	10.8	4
1	4.8	2	10.8	4
0	38.1	16	32.4	12
-1	21.4	9	18.9	4
-2	4.8	2	8.1	3
-3	7.1	3	5.4	2
-4	4.8	2	2.7	1
-5	0.0	0	2.7	1
-6	0.0	0	2.7	1
-7	2.4	1	0.0	0
Total	100.0	42	100.0	37
Mean		0.05		-0.32
Std. Dev.		2.46		2.25
t-value	0.70		mean difference	.379
df	77			
significance		.487		

Conclusions About Changes in Crime and Drug Events

We found no statistically significant differences in any of the 18 comparisons for the six crime and drug event measures. Though this suggests that the treatments had no effect, it is possible that the treatments had effects but these effects were too small for this experiment to detect. Certainly, no differences were greater than one event.

Table 59 summarizes the 18 comparisons by showing which group showed the greatest decrease (or smallest increase). Of the 12 comparisons with the letter group in only two circumstances did the letter group show more improvement than the control or the meeting group. The meeting group showed more improvement in 9 out of 12 comparisons with the control or letter groups. This is weak evidence that meetings may slightly reduce the number of crime and drug related events at drug places. Nevertheless, we must emphasize that these reductions are likely to be small, and this evidence is highly speculative.

Table 59: SUMMARY OF CRIME AND DRUG EVENT CHANGES			
	Letter v Control	Meeting v Control	Meeting v Letter
Drug Arrests	C	C	M
Other Arrests	C	M	M
Reported Crime	C	M	M
Field Interviews	L	M	M
Drug Complaints	=	C	L
Calls for Service	L	M	M
C -- Control showed greatest decrease L -- Letter showed greatest decrease M -- Meeting showed greatest decrease = -- equal decrease			

CONCLUSIONS

In this chapter we examined the effects of the treatments on three types of outcomes: evictions of drug offenders; the presence of drug offenders at or near the site; and drug and crime events at the site. We found that when the drug offender was the leaseholder, the meeting treatment increased the chances of the offender's eviction.

We found no statistically significant difference among the treatments with regards to the

presence of drug offenders at or near the treatment place. The reason for this may be that the chances of the drug offender being at or near the treatment site was low for all sites. It is also possible that narcotics investigators, without investigatory leads, were only able to conduct a cursory attempt to locate offenders, thereby missing dealers who were in the area. Nevertheless, the meeting treatment sites had a slightly lower frequency of the offender being at the site or near the site.

Finally, we looked at six measures of drug and crime events at the treatment sites. Here again we found no statistically significant differences among the three treatments for any of the six measures. Still, there is weak evidence that the meeting treatment may slightly reduce some drug and crime events.

The results so far imply that the treatments either have no effect, or the effects are small and weak. However, we should examine another possibility; the treatments may have a delayed effect and any important differences occur months or more after the treatments are applied. In the next chapter we examine this possibility.

CHAPTER 5

LONG TERM OUTCOMES

In the previous chapter we looked at the short term results of the two treatments. At best we found weak evidence that the treatments had an influence. Evictions of lease holding offenders were higher in the meeting group than the control group and the mean number of drug and crime indicators were lower for the treatment group places than for the control group places. A more conservative interpretation would be that the treatments had no discernible effects on crime and drug dealing in the treated rental properties. Before we conclude that the treatments have no effect on crime and drug dealing, we need to eliminate several rival hypotheses.

There are several reasons why the treatment effects may be weak or non-existent within 90 days. First, the impact of the enforcement that preceded the experiment may overwhelm any impact of the follow-up with landlords. Second, because the treatments work through place owners, they are indirect. Therefore, they may take some time to have their full effect. Examining the effects of the treatments for a longer period of time might address both of these concerns. Third, the number of events for any single indicator for the three month period may be too small to detect a treatment effect. This can be addressed by combining the indicators and examining a longer period after treatment.

In this chapter we reexamine the results of the experiment to determine if the original results remain once these three concerns are addressed. The original experimental design was to only examine the short term impact of the treatments. Delays in the analysis and writing of the report allowed the examination of a longer period following treatment. The long term analysis was made possible because the San Diego Police Department was able to provide data for four of

the crime and drug indicators for the two and a half years (30 months) after the treatment at each site. This period includes the first three months following treatment analyzed in the previous chapter. The department was unable to supply additional information for a comparable period prior to treatment because too much time had elapsed and much of the data had be purged from automated files.

If the effects of the initial law enforcement efforts wear off faster than the treatments of the landlords, then analyzing the places for the longer period should show whether there are treatment effects. This longer period will also allow us to determine if the treatments develop their effects over time and whether any benefits of the treatments wear off over time.

LONG TERM RESULTS

The San Diego Police Department's Crime Analysis Unit was able to supply 30 months of data for four of the six outcome indicators that we analyzed in the previous chapter. These four outcome indicators are drug arrests, other arrests, reported crime, and citizen complaints. Tables 60 through 64 show the distributions of these four indicators and the combined indicator by treatment group. For each indicator, and the combined indicators, the means for the two treatment groups are lower than the control group. Further, the two treatment groups have fewer cases at the extreme high end of the distribution than the control group. However, regardless of the treatment group or the indicator, zero is the modal category for the number of events.

The results of significance tests for differences among means of each group are reported at the bottom of tables 60 through 64. Because the distributions are far from being normal, z-

scores were used to calculate the t values. This was done by calculating the z-score for each place based on the mean and standard deviation for all 121 places. Simple regression models were estimated using the z-scores for each indicator as dependent variables. Dichotomous treatment variables were used as the independent variables. When the control group was compared to either treatment, separately or combined, then places in the control group were assigned the value of zero, and the places in the treatment groups were assigned the value of one. When the letter and meeting groups were compared, places in the letter group were assigned the value of one, and places in the meeting group were assigned the value of one. The t and p values reported are for the coefficients for the treatment variables.

The p values show the level of significance. As we did in Chapter 4, we require p values to be .10 or less to be considered significant. In other words, if the p value is greater than .10 we will not reject the hypothesis that the findings are due to chance. This does not mean that there were no treatment effects. It does mean that we cannot be confident that the treatments caused the observed results. Further, it implies that even if the treatments caused the observed differences between the control and treatment groups, the substantive effect is small.

Table 60: DRUG ARRESTS BY TREATMENT -- 30 months				
Number	Control	Letter	Meeting	Total
0	66.7 (28)	64.3 (27)	64.9 (24)	65.3 (79)
1	9.5 (4)	19.0 (8)	18.9 (7)	15.7 (19)
2	4.8 (2)	4.8 (2)	10.8 (4)	6.6 (8)
3	7.1 (3)	4.8 (2)	2.7 (1)	5.0 (6)
4	0.0 (0)	2.4 (1)	2.7 (1)	1.7 (2)
5	4.8 (2)	4.8 (2)	0.0 (0)	3.3 (4)
6	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
7	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
8	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
9	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	1.17	0.76	0.59	0.85
Std. Dev.	2.20	1.36	0.98	1.62
		Letter	Meeting	Letter & Meeting
v. Control		t=1.016 p=.3127	t=1.459 p=.1485	t=1.570 p=.1190
v. Letter			t=.619 p=.5375	

Though both treatment group means for drug arrests are less than the control group mean (Table 60), these differences are not statistically significant. Neither is the difference in means between the two treatment groups. The difference between the control group and the combined mean of the treatment groups is not significant either.

Table 61: OTHER ARRESTS BY TREATMENT -- 30 months				
Number	Control	Letter	Meeting	Total
0	47.6 (20)	47.6 (20)	62.2 (23)	52.1 (63)
1	26.2 (11)	23.8 (10)	24.3 (9)	24.8 (30)
2	7.1 (3)	19.0 (8)	0.0 (0)	9.1 (11)
3	2.4 (1)	0.0 (0)	2.7 (1)	1.7 (2)
4	4.8 (2)	2.4 (1)	5.4 (2)	4.1 (5)
5	7.1 (3)	2.4 (1)	0.0 (0)	3.3 (4)
6	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
7	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
8	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
9	2.4 (1)	2.4 (1)	0.0 (0)	1.7 (2)
10	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
11	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
...				
16	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	1.62	1.31	0.89	1.29
Std. Dev.	2.99	2.28	1.71	2.41
		Letter	Meeting	Letter & Meeting
v. Control		t=.534 p=.5949	t=1.303 p=.1963	t=1.100 p=.2735
v. Letter			t=.911 p=.3653	

In Table 61, for other arrests, we see no significant differences between the control group and the treatment groups, separately or combined. The treatment group mean differences are not statistically significant either.

Table 62: REPORTED CRIMES BY TREATMENT -- 30 months				
Number	Control	Letter	Meeting	Total
0	31.0 (13)	31.0 (13)	21.6 (8)	28.1 (34)
1	9.5 (4)	7.1 (3)	32.4 (12)	15.7 (19)
2	4.8 (2)	9.5 (4)	13.5 (5)	9.1 (11)
3	4.8 (2)	21.4 (9)	5.4 (2)	10.7 (13)
4	7.1 (3)	11.9 (5)	5.4 (2)	8.3 (10)
5	7.1 (3)	2.4 (1)	0.0 (0)	3.3 (4)
6	4.8 (2)	2.4 (1)	5.4 (2)	4.1 (5)
7	7.1 (3)	4.8 (2)	2.7 (1)	5.0 (6)
8	9.5 (4)	0.0 (0)	5.4 (2)	5.0 (6)
9	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
10	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
11	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
12	0.0 (0)	2.4 (1)	2.7 (1)	1.7 (2)
13	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
14	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
15	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
16	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
17	2.4 (1)	2.4 (1)	0.0 (0)	1.7 (2)
18	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
19	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
20	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
21	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
22	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
...				
26	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	5.05	3.31	3.03	3.83
Std. Dev.	6.30	4.18	3.93	5.00
		Letter	Meeting	Letter & Meeting
v. Control		t=1.489 p=.1402	t=1.682 p=.0965	t=1.983 p=.0497
v. Letter			t=.308 p=.7589	

The letter group mean for reported crime is not statistically different from the control mean in Table 62. There is less than a 10 percent chance that the difference between the meeting group and control group mean is due to chance. Further, when the combined treatment group mean is compared to the control group mean, the results are statistically significant at the .05 level. There is no statistically significant difference between the means of the two treatment groups. These results suggest that meetings reduced crimes at places relative to doing nothing.

