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FIRST PRINTING

COMMUNITY CRIME PREVENTION Does It Work?

# Dennis P. Rosenbaum

Editor

Chapter 4

## NEIGHBORHOOD-BASED ANTIBURGLARY STRATEGIES An Analysis of Public and Private Benefits from the Portland Program

ANNE L. SCHNEIDER

Most publicly funded efforts to reduce or control crime can be categorized as prevention, rehabilitation, or deterrence.<sup>1</sup> The purposes of these programs are to prevent persons from developing criminal careers, or, for those who are already engaged in crime, to retrain them, modify their behavior, or incapacitate them. If prevention, treatment, or deterrence efforts are effective in reducing crime, then it is generally assumed that a "public good" has been produced—that is, that the entire public will benefit from the increased safety (Shoup, 1976; McKenzie & Tullock, 1975; Wilson & Schneider, 1976).

Programs that seek to reduce crime by focusing on the potential victims usually are designed to educate residents in the techniques of crime prevention or to supply them with the training and equipment that would reduce the probability of their own victimization. Environmental design programs are similar in that they focus on the built environment of a specific household or area and seek to reduce the likelihood of its victimization.

The victim-oriented approach, however, does not necessarily produce a "public good." If some residents in an area undertake selfprotection activities and successfully reduce the probability that they

AUTHOR'S NOTE: Funding for the research upon which this chapter was based was provided by Grant 74-NI-99-0016-G from the Oregon Law Enforcement Council and the National Institute of Law Enforcement in Criminal Justice, Washington, D.C. Points of view or opinions stated in this document are those of the author, and do not necessarily represent the official position or policies of the Department of Justice. will be victimized, offenders may select other residents in the area as their victims (Maltz, 1972; Mattick, Olander, Baker, & Schlegel, 1974). Thus, the total volume of crime may not be reduced. It is possible that crime will be shifted from one victim to another, from one area to another, from the inner city to the suburbs, or even from the urban areas to the rural areas of the nation.

When public funds are spent on programs that successfully reduce the criminal activities of offenders or potential offenders, few would criticize the expenditures because the benefits of crime reduction are, for the most part, distributed to everyone as increased safety. On the other hand, if a city government supplies funds to a victim-oriented program, and if that program shifts the monetary and social costs of crime from one set of people (participants) to another (nonparticipants), then one might legitimately question the fairness of the program.

Publicly funded crime prevention efforts also may have the effect of redistributing the amount of protection among different socioeconomic classes. It is generally believed that persons in the higherincome groups are able to purchase better protection for themselves (Weicher, 1976). This has not become much of a political issue, however, because in a free-market economy most acknowledge the right of individuals to spend their money in whatever manner they choose. However, when public funds are used to purchase additional protection for some citizens but not all, then their allocation among socioeconomic groups is an important consideration.

At the time the Portland, Oregon, burglary prevention program was implemented in 1973, very little was known about the impact of these programs, much less the extent to which they would produce private rather than public benefits or result in a more (or less) equitable distribution of protection among different socioeconomic groups.

#### THE PROGRAM

The Portland burglary prevention program was implemented during the summer of 1973 as part of the Law Enforcement Assistance Administration (LEAA)-funded Impact Cities initiative. The program was operated by the Crime Prevention Bureau (CPB), which was a civilian-staffed component of the police department.

The program was based primarily on a neighborhood prevention strategy. The CPB staff identified several high crime target areas for

door-to-door canvassing of residents. This effort was followed by neighborhood meetings, usually sponsored by local residents, in which the program was explained, engraving equipment distributed, and decals signifying participation were given to those who attended.

The private prevention techniques recommended by the program included information about types of locks, alarms, use of outside lighting around entrances to the residence, removal or trimming of hedges to increase the visibility of the residence, and special precautions to take during vacations.

Residents were encouraged to mark their property with an engraver supplied by the Crime Prevention Bureau. These engravers were available at the meeting, directly from the CPB headquarters, and from public libraries. A crime prevention decal was to be posted in a conspicuous place near the front door. It informed potential burglars that items in the household were engraved and could be traced.

The neighborhood prevention efforts included information on the methods of operation that burglars tended to use, information on suspicious behavior, actions to take if suspicious behavior or a crime in progress was observed, and general exhortations for the residents to watch out for the safety of each other.

In the early phases of the program, the CPB designated certain areas of the city for high-priority efforts on the part of CPB personnel. Two census tracts (36.02 and 19), both of which had high burglary rates, were designated for major work in terms of block meetings, door-to-door coverage with the engraving equipment, and the dissemination of information. In addition, an area that also was selected for street lighting (one that had the highest burglary rates in Portland) was designated as an area of special activity.

Several months after the program began, the CPB altered its strategy and began implementing the program citywide on the basis of requests received from residents throughout the city. CPB staff did not canvass these other areas, but they did speak at neighborhood meetings, which were organized by the community. They also initiated a massive television advertising campaign, which produced a dramatic increase in the number of persons obtaining information, engravers, and decals from the CPB offices. This strategy was reversed after the first evaluation reports were produced. These reports sparked a discussion about displacement effects (which program staff strongly suspected were occurring) and how such effects might be minimized. Thereafter, the CPB returned to its canvassing, neighborhood-based strategy in an effort to saturate an entire area bounded by natural barriers to minimize displacement. Logic of the Program

The rationale underlying this type of neighborhood burglary prevention program is that burglars wish to incur the smallest possible risk when selecting a home to burglarize. The burglar is expected to avoid homes with burglar alarms or dogs, as well as those in which the neighbors can see the entrances easily.