Table 63: CITIZEN COMPLAINTS BY TREATMENT -- 30 months				
Number	Control	Letter	Meeting	Total
0	76.2 (32)	66.7 (28)	81.1 (30)	74.4 (90)
1	16.7 (7)	21.4 (9)	13.5 (5)	17.4 (21)
2	0.0 (0)	7.1 (3)	0.0 (0)	2.5 (3)
3	2.4 (1)	4.8 (2)	2.7 (1)	3.3 (4)
4	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
5	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
6	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
7	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
...				
11	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	0.60	0.50	0.41	0.50
Std. Dev.	1.84	0.83	1.26	1.37
		Letter	Meeting	Letter & Meeting
v. Control		t=.306 p=.7602	t=.529 p=.5983	t=.533 p=.5951
v. Letter			t=.398 p=.6915	

There are no statistically significant differences among the means of citizen complaints (Table 63) for the groups compared.

Table 64: TOTAL EVENTS BY TREATMENT -- 30 months				
Number	Control	Letter	Meeting	Total
0	19.0 (8)	19.0 (8)	18.9 (7)	19.0 (23)
1	11.9 (5)	9.5 (4)	16.2 (6)	12.4 (15)
2	4.8 (2)	0.0 (0)	16.2 (6)	6.6 (8)
3	0.0 (0)	9.5 (4)	8.1 (3)	5.8 (7)
4	7.1 (3)	16.7 (7)	5.4 (2)	9.9 (12)
5	2.4 (1)	14.3 (6)	5.4 (2)	7.4 (9)
6	9.5 (4)	2.4 (1)	5.4 (2)	5.8 (7)
7	0.0 (0)	4.8 (2)	0.0 (0)	1.7 (2)
8	7.1 (3)	4.8 (2)	2.7 (1)	5.0 (6)
9	7.1 (3)	4.8 (2)	0.0 (0)	4.1 (5)
10	4.8 (2)	0.0 (0)	5.4 (2)	3.3 (4)
11	0.0 (0)	2.4 (1)	2.7 (1)	1.7 (2)
12	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
13	4.8 (2)	0.0 (0)	0.0 (0)	1.7 (2)
14	7.1 (3)	2.4 (1)	2.7 (1)	4.1 (5)
15	0.0 (0)	2.4 (1)	2.7 (1)	1.7 (2)
16	0.0 (0)	2.4 (1)	2.7 (1)	1.7 (2)
17	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
...				
21	4.8 (2)	0.0 (0)	0.0 (0)	1.7 (2)
22	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
23	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
24	0.0 (0)	0.0 (0)	2.7 (1)	0.8 (1)
...				
29	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
30	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
31	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
32	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
33	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
34	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
35	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
...				
45	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
continued ...				

Table 64: TOTAL EVENTS BY TREATMENT -- 30 months Continued				
Number	Control	Letter	Meeting	Total
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	8.43	5.88	4.92	6.47
Std. Dev.	9.93	7.10	5.88	7.97
		Letter	Meeting	Letter & Meeting
v. Control		t=1.352 p=.1800	t=1.879 p=.0641	t=1.995 p=.0484
v. Letter			t=.651 p=.5172	

When all of the indicators of crime and drug dealing are combined (Table 64), we see that the meeting treatment is associated with a statistically significant difference at the .10 level, and the combined treatment mean is significantly less than the control mean at the .05 level. The two treatment means are not significantly different.

These results are all consistent with the hypothesis that both the letter treatment and the meeting treatment decrease drug and crime problems at places that have been subjected to drug enforcement. However, we cannot reject the possibility that the letter results are due to chance. For the meeting treatment, the results are more definitive. The meeting treatment reduced reported crime at former drug sites and may reduce all crime and drug activity measured.

THE DYNAMICS OF TREATMENT AND CONTROL EFFECTS

These results come from examining the entire 30 month period following the treatments. We can gain a better understanding of the dynamics of treatments if we look at six month intervals following treatment to see where the biggest differences between the control group and

the treatment groups appear. Tables 65 through 69 show the mean number of events for each indicator, and all indicators combined, for each of the five six month time periods.

Five things become evident from examining tables 65 through 69. First, for each indicator, there is a big difference between the control group and either treatment group for the first six month period. Second, during the first six month period the letter and meeting group means are relatively similar. Third, the means for treatment groups either remain relatively constant or decline slightly in subsequent six month time periods. Fourth, the control group mean drops precipitously from the first to the second period, and generally remains stable after that. Finally, after the first period, there does not seem to be much of a difference between any of the group means for any of the indicators, separately or combined. Thus, any treatment effects occur in the first six months. However, the relative decline in the treatments over the controls does not occur because of declining efficacy of the treatments, but because the control group improves. This suggests that the primary effect of the treatments is to accelerate a decline in crime and drug events, that may naturally occur following drug enforcement at a place.

Table 65: DRUG ARRESTS -- MEAN NUMBER BY GROUP AND PERIOD (standard deviation)			
Six Month Period	Control (42)	Letter (42)	Meeting (37)
1	0.64 (1.56)	0.31 (0.95)	0.22 (0.75)
2	0.12 (0.45)	0.19 (0.51)	0.05 (0.23)
3	0.14 (0.47)	0.10 (0.30)	0.16 (0.50)
4	0.12 (0.50)	0.12 (0.50)	0.11 (0.39)
5	0.14 (0.68)	0.05 (0.22)	0.05 (0.23)

Table 66: OTHER ARRESTS -- MEAN NUMBER BY GROUP AND PERIOD (standard deviation)			
Six Month Period	Control (42)	Letter (42)	Meeting (37)
1	0.50 (1.55)	0.26 (0.70)	0.30 (0.66)
2	0.29 (0.51)	0.31 (0.92)	0.11 (0.31)
3	0.33 (0.82)	0.26 (0.66)	0.16 (0.44)
4	0.21 (0.56)	0.36 (0.85)	0.16 (0.44)
5	0.21 (1.02)	0.12 (0.33)	0.16 (0.44)

Table 67: REPORTED CRIME -- MEAN NUMBER BY GROUP AND PERIOD (standard deviation)			
Six Month Period	Control (42)	Letter (42)	Meeting (37)
1	1.52 (2.27)	0.74 (1.36)	0.62 (0.89)
2	0.83 (1.41)	0.79 (1.63)	0.76 (1.23)
3	1.02 (1.69)	0.50 (0.80)	0.59 (1.19)
4	0.76 (1.56)	0.76 (1.03)	0.41 (0.76)
5	0.90 (1.39)	0.52 (0.94)	0.65 (1.34)

Table 68: CITIZEN CALLS -- MEAN NUMBER BY GROUP AND PERIOD (standard deviation)			
Six Month Period	Control (42)	Letter (42)	Meeting (37)
1	0.29 (0.89)	0.05 (0.22)	0.11 (0.52)
2	0.12 (0.40)	0.17 (0.44)	0.03 (0.16)
3	0.14 (0.65)	0.10 (0.30)	0.03 (0.16)
4	0.05 (0.31)	0.07 (0.34)	0.11 (0.52)
5	0.00 (0.00)	0.12 (0.40)	0.14 (0.67)

Table 69: ALL EVENTS -- MEAN NUMBER BY GROUP AND PERIOD (standard deviation)			
Six Month Period	Control (42)	Letter (42)	Meeting (37)
1	2.95 (4.43)	1.36 (2.25)	1.24 (1.69)
2	1.36 (1.75)	1.45 (2.85)	0.95 (1.41)
3	1.64 (2.47)	0.95 (1.36)	0.95 (1.90)
4	1.14 (2.37)	1.31 (2.02)	0.78 (1.42)
5	1.33 (2.11)	0.81 (1.19)	1.00 (1.93)

FIRST 6 MONTHS AFTER TREATMENT

Tables 70 through 74 show the distributions of the four indicators separately and combined, for the first six month period only. Again, zero is the modal number of events, for each indicator and each treatment group, and the distributions are far from being normal. Significance test results are reported at the bottom of the tables. The t and p values were calculated in the same way as described earlier.

Both the letter and meeting groups had smaller mean numbers of drug arrests than the control group, however, these differences are not significant (Table 70). There was no significant difference between the two treatment group means either. However, when the means for the two treatment groups are combined, it is significantly smaller than the control group mean at the .10 level.

Table 70: DRUG ARRESTS -- 1st 6 months				
Number	Control	Letter	Meeting	Total
0	76.2 (32)	85.7 (36)	89.2 (33)	83.5 (101)
1	9.5 (4)	7.1 (3)	5.4 (2)	7.4 (9)
2	7.1 (3)	2.4 (1)	2.7 (1)	4.1 (5)
3	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
4	2.4 (1)	0.0 (0)	2.4 (1)	1.7 (2)
5	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
6	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
7	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	0.64	0.31	0.22	0.40
Std. Dev.	1.56	0.95	0.75	1.16
		Letter	Meeting	Letter & Meeting
v. Control		t=1.183 p=.2401	t=1.516 p=.1335	t=1.719 p=.0883
v. Letter			t=0.480 p=.6326	

Table 71: OTHER ARRESTS -- 1st 6 months				
Number	Control	Letter	Meeting	Total
0	81.0 (34)	83.3 (35)	78.4 (29)	81.0 (98)
1	9.5 (4)	11.9 (5)	16.2 (6)	12.4 (15)
2	4.8 (2)	0.0 (0)	2.7 (1)	2.5 (3)
3	0.0 (0)	4.8 (2)	2.7 (1)	2.5 (3)
4	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
...				
9	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	0.50	0.26	0.30	0.36
Std. Dev.	1.55	0.70	0.66	1.06
		Letter	Meeting	Letter & Meeting
v. Control		t=0.907 p=.3670	t=0.738 p=.4627	t=1.092 p=.2772
v. Letter			t=-0.230 p=.8187	

Though the mean number of other arrests for the treatment groups is smaller than the control group, these differences are not significant (Table 71). The combined treatment mean is not significantly different from the control mean. The treatment means are not significantly different from each other.

Table 72 shows that the reported crime mean for the treatment groups, separately or combined, is significantly different from the control mean. However, the two treatments are not significantly different from each other.

Table 73 shows that the difference between the letter group and the control group is significant at the .10 level. The difference between the meeting group and the control group is not significant. However, the mean number of citizen calls for the treatment groups combined is significantly different from the control group at the .01 level. As usual, the treatment group

means are not significantly different.

Table 72: REPORTED CRIME -- 1st 6 months				
Number	Control	Letter	Meeting	Total
0	45.2 (19)	64.3 (27)	56.8 (21)	55.4 (67)
1	23.8 (10)	16.7 (7)	29.7 (11)	23.1 (28)
2	7.1 (3)	9.5 (4)	10.8 (4)	9.1 (11)
3	11.9 (5)	7.1 (3)	0.0 (0)	6.6 (8)
4	2.4 (1)	0.0 (0)	2.7 (1)	1.7 (2)
5	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
6	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
7	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
8	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
9	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
10	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	1.52	0.74	0.62	0.98
Std. Dev.	2.27	1.36	0.89	1.67
		Letter	Meeting	Letter & Meeting
v. Control		t=1.926 p=.0576	t=2.270 p=.0260	t=2.702 p=.0079
v. Letter			t=0.443 p=.6592	

Table 73: CITIZEN CALLS -- 1st 6 months				
Number	Control	Letter	Meeting	Total
0	88.1 (37)	95.2 (40)	94.6 (35)	92.6 (112)
1	4.8 (2)	4.8 (2)	2.7 (1)	4.1 (5)
2	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
3	4.8 (2)	0.0 (0)	2.7 (1)	2.5 (3)
4	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	0.29	0.05	0.11	0.15
Std. Dev.	0.89	0.22	0.52	0.61
		Letter	Meeting	Letter & Meeting
v. Control		t=1.683 p=.0962	t=1.065 p=.2903	t=2.702 p=.0079
v. Letter			t=-0.695 p=.4891	

When all four indicators are combined (Table 74), we find significant differences at the .05 level between the control group mean and both individual treatment group means and the combined treatment group mean. The means for the two treatment groups are not significantly different from each other.

Table 74: ALL EVENTS -- 1st 6 months				
Number	Control	Letter	Meeting	Total
0	33.3 (14)	50.0 (21)	48.6 (18)	43.8 (53)
1	14.3 (6)	23.8 (10)	24.3 (9)	20.7 (25)
2	11.9 (5)	7.1 (3)	5.4 (2)	8.3 (10)
3	11.9 (5)	7.1 (3)	5.4 (2)	8.3 (10)
4	7.1 (3)	2.4 (1)	10.8 (4)	6.6 (8)
5	4.8 (2)	4.8 (2)	2.7 (1)	4.1 (5)
6	4.8 (2)	0.0 (0)	2.7 (1)	2.5 (3)
7	4.8 (2)	2.4 (1)	0.0 (0)	2.5 (3)
8	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
...				
11	0.0 (0)	2.4 (1)	0.0 (0)	0.8 (1)
12	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
...				
25	2.4 (1)	0.0 (0)	0.0 (0)	0.8 (1)
Total	34.7 (42)	34.7 (42)	30.6 (37)	100.0 (121)
Mean	2.95	1.36	1.24	1.88
Std. Dev.	4.43	2.25	1.69	3.15
		Letter	Meeting	Letter & Meeting
v. Control		t=2.079 p=.0407	t=2.207 p=.0303	t=1.995 p=.0484
v. Letter			t=0.651 p=.5172	

CONCLUSIONS

In this chapter we examined the results of this experiment for a 30 month time period following the treatments. Over the entire period, the treatment sites had significantly fewer reported crimes than the control sites. The same finding was reported when all four indicators were combined. However, none of the other indicators -- drug arrests, other arrests, or citizen drug calls -- were significantly lower in either treatment group compared to the control group.

When we examined the time course of experimental effects over the 30 months, we found that most of the effects occur during the first six months. The differences between treatments and controls were most pronounced during this period. In subsequent six month periods, the differences between the control group and the treatment groups disappear.

The treatment groups did not lose effectiveness over time. Instead, their mean number of events did not change dramatically over the entire 30 month period. However, the control group means for each of the indicators declined after the first six month period. So in the second and subsequent periods there were no meaningful differences between the control places and the treated places.

These results suggest how the treatments may influence crime and drug events at the sites. Recall from the previous chapter that meetings significantly increase the chances of the drug offender being evicted from the place. This may accelerate offenders leaving and speed the decline of crime and drug events at sites. In control group sites, the offender stays longer, but eventually leaves. This is a primary effect of the treatments.

There may be an additional secondary effect. At the treatment places, landlords began

paying closer attention to their properties sooner than at control sites. This accelerated attention provided increased protection to place users. Landlords at control sites also began paying closer attention to their properties, but absent police follow-up, they took longer.

There may be other explanations as well. We will discuss these in the next chapter. What is clear is that the treatments in this experiment do not wear off over a two and a half year period. Rather than the hypothesized rebound effects suggested by Sherman (1990), the untreated sites also improve.

CHAPTER 6

CONCLUSIONS AND IMPLICATIONS

This is the second of two studies of drug places in San Diego. The first study examined drug places in one area of the city with a high concentration of drug dealing. Among its many findings, the first study concluded that drug dealers look for rental units where property management is weak. This allows them to sell drugs without outside scrutiny. This finding suggested that if place management were improved at drug dealing locations, the drug dealing and associated problems would decline. A second study was planned to test the effectiveness of addressing place management as a supplement to traditional drug enforcement.

This experiment examined whether contacting property owners increased the effectiveness of drug enforcement. A total of 121 rental properties which had experienced some form of drug enforcement were studied. They were randomly assigned to one of three groups. DART made contacts were made with property owners of places assigned to the control group. Property owners of the places assigned to the letter group received a letter from a special unit of the police department, telling them of the drug enforcement, offering assistance if the owner wanted it, and reminding them of their responsibility to address the drug problem. DART made no additional contacts were made with the owner, unless the owner initiated it. The owners of places assigned to the meeting group received a more strongly worded letter and a meeting with a special unit detective and a City Code Compliance Department official. Data from interviews with apartment owners and managers, police records, environmental observations, and follow-up drug-buy attempts by narcotics detectives, were used to determine if there were differences in drug and crime related outcomes among these three groups.

In brief, the experiment yielded information supporting the following findings.

- Many landlords of properties with drug dealing have limited resources to manage and improve their properties.
- These landlords seldom live on their property or employ resident managers. Therefore, full time on-site monitoring of rental properties is rare.
- Owners conducted only limited screening of prospective tenants.
- Follow-up meetings with rental property owners increased the chances that drug offenders would be evicted compared to places where the police did not contact the owners.
- Follow-up meetings with rental property owners reduced crime and other related drug and crime events at these locations more than at places without meetings among owners, police, and city codes officials.
- Letters to landlords also reduced drug and crime events at places following enforcement, but not as much as meetings.
- The enhanced crime reduction effects of letters and meetings became most evident after three months and disappeared some time after six months.

The basic conclusion of this experiment is that following drug enforcement, meetings decreased crime at residential rental places relative to no follow-up with property owners. Nevertheless, the decline in crime and drug events at control places deserves some discussion. Evidence from this study is consistent with three possible explanations for the decline in crime and drug events at the control sites.

First, drug enforcement efforts at these places may stimulate a long term decline in drug and crime related. This would cause control sites to improve along with letter and meeting sites. Because this study only examined rental residential places that had just received drug enforcement, there is no way to test this hypothesis, but it is consistent with the results of two randomized experiments of the drug enforcement (Weisburd and Green, 1995; Sherman and Rogan, 1995), but it suggests that the effects of raids were stronger and last longer than was found by Sherman and Rogan (1995) in Kansas City.

The second explanation is that the decline in crime and drug events in the control group is due to a citywide change in drug dealing that influenced offender behavior at all drug places. We did not collect information on citywide patterns of drug dealing over time, so we have no evidence such changes occurred. Though this second hypothesis seems less plausible than the first hypothesis, we cannot rule it out. If this second explanation is correct, then if the study was conducted again, the improvement in the control group would not be evident.

A third possibility is that the improvement in the control group was due to the effects of the experiment, particularly the owner interviews and narcotics squad follow-up drug buy attempts. According to this hypothesis, either the owner interviews or the follow-up drug buy attempts acted as additional treatments and accelerated improvements at all sites. This is what Campbell and Stanley (1968: page 18) refer to as “interaction of testing.” As they note, this hypothesis raises concerns about the generalizability of the findings to other settings and conditions, but does not have any bearing on the validity of the experimental findings for the places examined. We have no evidence to refute or support this possibility. If this explanation is

valid, then improvements in the control group will not occur in replications of this experiment that do not use owner surveys or follow-up buy attempts. This hypothesis has important implications for experiments on place management. If this hypothesis should be true, then measurement processes that react with research subjects (like interviews and surveys) can have an impact on how place managers behave. Greater use of nonreactive measures (Webb, et al., 1966), such as reported crimes, use of other public records, and covert observations may get around this problem. Nevertheless, there is some information for which the single best source is the place manager. On a more positive note, if this hypothesis is correct, this means that descriptive research projects, undertaken by police and researchers, could yield interesting findings and have the side effect of improving conditions at the places studied. Evaluating such an undertaking would be difficult, however.

Assuming that the first explanation is more accurate than the second or third explanation, drug dealers may slowly move from the place following enforcement. In the absence of any further police effort, they leave the place after six months. Follow-up meetings or letters with landlords after enforcement accelerates this process. The primary effect of the follow-up meeting is to increase the chances that a drug offender who has a lease will be evicted. This gets them out of the rental property faster than they would on their own. Letters may not cause the primary effect. The follow-up meeting or letter may also have a secondary effect. They focus the owner's attention on the problems of the rental property.

The evictions or increased attention to the property changes the behaviors of place users. These behavioral changes reduce crime at the location. The added benefits of the meeting and

letters (over doing nothing after the initial enforcement) do not continue to accrue forever. Some time after the sixth month offenders will leave anyway or landlords will begin to pay greater attention to their places. In short, meetings and letters accelerate rental property improvement, yielding substantial yet finite crime reduction benefits.

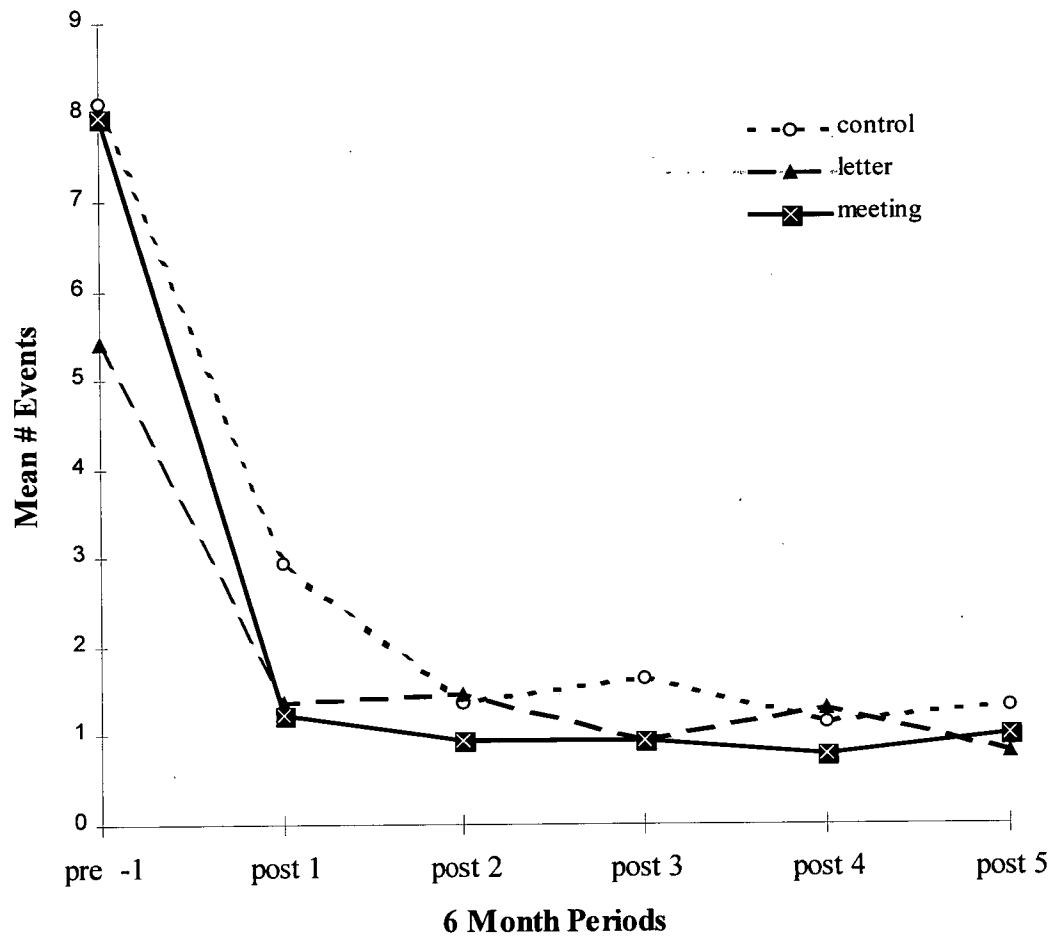
Though the added benefits of follow-up contacts decrease relative to places where no follow-up occurred, there is no evidence that effects of the initial enforcement or follow-up meetings decline. After two and a half years the mean number of drug events remained below the average number of events prior to treatment.

This can be seen in Figure 1. The mean number of crime and drug events (drug arrests, other arrests, reported crime, and citizen calls), are plotted for each group. To estimate the mean number of these events for the six months prior to treatment, the three month pre-treatment mean for each group was doubled. The actual and estimated means (shaded) used in Figure 1 are shown in Table 75.

Table 75: ALL EVENTS – MEAN NUMBER BY GROUP AND PERIOD			
	Control (42)	Letter (42)	Meeting (37)
actual 3 months pre	3.97	2.71	3.97
estimated 6 months pre	8.1	5.42	7.94
actual 1 st 6 months post	2.95	1.36	1.24
actual 2 nd 6 months post	1.36	1.45	0.95
actual 3 rd 6 months post	1.64	0.95	0.95
actual 4 th 6 months post	1.14	1.31	0.78
actual 5 th 6 months post	1.33	0.81	1.00

The biggest decline occurs from the pre-treatment period to the first post-treatment period, for each group. The mean for the meeting group then declines faster and further, than the

Figure 1: TIME COURSE OF TREATMENT EFFECTS



control group. The meeting group means stay down but do not change for any of the subsequent periods. The control mean continues to decline through the second post-period and then levels off. The letter group mean begins lower than the mean for the other two groups prior to treatment. The letter mean then oscillates between the control and meeting groups' means in subsequent periods. The same pattern can be seen in Table 75, even when one only uses the

actual three month pre-treatment means.

Note that if either the second or third explanation for the improvement in the control group is valid, then we could use a simpler explanation of the effects of police follow-up. In this experiment, the two treatments might have accelerated improvements caused by city wide changes or data collecting methods. However, in other settings and time periods -- when the city wide change in dealer behavior are not occurring or owner survey and narcotics unit follow-up buy attempts are absent -- any decline in crime would be due to follow-up letters or meetings.

GENERALIZABILITY

We can be reasonably confident of experimental findings for the City of San Diego. The randomized experimental design, the use of multiple measures of effectiveness, documentation of landlord reactions to letters and meetings, narcotics detectives' assessments of drug sales at sites, and the long follow-up period after treatment all give this study strong internal validity. Nevertheless, we need to discuss the degree to which these findings may apply to other cities and police agencies.

This experiment focused on influencing the behavior of rental property owners and managers. Differences in real estate investment, property management, rental markets, and related matters may influence the efficacy of these follow-up treatments. Letter and meeting follow-ups may be most effective when rental markets are neither extremely unprofitable or extremely profitable. If the rental market is so bad that many owners are on the verge of abandoning their properties, and many have already left them vacant, then police may have

trouble enlisting the support of landlords. At the other extreme, if rental properties are very profitable then follow-up by the police may not be needed. Cities with marginal neighborhoods may find follow-up contacts most useful. Since rental markets can vary throughout a large city, a follow-up letter or meeting program may vary in effectiveness in different neighborhoods of the same city. Thus, if this experiment is replicated, we should expect variation in results, depending in part on the economics of rental markets in the cities and neighborhoods hosting the replications. Similarly, police agencies considering adopting a follow-up contact program should consider the economic conditions of the neighborhoods where the program will be implemented.

IMPLICATIONS

The results of this experiment support a police policy of working with landlords following drug enforcement at rental sites. If we assume that enforcement efforts that precede follow-up contacts are effective, then follow-up contacts should be made soon after the initial enforcement to maximize the improvement at sites. Substantial delays in follow-up are unlikely to produce improvements over doing nothing following an enforcement activity. Police agencies may want to experiment with coordinating enforcement with follow-up activities. For example, in preparation for a raid, a narcotics investigator could identify the landlord so that he or she can be contacted within hours, rather than days. Since raids can also disrupt non-drug involved tenants and damage the property, follow-up with landlords could also be used to address these problems.

In this experiment letters were cheap and relatively non-coercive. Letters offered police

assistance, if the landlord requested it, but did not threaten punitive actions. They simply provided landlords with information. Letters produce similar long term results as meetings, but their effects are weaker. This may be because they do not increase evictions of drug dealers.

Though letters may appear to be cheap and effective, any letter program needs to be supported by police officials who can provide timely assistance if owners request it. Offering assistance but having no one available is likely to antagonize the rental property owners who are in most need of assistance. Such assistance was available in San Diego, but in many police agencies special efforts may be needed to create backup support for a follow-up letter program. In these situations, a letter program may not be as inexpensive as it first appears.

More generally, this experiment underscores the importance of place-based (as compared to neighborhood based) policing. Neighborhoods are made up of many places and most of the places, even in neighborhoods with high crime rates, have little or no crime (Sherman, 1989). Thus, a few places may characterize an entire neighborhood. This implies that addressing crime problems at these crime prone places may have a larger impact than addressing crime throughout an entire neighborhood (Eck and Weisburd, 1996).

The first Drug Market Analysis study in San Diego found that in an area with a great deal of drug dealing, the drug dealing was concentrated along arterial routes. Further, even along these routes, some places were more vulnerable to drug dealers than others. One feature of places that increased their vulnerability was weak place management (Eck, 1994; 1996).

This second study in San Diego reconfirms the important role of place managers in crime and drug control. It also supports police and local government efforts to enlist the support of

property owners. Such efforts range from providing training and assistance to property owners to coercive efforts such as nuisance abatement (Green, 1996; Mazerolle, Roehl, and Kadleck, 1997; Lurigio, et al., 1993). Though there are complaints that such efforts unfairly hold landlords responsible for the actions of their tenants (Davis and Lurigio, 1996), it is becoming increasingly clear that the most effective ways of controlling crime must involve people other than offenders. Place managers are only one of several types of people who can reduce crime if they are given the appropriate information, authority, and motivation (Felson, 1996).

Until recently there has been no research on place managers and little recognition of the pivotal role they can have in improving public safety. This experiment has shown that place managers are important for controlling drug problems, and the police can improve the effectiveness of these people, if the police make the effort. Though police are becoming increasingly adept at working with neighborhood residents, they must also recall that in communities afflicted with crime and retail drug dealing, most of the residents are renters. If the police only work with the renters, but not with the landlords, they will miss important opportunities to solve drug and crime problems.

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APPENDIX A

EXPERIMENTAL PROCEDURES

ELIGIBLE PROPERTIES

Only rental residential properties were included in this experiment. Owner occupied residences and commercial sites were excluded because Phase I DMA research in San Diego revealed that there were many more drug places in rental properties than in commercial or owner occupied locations, and the characteristics of non-rental, non-residential properties were substantially different from the characteristics of rental, residential properties. Limiting the variety of properties examined decreased the heterogeneity of the study subjects and increased the power of the experiment. Additionally, residences and commercial sites were a very small part of DART's workload, and DART's procedures were generally geared to rental residential properties.

Properties with previous DART contacts prior to the experiment were also excluded from the experiment. Thus, owners of experimental properties had little or no prior experience with DART. This also excluded any property currently under nuisance abatement litigation. Finally, if it was determined that an owner had evicted the drug dealing tenant prior to assignment to the experiment, the property was excluded from analysis. This restricted consideration to those properties where treatments could have had an effect, and excluded sites where prior actions could be mistakenly be attributed to a treatment.

Apartment complexes with two or more units with incidents of drug dealing arrests were treated as one location in this experiment.

Each week the Narcotics Section lieutenant selected all addresses where the detectives had made an arrest or recovered drugs on the property. He forwarded these addresses to a

researcher employed by the Police Executive Research Forum (Wartell) based in the Crime Analysis Unit (the Narcotics Section and Crime Analysis Unit are on the same floor and next to each other in police headquarters). If the addresses fitted the criteria for experimental rental properties, they were included.

A few referrals were sent to Wartell by patrol officers and Neighborhood Policing Team officers at the area stations as a result of a narcotics arrest or drugs were recovered.

RANDOMIZATION

In Washington DC, the PERF principle investigator (Eck) generated a list of sequential case numbers. He randomly assigned each case number to a treatment group. These assignments were kept in Washington DC and were not communicated to anyone in San Diego, or anyone not directly involved in the experiment. Once a week Wartell compiled a list of properties in San Diego that were eligible for the experiment and assigned each a sequential case number. A volunteer in the San Diego Police Department conducted a background search for each of these properties to determine their owners and other vital facts. Once the background check was made, Wartell faxed the addresses and case numbers to Washington DC. Eck then called Wartell and gave her the treatment assignments for each case. A coded fax was sent later that day so the assignments could be checked. Wartell then gave the addresses that were in the treatment groups to the sergeant in charge of the DART unit along with their assignments. No information was forwarded about the control group properties.

This procedure was to be followed until a minimum of 40 properties were assigned to each group. At the end of the time available for case assignment, 47 cases were randomly

assigned to the meeting group and 42 cases were assigned to the letter and control groups, respectively. However, 10 of the meeting treatment properties had drug dealers evicted prior to assignment to treatment, so there were only 37 eligible cases in this group.

No one outside the research staff was told the addresses of the control groups. The Crime Analysis Unit recorded all experimental cases--treatment and controls--as DART cases in its computer files. This indicator served as a flag to narcotics detectives and others that they should inform Crime Analysis about any enforcement activities that occurred at these addresses.

TREATMENTS

One third of the properties received no follow-up from DART. They were assigned to the control group. For a third of the cases, a letter was sent to the property owners telling them of the drug dealing activity on their property. There was no further follow-up by DART. For another third of the cases, the following procedures were followed. Letters were sent to the property owners telling them of drug dealing on their property and asking that they schedule an appointment with the DART detective.

If owners or their property managers did not call DART within five days, DART contacted them and arranged a face-to-face interview at the property in question. At the interview the detective described the actions that the owner should take to rid the place of drug dealers and prevent future occurrences of dealing. Whenever possible, an inspector from the Code Compliance Department accompanied the DART detective. The principle tactic was the eviction of the drug dealing tenant. If the property owner or manager claimed to have evicted the original subject, the DART detective followed up by driving around the location to verify this

information. The code inspector checked for compliance with city building and safety codes and recommended improvements.

DATA SOURCES

Police files supplied data on enforcement activities, offenders, drug dealing activities, and DART activities. Data files accessible by the Crime Analysis Unit contained calls for service, reported crimes, arrests, field interrogations, and narcotics complaints. DART activities came from activity logs completed by the DART detective.

During the first 45 days following assignment to DART, data was collected for the 90 day period prior to the treatment. Ninety days after treatment began, data collection for the 90 days after treatment began.

A survey of property owners collected information on evictions, the presence of drug offenders at the property following treatment, financial viability of the property, lease provisions, owner characteristics, management practices and other issues.

Owners were identified by a police volunteer using tax assessor and County Recorder files. If the owner was listed as a company or trust, further research was required. Property owner information was forwarded to DART for the letter and meeting properties, but not the control properties. Owner surveys began no sooner than 45 days after assignment of the case. The surveys were conducted over the phone by the PERF Research Assistant. If an owner preferred, the interview was conducted with a manager instead.

An environmental survey was used to document the physical layout and characteristics of the property and surrounding structures. Some of the information came from computer files

available in the police department. Most of the information came from on site inspection of the property by the Research Assistant and San Diego Police interns. Neither DART nor owners were told when these surveys took place.

To determine if drug dealing was continuing in and around properties in the experiment, narcotics detectives attempted a controlled buy at each location. When possible, the narcotics team that had made the original enforcement at the site conducted the attempted follow-up controlled buy. Detectives were unaware of the experimental status of the properties where they attempted to make buys. A debriefing form was used to collect this information from the detectives conducting the buy attempt. Wartell interviewed the detectives and completed the forms. When possible the researcher accompanied the detectives on the attempt and subsequently completed the interview. When this was not possible the interview was conducted as soon as practical at the Narcotics Section offices. Though follow-up buys were to begin no sooner than 45 days after assignment, the workload of the Narcotics Section often forced delays of 60 days or more after properties became eligible for attempted buys.

SCHEDULE

Treatment was scheduled to begin on June 2, 1993 and continue for ten weeks. It was originally estimated that 12 properties per week could be achieved. This turned out to be an underestimate so treatment assignment was continued into November.

The plan carried out during the experiment was that every Wednesday new addresses were identified; every Thursday ownership information was researched; and every Friday the randomization process was executed, addresses forwarded to DART and letters sent. This day

was considered the first day of treatment (whether assignment to control, letter, or meeting group). All pre- and post-treatment times were relative to this day (e.g., 90 days prior to treatment means 90 days before the Friday on which the case was assigned to a group and, if it was a letter or meeting assignment, the property was referred to DART). Table A1 depicts this schedule.

The original plan called for an assessment of treatment effects 90 days after assignment. However, unforeseen delays in analyzing the data and writing the final report permitted the collection of additional data for 30 months following assignment. These data came from police records, and included: drug arrests, other arrests, reported crime, and citizen complaints about drugs. The data provided by the Crime Analysis Unit was aggregated to five 6-month intervals. Information on field interrogations and calls for service at sites is not maintained by the police department for this length of time. Additional data allowed more extensive analysis of the long term impacts of the treatments.

Table A1: EXPERIMENT SCHEDULE		
Day	Processes	Data Collection
-2	Narcotics sends researcher addresses	
-1	Researcher screens for eligibility and assigns numbers. Volunteer identifies owner.	
0	Randomized assignments sent from PERF. Treatment properties given to DART. Letters sent to owners of properties assigned to the letter and meeting groups.	
...		
5	DART calls owners of "meeting" properties who have not already called DART, and set time for meeting.	Begin collection of police file data for 90 day period leading up to assignment. First day eligible for environmental survey.
...		
45		First day eligible for owner survey. First day eligible for follow-up drug buy attempt.
...		
90		Begin collection of police file data for 90 day period following assignment.
...		
120		Completion of all data collection.

APPENDIX B

LETTERS

“LETTER” GROUP LETTER

[date]

[internal address]

Dear Property Owner:

On *[date]*, the San Diego Police Department's Narcotics Section conducted a narcotics investigation involving the property at *[address]*. As a result of this investigation, arrests were made and/or drugs seized. Our records indicate that you are the current owner(s) of this property. As a courtesy to you, the San Diego Police Department is notifying you of the attached Drug Abatement Act.

Our sincere interest in working with you to eradicate this activity is two fold: You will protect your investment while enhancing the quality of life in the community.

It is imperative that you take the necessary action to prevent this problem from escalating, and to avoid liability under the Drug Abatement Act. A Landlord Training Schedule and Program Guide are available for your education and assistance upon request. If you no longer own this property, or if we can be of further assistance, please contact Detective Kathy Healey at (619) 531-2915. Thank you for your concern in resolving this matter.

Sincerely,

Guy Swanger, Sergeant
Drug Abatement

GS: KH: p
Attachment

The Drug Abatement Act, California Health and Safety Code Section 11570-11587, authorizes the City Attorney to maintain an action to abate illegal drug activities on your property if the court finds that those activities are a nuisance, as defined in Section 11570. The court may then impose the following sanctions against you in a drug abatement action;

1. The closure of the building for a maximum of one year pending trial; or damages equal to the fair market rental value of the building for one year.
2. Civil penalties up to \$25,000.
3. Attorney fees and investigation costs.
4. Prohibitions against maintaining or permitting others to maintain a public nuisance related to illegal drug activities.
5. Removal and sale of all fixtures and movable property from the building which was used in conducting, maintaining, aiding or abetting the nuisance.

"MEETING" GROUP LETTER

[date]

[internal address]

Dear Property Owner:

On *[date]*, the San Diego Police Department's Narcotics Section conducted a narcotics investigation involving the property at *[address]*. As a result of this investigation, arrests were made and/or drugs seized. Our records indicate that you are the current owner(s) of this property. As a courtesy to you, the San Diego Police Department is notifying you of the attached Drug Abatement Act.

The Drug Abatement Act, California Health and Safety Code Section 11570-11587, authorizes the City Attorney to maintain an action to abate illegal drug activities on your property if the court finds that those activities are a nuisance, as defined in Section 11570. The court may then impose the following sanctions against you in a drug abatement action;

1. The closure of the building for a maximum of one year pending trial; or damages equal to the fair market rental value of the building for one year.
2. Civil penalties up to \$25,000.
3. Attorney fees and investigation costs.
4. Prohibitions against maintaining or permitting others to maintain a public nuisance related to illegal drug activities.
5. Removal and sale of all fixtures and movable property from the building which was used in conducting, maintaining, aiding or abetting the nuisance.

It is critical that you take the necessary action now to prevent this problem from escalating. It is imperative that you contact Detective Kathy Healey immediately regarding this investigation to arrange a meeting on the property to discuss resolution of this matter. She can be reached between 7:30 a.m. and 4:00 p.m. at (619) 531-2915, to schedule this meeting.

Guy Swanger, Sergeant
Drug Abatement

GS: KH: p

APPENDIX C
DISTRIBUTIONS OF CRIME AND DRUG EVENTS:
90 Days Prior (Pre) to the Intervention and
90 Days After (Post) the Intervention

Table C1: PRE NARCOTICS ARRESTS AT SITE				
# of Events	Meeting	Letter	Control	Total
0	3	1	3	7
1	13	20	18	51
2	14	17	9	40
3	2	2	7	11
4	3	0	2	5
5	1	1	1	3
6	0	0	2	2
7	1	1	0	2
Total	37	42	42	121
Mean	1.92	1.71	1.95	1.86
Std. Dev.	1.42	1.17	1.45	1.34

Table C2: PRE OTHER ARRESTS AT SITE				
# of Events	Meeting	Letter	Control	Total
0	30	38	32	100
1	1	3	7	11
2	4	1	2	7
3	1	0	0	1
4	0	0	0	0
5	0	0	0	0
6	0	0	1	1
7	1	0	0	1
Total	37	42	42	121
Mean	0.51	0.12	0.40	0.34
Std. Dev.	1.35	0.40	1.04	1.00

Table C3: PRE REPORTED CRIME AT SITE

# of Events	Meeting	Letter	Control	Total
0	24	33	25	82
1	7	7	9	23
2	2	1	3	6
3	0	0	2	2
4	1	1	1	3
5	1	0	0	1
6	1	0	0	1
7	1	0	1	2
8	0	0	0	0
9	0	0	1	1
Total	37	42	42	121
Mean	0.89	0.31	0.98	0.72
Std. Dev.	1.76	0.75	1.88	1.56

Table C4: PRE FIELD INTERVIEWS AT SITE

# of Events	Meeting	Letter	Control	Total
0	22	29	25	76
1	6	7	6	19
2	5	4	3	12
3	1	1	3	5
4	1	0	1	2
5	0	0	1	1
6	0	0	0	0
7	1	0	2	3
8	1	0	0	1
9	0	0	0	0
10	0	0	0	0
11	0	0	1	1
12	0	0	0	0
13	0	0	0	0
14	0	1	0	1
Total	37	42	42	121
Mean	1.03	0.76	1.31	1.03
Std. Dev.	1.86	2.23	2.38	2.18

Table C5: DRUG COMPLAINTS AT SITE

# of Events	Meeting	Letter	Control	Total
0	23	31	26	80
1	10	7	8	25
2	2	2	5	9
3	1	0	2	3
4	0	0	0	0
5	0	1	0	1
6	0	0	1	1
7	1	0	0	1
8	0	1	0	1
Total	37	42	42	121
Mean	0.65	0.57	0.71	0.64
Std. Dev.	1.30	1.48	1.22	1.33

Table C6: PRE CALLS FOR SERVICE AT SITE

# of Events	Meeting	Letter	Control	Total
0	14	12	7	33
1	9	12	7	28
2	3	6	5	14
3	1	1	6	8
4	5	6	2	13
5	0	4	2	6
6	1	1	4	6
7	2	0	0	2
8	1	0	1	2
9	0	0	1	1
10	1	0	1	2
11	0	0	1	1
12	0	0	1	1
13	0	0	1	1
...				
21	0	0	1	1
...				
26	0	0	1	1
...				
33	0	0	1	1
Total	37	42	42	121
Mean	2.05	1.83	5.24	3.08
Std. Dev.	2.65	1.82	7.05	4.77

Table C7: POST NARCOTICS ARRESTS AT SITE				
# of Events	Meeting	Letter	Control	Total
0	33	37	38	108
1	2	2	3	7
2	1	2	0	3
3	0	0	0	0
4	0	0	0	0
5	0	1	0	1
6	0	0	0	0
7	1	0	1	2
Total	37	42	42	121
Mean	0.30	0.26	0.24	0.26
Std. Dev.	1.20	0.89	1.10	1.05

Table C8: POST OTHER ARRESTS AT SITE				
# of Events	Meeting	Letter	Control	Total
0	32	37	35	104
1	4	5	3	12
2	0	0	3	3
3	0	0	1	1
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	1	0	0	1
Total	37	42	42	121
Mean	0.30	0.12	0.29	0.23
Std. Dev.	1.18	0.33	0.71	0.79

Table C9: POST REPORTED CRIME AT SITE				
# of Events	Meeting	Letter	Control	Total
0	26	36	27	89
1	8	3	5	16
2	1	2	5	8
3	0	0	4	4
4	0	1	1	2
5	0	0	0	0
6	1	0	0	1
7	1	0	0	1
Total	37	42	42	121
Mean	0.62	0.26	0.74	0.54
Std. Dev.	1.52	0.77	1.15	1.18

Table C10: POST FIELD INTERVIEWS AT SITE				
# of Events	Meeting	Letter	Control	Total
0	33	36	31	100
1	3	2	7	12
2	0	2	0	2
3	0	1	2	3
4	0	1	0	1
5	0	0	0	0
6	0	0	0	0
7	1	0	0	1
8	0	0	0	0
9	0	0	0	0
10	0	0	1	1
...				
30	0	0	1	1
Total	37	42		121
Mean	0.27	0.31	1.26	0.63
Std. Dev.	1.17	0.87	4.83	2.98

Table C11: POST DRUG COMPLAINTS AT SITE

# of Events	Meeting	Letter	Control	Total
0	36	41	39	116
1	0	1	1	2
2	0	0	1	1
3	0	0	0	0
4	0	0	1	1
5	0	0	0	0
6	0	0	0	0
7	1	0	0	1
Total	37	42	42	121
Mean	0.19	0.02	0.17	0.12
Std. Dev.	1.15	0.15	0.70	0.76

Table C12: POST CALLS FOR SERVICE AT SITE

# of Events	Meeting	Letter	Control	Total
0	17	23	12	52
1	10	3	8	21
2	4	3	5	12
3	0	4	1	5
4	0	4	3	7
5	2	0	1	3
6	1	3	3	7
7	1	0	0	1
8	0	0	0	0
9	1	0	2	3
10	0	1	0	1
11	0	0	1	1
12	0	0	0	0
13	0	0	1	1
14	1	1	1	3
15	0	0	0	0
16	0	0	1	1
...				
26	0	0	1	1
...				
33	0	0	1	1
...				
42	0	0	1	1
Total	37	42	42	121
Mean	1.73	1.88	5.45	3.07
Std. Dev.	3.02	3.01	9.11	6.10

APPENDIX D

DART ACTIVITY LOG ANALYSIS

DART logs recorded daily activities on experimental cases. These activities varied from listening to messages left by owners to meetings with owners. Most log entries describe information given and received and were in the form of short narrative entries. These entries were entered into the data set as one of 76 codes, such as "1 Left message for owner," or "39 Owner informed DART they are trying to sell the property," or "45 On-site meeting was rescheduled," or "72 Property manager told DART that he takes care of property for 90 year old owner." To analyze these highly specific codes, they were grouped into 20 activity types. Table D1 shows, for each treatment, the percent of cases in which an activity type was conducted at least once for a specific case.

Table D1: DART ACTIONS BY TREATMENT				
	CONTROL (42)	LETTER (42)	MEETING (37)	TOTAL (121)
Letters returned to DART and re-sent	0.0 (0)	11.9 (5)	5.4 (2)	5.8 (7)
Owner leaves message for DART	0.0 (0)	21.4 (9)	67.6 (25)	28.1 (34)
DART leaves message for owner	0.0 (0)	11.9 (5)	43.2 (16)	17.4 (21)
DART and owner meeting and related actions	0.0 (0)	2.4 (1)	91.9 (34)	28.9 (35)
Owner tells DART about property status	0.0 (0)	2.4 (1)	5.4 (2)	2.5 (3)
Owner gives DART tenant information	0.0 (0)	0.0 (0)	8.1 (3)	2.5 (3)
Owner unclear unsure of tenant status	0.0 (0)	0.0 (0)	10.8 (4)	3.3 (4)
Owner tells DART about tenant problem	0.0 (0)	0.0 (0)	5.4 (2)	1.7 (2)
Owner tells DART miscellaneous information	0.0 (0)	0.0 (0)	13.5 (5)	4.1 (5)
DART provides owner with information	0.0 (0)	0.0 (0)	18.9 (7)	5.8 (7)
DART does drive by of property	0.0 (0)	0.0 (0)	16.2 (6)	5.0 (6)
DART exchanging information within police department	0.0 (0)	4.8 (2)	5.4 (2)	3.3 (4)
DART learns offender in jail	0.0 (0)	0.0 (0)	5.4 (2)	1.7 (2)
DART makes recommendations to owner	0.0 (0)	11.9 (5)	51.4 (19)	19.8 (24)
Owner tells DART offender is gone	0.0 (0)	14.3 (6)	43.2 (16)	18.2 (22)
Owner provides DART evidence of evictions	0.0 (0)	19.0 (8)	56.8 (21)	24.0 (29)
Owner hesitant to evict offender	0.0 (0)	2.4 (1)	13.5 (5)	5.0 (6)
Owner tells DART about property management actions	0.0 (0)	0.0 (0)	10.8 (4)	3.3 (4)
Owner tells DART they are renovating the property	0.0 (0)	0.0 (0)	10.8 (4)	3.3 (4)
Owner critical of DART or police	0.0 (0)	2.4 (1)	10.8 (4)	4.1 (5)

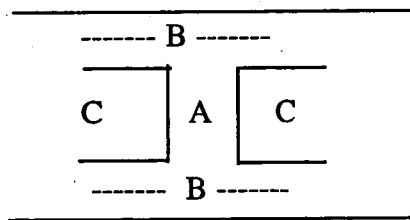
PROPERTY OF
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

**ENVIRONMENTAL SURVEY
DATA COLLECTION INSTRUMENT**

1. Address _____ Apt# _____
2. Date _____ 3. Time of Day _____

BLOCK FACE: (1 linear block, containing both block faces in either direction and mid-block of alley)

4. Adjacent to an arterial: _____ Yes < if A, B, or C > (1) _____ No (0)



5. IF NOT, within one block of an arterial: _____ Yes (1) _____ No (0)

6. Parking (check most appropriate):

_____ Meters (1) _____ Restricted (2) _____ Un-Restricted (3) _____ None (0)

7. Number of lanes (check most appropriate):

_____ 1 lane (1) _____ 2 lanes (2) _____ 3 lanes (3) _____ 4 lanes (4)

8. Type of Street: _____ 1-way (1) _____ 2-way (2)

9. Traffic Types (dominant):

_____ Residential (1) _____ Commercial/Commuter (2) _____ Unknown (3)

10. Significant amount of graffiti: _____ Yes (1) _____ No (0)

LOCATION INFORMATION (SITE SPECIFIC):

11. Structure of location: _____ Apt/Condo (1) _____ Duplex/Triplex (2) _____ House (3)

12. Number of buildings in complex: _____ Number of units in building(s): _____

13. Location on street (check all that apply): ☐ Within Block (1) ☐ Corner (2)
☐ Alley (3) ☐ Unknown (4)

14. Parking (check most appropriate): ☐ Meters (1) ☐ Restricted (2)
☐ Un-restricted (3) ☐ None (4)

15. Parking lots (check most appropriate):

☐ Pay lots (1) ☐ Public lots (2) ☐ No lots (3)
☐ Private restricted lots (4) ☐ Driveways (5) ☐ Garages (6)

16. Street lights (in front of location): ☐ Yes (1) ☐ No (0)

Check off the characteristics that apply to the unit in question. (1's for yes, 0's for no)

17. <input type="checkbox"/> Security system	25. <input type="checkbox"/> Windows blacked-out/boarded
18. <input type="checkbox"/> Security door	26. <input type="checkbox"/> Windows broken/cracked
19. <input type="checkbox"/> Bars on windows	27. <input type="checkbox"/> Fence (between lots)
20. <input type="checkbox"/> Shed or garage structure	28. <input type="checkbox"/> Fence (rear)
21. <input type="checkbox"/> Peeling paint/cracked stucco	29. <input type="checkbox"/> Fence (front)
22. <input type="checkbox"/> Untended yard	30. <input type="checkbox"/> Fence (surrounded)
23. <input type="checkbox"/> Tears/bends in screen	31. <input type="checkbox"/> Path
24. <input type="checkbox"/> Drug Paraphernalia (outside structure on ground)	32. <input type="checkbox"/> Other: _____

Check off the characteristics that apply to the building/complex/house where the unit is located.

33. <input type="checkbox"/> Live-in manager	38. <input type="checkbox"/> Courtyard
34. <input type="checkbox"/> Buzz-in gate/door	39. <input type="checkbox"/> Alleys
35. <input type="checkbox"/> Locked gate/fence	40. <input type="checkbox"/> Public phones available in complex
36. <input type="checkbox"/> Unlocked gate	41. <input type="checkbox"/> Graffiti (on walls/fence around property/lot)
37. <input type="checkbox"/> No physical security	42. <input type="checkbox"/> Other: _____

43. Shape of complex structure:

☐ Horseshoe/Semi-circle (1) ☐ Closed (circle or square) (2) ☐ House/Duplex(3)
☐ Single row (4) ☐ L-shaped (5) ☐ Cottages (clustered units) (6)

44. Number of entrances to complex: ☐ 1 (1) ☐ 2 (2) ☐ Multiple (3)
☐ Not closed complex (4) ☐ Unknown (5) ☐ N/A (8)

45. Number of floors: ☐ 1 (1) ☐ 2 (2) ☐ Multiple (3) ☐ Unknown (4)

46. Floor of drug dealing unit: _____ ☐ N/A (8)

47. Where is dealing unit in complex: ☐ Front (1) ☐ Side (2)
☐ Back/Alley (3) ☐ N/A (8)

48. Is window accessible from outside ground: ☐ Yes (1) ☐ No (0)

49. Description of adjacent/across the street buildings: (can choose more than one)

☐ apartment (1) ☐ duplex/triplex (2) ☐ single family home (3)
☐ business (4) ☐ parking lot/vacant lot (5)

**SAN DIEGO DRUG MARKET ANALYSIS PROJECT
DRUG ASSESSMENT REPORT**

Address of attempt/buy/search: _____ Exp. IDN: _____

1. Detective IDN: _____
2. Type of assessment: ____ Attempt/Buy (1) ____ 4th (2) ____ KT (3) ____ Other (4)
3. Who made the search/attempt/buy? ____ CI (1) ____ Detective (2)
4. Date of attempt/buy/search: _____
5. Time of attempt/buy/search: _____ Time to complete transaction: _____ minutes
6. Type of drug purchased: _____ Amount: _____ Price: _____

-
7. At what type of location did the search, attempt or purchase occur?

____ indoor (1)
____ street (2)
____ third person (runner between buyer and seller) (3)
____ other _____ (4)

8. Who approached whom for the initial contact?

____ I/CI approached suspected seller and solicited him for drugs. (1)
____ I/CI was approached by a "steerer" or other who...
____ directed me to a seller for no fee (2)
____ expected compensation for information provided on how to obtain drugs at this location (3)
____ would take me to a seller for a fee (4)
____ I/CI approached an individual who...
____ was not working for a seller but informed me for no compensation who was selling drugs (5)
____ was not working for a seller but would take me for compensation to a seller (6)
____ was a "steerer" for a seller and directed me for no compensation (7)
____ was a "steerer" for a seller and directed me for compensation (8)
____ CI introduced U/C who approached seller (9)
____ I approached seller/occupant and requested a 4th Waiver/Knock-Talk search (10)
____ other (explain) _____ (11)

9. If drugs were purchased, how was the transaction completed?

- ☐ N/A - no transaction was made (8)
- ☐ at that time, with the seller (1)
- ☐ an oral agreement was made, but the seller left and returned shortly with the drugs (2)
- ☐ an oral agreement was made at the site, but the seller insisted upon completing the deal at an alternate location (3)
- ☐ a third person (runner) left and came back with the drugs (4)
- ☐ other _____ (5)

10. Did you see any drugs at the location?

- ☐ yes, the drugs that were for sale (1)
- ☐ yes, drugs that were for personal use (2)
- ☐ no (0)

11. If you did see drugs, what types and what amount?

12. Where did the seller hold the drugs?

- ☐ on his/her person (1)
- ☐ stashed nearby inside the structure (2)
- ☐ third person holds the drugs (3)
- ☐ inside of another occupied residence (4)
- ☐ inside of a vehicle (5)
- ☐ inside of an abandoned or burned out vehicle or residence (6)
- ☐ other _____ (7)
- ☐ N/A - no seller and/or no drugs (8)

13. Did you see any drug paraphernalia at the location? ☐ yes (1) ☐ no (0)

13b. If so, what kind? _____

14. What was the seller's/occupant's attitude about selling drugs to you/allowing a search? Was the seller/occupant... (read responses)

- | | |
|-----------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> anxious (1) | <input type="checkbox"/> refused to sell/allow a search (4) |
| <input type="checkbox"/> nonchalant (2) | <input type="checkbox"/> other _____ (5) |
| <input type="checkbox"/> leery (3) | <input type="checkbox"/> N/A - there was no seller (8) |

15. Why do you think the buy attempt/search was unsuccessful? (*Can select more than one*)

- ☐ N/A - buy/search was successful (88)
- ☐ location is dry (1)
- ☐ sellers were suspicious of the detective/CI (2)
- ☐ sellers do not sell to strangers (3)
- ☐ sellers were suspicious of a car (undercover PD) in the area (4)
- ☐ detective/CI was of a different race than the seller (5)
- ☐ wrong time of day (6)
- ☐ a third person disrupted the deal (7)
- ☐ detective/CI could not meet with the right people (8)
- ☐ people became angry when asked for drugs (9)
- ☐ place was vacant (10)
- ☐ tenants no longer selling (11)
- ☐ other _____ (12)

16. How difficult was it to buy drugs?

- | | | |
|----------------------------------------|-------------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> very easy (1) | <input type="checkbox"/> difficult (3) | <input type="checkbox"/> very difficult (5) |
| <input type="checkbox"/> easy (2) | <input type="checkbox"/> somewhat difficult (4) | <input type="checkbox"/> N/A - no buy (8) |

17. In your opinion, is there drug dealing at this location? ☐ yes (1) ☐ no (0)

18. What leads you to suspect that drug dealing is occurring at this location? (*More than one may be selected*) (*read responses*)

- ☐ N/A - do not believe there is drug dealing at this location (88)
- ☐ there was an offer made (1)
- ☐ drugs were found during a search (2)
- ☐ I was told to come back at a later time (3)
- ☐ type of environment (i.e. shabbily maintained building, trashy area, etc.) (4)
- ☐ people under the influence of drugs, drinking, etc. (5)
- ☐ suspicious people "eyeing" the detective (lookouts, possible other sellers) (6)
- ☐ other sellers present (7)
- ☐ other people present who were buying drugs (8)
- ☐ drug paraphernalia present (9)
- ☐ large amounts of car or pedestrian traffic in the area (10)
- ☐ people talking on pay phones (11)
- ☐ detective personally knew of drug offenders that were present (12)
- ☐ comments made about availability of drugs by people at location (13)
- ☐ other _____ (14)

19. What makes you think that there is not drug selling at this location? (*Check all that are appropriate*)

- ☐ N/A - there is drug dealing (9)

- ☐ told the dealer moved (1)
- ☐ individual at location stated that he did not sell (2)
- ☐ type of environment (clean area, well-maintained, etc.) (3)
- ☐ no suspicious people (addicts, sellers, etc.) present (4)
- ☐ little or no traffic (car or pedestrian) in and out of area (5)
- ☐ people were insulted by being asked for drugs (6)
- ☐ an individual informed you to go to another location for drugs (7)
- ☐ place was vacant and no signs of people staying there (8)
- ☐ other _____ (9)

20. If comments were made by people at the location regarding the availability of drugs, what were they? (More than one may be selected)

- ☐ N/A - there was no one there/no comments were made (88)
- ☐ sold out, should have come earlier (1)
- ☐ will get some soon, come back later (2)
- ☐ people were willing to direct detective/CI to a seller (3)
- ☐ person knew what detective was referring to and were cooperative (4)
- ☐ manner in which the person talked (knew lingo, knew drug scene) (5)
- ☐ person was abrupt, defensive, or nervous (detective felt person was fearing that he was a cop) (6)
- ☐ sarcastic reaction (laughing, made jokes about selling) (7)
- ☐ other _____ (8)

21. Was the occupant the same person who has been arrested for dealing at the location in the past?

- ☐ don't know (2) ☐ yes (1) ☐ no (0) ☐ N/A - no one is selling (8)

22. What are the chances that the original subject is still dealing?

22a) At that location: ☐ good (1) ☐ poor (2) ☐ don't know (3)

22b) Within a half mile: ☐ good (1) ☐ poor (2) ☐ don't know (3)

23. What was the race of the person with whom you had contact?

- ☐ white (1) ☐ black (2) ☐ hispanic (3) ☐ asian (4)
- ☐ other _____ (5) ☐ N/A - no one there (8)

24. What was the approximate age of the person?

- ☐ under 18 (1) ☐ 19-25 (2) ☐ 26-40 (3) ☐ 41-55 (4)
- ☐ over 55 (5) ☐ N/A - no one there (8)

25. Was the person... ☐ male (1) ☐ female (2) ☐ N/A - no one there (8)

OWNER QUESTIONNAIRE

Hello, my name is _____, and I am calling from the San Diego Police Department. I'm calling on behalf of a study being conducted by the Police Department and San Diego State University concerning property ownership and drug dealing on rental properties. I was wondering if I could have about 10 minutes of your time to answer some questions. All data will be kept completely confidential and coded so as not to be associated with your name.

IDN: _____

- 1) What type of property owner are you? (read responses)
____ individual (1) ____ partner (2) ____ corporation (3) ____ receiver (4)
- 2) If you are not an individual, what is your position? _____
- 3) Did you receive a letter from the Police Department? ____ yes (1) ____ no (0)
- 4) Is this the first time you have been made aware of drug dealing at that particular unit?
____ yes (1) ____ no (0) ____ N/A (8)
- 5) If no, how were you made aware of the problem?
____ property manager (1) ____ other tenant (2) ____ neighbor (3)
____ other (4) _____ N/A (8)
- 6) To your knowledge, has there been drug dealing at the complex/property in the past?
____ yes (1) ____ no (0) ____ not sure (2)

ABOUT THE PHYSICAL PROPERTY

- 7) How did you acquire the dwelling? (read responses)
____ purchase (1) ____ inherit (2) ____ build (3)
____ receiver (4) ____ other (5) _____
- 8) How old is the structure? ____ 1-5 years (1) ____ 6-10 years (2)
____ 11-20 years (3) ____ 21-30 years (4) ____ over 30 years (5)
- 9) How long have you owned this property? ____ 1-5 years (1) ____ 6-10 years (2)
____ 11-20 years (3) ____ 21-30 years (4) ____ over 30 years (5)

- 10) Have there been any substantial modifications since you've owned it?
____ yes (1) ____ no (0)
- 11) If so, how long ago? ____ less than 1 year (1) ____ 1-5 years (2)
____ 6-10 years (3) ____ over 10 years (4) ____ N/A (8)
- 12) Do you own other rental properties? ____ yes (1) ____ no (0)
- 13) If so, how many? _____

ABOUT THE TENANTS

- 14) What type of rental agreement do you have with the leaseholder?
____ month-to-month (1) ____ 6-month lease (2) ____ year lease (3)
- 15) Does this tenant have the same type of agreement as all other tenants?
____ yes (1) ____ no (0) ____ N/A - only tenant (8)
- 16) Is the person who was arrested the lease holder? ____ yes (1) ____ no (0)

If yes to #16:

- 17) Do they still live in the unit? ____ yes (1) ____ no (0)
- 18) Were they paying rent up until the time they left? ____ yes (1) ____ no (0)
- 19) Is the rent typically paid on time? ____ yes (1) ____ no (0)
- 20) How is it paid? ____ cash (1) ____ money-order (2) ____ check (3)
- 21) Have you attempted to evict them? ____ yes (1) ____ no (0)
- 22) If so, how long ago (in days) was notice given? _____
- 23) How long ago (in days) did they leave property? _____

If no to #16:

- 24) Who pays the rent? _____
- 25) Is the rent typically paid on time? ____ yes (1) ____ no (0)
- 26) How is it paid? ____ cash (1) ____ money-order (2) ____ check (3)

- 27) Have you attempted to evict them? ____ yes (1) ____ no (0)
- 28) If so, how long ago (in days) was notice given? _____
- 29) How long ago (in days) did they leave property? _____
- 30) How long has the person who presently pay rent lived there? ____ less than 1 month (1)
____ 1-6 months (2) ____ 7-12 months (3) ____ over 1 year (4)
- 31) What type of background check was done on the original applicant?
(can check more than 1)
____ credit (1) ____ references (2) ____ bank (3) ____ job (4)
____ criminal history (5) ____ other (6) _____ none (0)
- 32) Have you ever been or felt threatened by the tenant? ____ yes (1) ____ no (0)

PROPERTY MANAGEMENT

- 33) Do you belong to the San Diego Apartment Association or another property owner association?
____ yes (1) ____ no (0)
- 34) Do you receive any government assistance for this rental property?
____ yes (1) ____ no (0)
- 35) Do your tenants receive any government subsidies to assist them with rental payments?
____ yes (1) ____ no (0)
- 36) Do you use a property manager (indiv or company)? ____ yes (1) ____ no (0)
- 37) If so, is it on site? ____ yes (1) ____ no (0)
- 38) How often do you visit your properties? ____ weekly (1) ____ monthly (2)
____ bimonthly (3) ____ biannually (4) ____ yearly (5) ____ never (0)
- 39) When did you last visit this property?
____ within past week (1) ____ within past month (2) ____ within past 6 months (3)
____ within past year (4) ____ over one year (5)

40) Do the occupants maintain the property or neglect it?

_____ maintain (1) _____ neglect (2)

41) Not counting this incident, have you had any problems with these tenants?

_____ yes (1) _____ no (0)

42) Are you aware of any complaints from neighbors regarding the occupants?

_____ yes (1) _____ no (0)

questions 43-46 apply to treatment groups only

43) Have you taken any actions as a result of the notice from the Police Department?

_____ yes (1) _____ no (0)

44) If yes, what? _____

45) If no, why not? _____

46) Have there been any physical changes made to the property as a result of the notice from the Police Department?

_____ yes (1) _____ no (0)

47) Do you (or would you) fear retaliation from the tenant if you do take action (i.e. eviction)?

_____ yes (1) _____ no (0)

48) Have you heard about the landlord training program offered by the Police Department?

_____ yes (1) _____ no (0)

49) If yes, have you attended the program? _____ yes (1) _____ no (0)

_____ plan on going (2) _____ N/A (8)

50) Do you feel the police are doing their part to address the problems in your neighborhood?

_____ yes (1) _____ no (0) _____ don't know (2)

SATISFACTION WITH DART (treatment 2 groups only)

51) How would you rate the DART unit on their professionalism? *(read responses)*

_____ Poor (1) _____ Fair (2) _____ Good (3) _____ Very Good (4)
_____ Excellent (5) _____ N/A (8)

52) Do you feel that you were treated fairly? ____ yes (1) ____ no (0) ____ N/A (8)

53) Is there anything that you would have liked to see done differently by the DART unit?

FINANCIAL ASPECTS

54) What was the purchase price of the property? \$ _____

55) What is the current valuation? \$ _____

56) Does the rental income exceed maintenance, property tax, utility, and other costs?

____ yes (1) ____ no (0)

57) How important is it to have all units rented throughout a 12-month period to meet your financial objectives? (*read responses*)

____ not at all(1) ____ not very(2) ____ somewhat(3) ____ very(4) ____ extremely(5)

58) Do you have any outstanding debt on the property (loans, mortgages, etc.)?

____ yes (1) ____ no (0)

59) What is the maximum dollar value which you could undertake for improvements to the property at this time? (*read responses*)

____ 0 (0) ____ up to \$1,000 (1) ____ \$1-5,000 (2) ____ over \$5,000 (3)

OWNER INFORMATION

60) How far do you live from the property?

____ on the property (1) ____ less than 1 mile (2) ____ 1-5 miles (3)
____ 6-20 miles (4) ____ 21-50 miles (5) ____ over 50 miles (6)

61) What is your occupation? _____

62) Age ____ 18-29 years (1) ____ 30-45 (2) ____ 46-65 (3) ____ over 66 (4)

63) Sex ____ male (1) ____ female (2)

64) Race ____ White (1) ____ Black (2) ____ Hispanic (3) ____ Asian (4)
____ Vietnamese (5) ____ Middle-Eastern(6) ____ Filipino (7)
____ other (8) _____

65) Education ____ did not complete high school (1) ____ high school graduate (2)
____ some college (3) ____ bachelor's degree (4) ____ advanced degree (5)