Property that has been marked with an identification number is presumed to be more difficult to fence, more easily recovered, and more apt to be traced back to the burglar. Neighborhoods in which most of the residents know each other and in which residents have been encouraged to help watch for suspicious behavior or strangers should be less attractive to potential burglars, because their presence is more apt to be noticed. The CPB specifically sought to increase not only the protection of individual households, but the protection of the entire neighborhood.

## EVALUATION PURPOSE AND METHODOLOGY

The evaluation of Portland's Impact City Program—for which I served as principal investigator and which included the neighborhood burglary prevention effort—was contracted by the Oregon Law Enforcement Council (OLEC) to the Oregon Research Institute after a competitive bidding process. Because the study had to serve several purposes, OLEC had already decided that a multiple-purpose design should be developed and that one aspect of the design would include a victimization survey.

The purposes of the evaluation were as follows:

- to measure the private benefits of the burglary prevention program by examining its effect on the burglary rates of participating households compared with nonparticipants;
- (2) to assess the public benefits of the program by estimating the change in burglary rates for the entire city;
- (3) to measure the effect on the recovery rates of marked property;
- (4) to examine the change in "private-oriented" crime prevention behavior versus "collective" crime prevention behavior that could be attributed to the neighborhood burglary program; and
- (5) to assess the effect of the program on the distribution of private protection among different socioeconomic groups.

## The Data

Three sources of data were available for the evaluation.

A victimization survey specifically designed to assist in the evaluation of the burglary prevention program was conducted in the summer of 1974 (covering a recall period from May 1973 through April 1974) in the Portland metropolitan area (see Schneider, 1975c). Of the approximately 3,950 interviews, 1,909 were within the city limits of Portland and the remainder were in the suburban areas. All of the interviews were conducted in person.

The sample was developed in such a way as to oversample residents in three target areas identified by the CPB: the street-lighting area (which received extensive coverage by the CPB, as well as the addition of street lights); the northeast Portland area; and one other highpriority neighborhood in the inner city. The remaining households were selected randomly from throughout the city.

The victimization survey instrument contained extensive questions regarding knowledge of and participation in crime prevention activities, attitudes toward crime, actions taken to avoid being victimized, and so forth. These questions were asked first and were then followed by the victimization portion of the interview. The victimization screening and follow-up questions were the same as those used in LEAAsponsored surveys.

The second source of data was another victimization survey, this one conducted in 1972 by LEAA as part of its City Victimization plan. This survey was extremely limited, however, in its contribution to the evaluation because Census Bureau rules prevented the data from being broken out to subareas within the city. The rules also prohibited the Bureau from providing individual-level data, which could have been used to create a historical control group. Nevertheless, the LEAA study was used for in the pre-post examination of change in the citywide burglary rates, as will be explained below.

Police statistics on the offense rates, by month, for burglaries and other Crime Index offenses on a citywide basis were the third set of data used in the evaluation.

#### The Design

Two issues present extraordinary problems in developing a valid research design for community crime prevention programs such as the one implemented in Portland. One of these is the simultaneous impact of the program on burglary rates and on the reporting of burglaries to the police. The other is the displacement effect.

If the program increases the probability that burglaries will be reported to the police, then time-series or pre-post designs using official police statistics will not be able to determine the true effect. If the program is effective in reducing burglaries and also increases the probability of reporting, then the analysis may show no change at all. The two victimization surveys conducted in Portland indicate an increase in reporting of burglaries (from 50% in the 1972 survey to 65% in 1974). Furthermore, the later survey indicates differences of a similar magnitude between participants and nonparticipants (Schneider, 1975a).

The fact that the program probably increased the reporting of burglaries precluded the use of official statistics either in time-series or concurrent comparison group designs.

In relation to displacement effects and collective benefits, the problems emerge only if the program is effective in reducing burglaries for participating households. If so, then any one of three outcomes may occur.

First, some burglars and potential burglars abandon crime entirely within the area due to the deterrent effects of the program. Others are not concerned about the new protections and continue their activities without distinguishing between participating and nonparticipating households.

With this scenario, the burglary rate for participating and nonparticipating households in the area would decline at approximately the same rate. No displacement has occurred within the area being considered, and the program has positive private effects and positive collective effects as well.

Second, some burglars and potential burglars abandon crime in the area entirely due to the program and others shift their activities toward the nonparticipating households.

In this instance, the burglary rate for participating households would decline markedly whereas the rate for nonparticipants would decline some or remain the same as before the program, or even increase slightly depending on how many burglars were permanently deterred. In this example, the benefits to participating households are greater than the benefits to nonparticipating households, but the overall effect of the program may be positive for both participants and nonparticipants.

Third, no burglars or potential burglars abandon crime in the area and all shift their choices toward the nonparticipating households. If this occurs, the rate for participating households would decline and the rate for nonparticipants would increase by approximately the same amount because the latter households are selected as victims instead of the participating ones.

Displacement has occurred in this situation and the program has positive private benefits, but negative (or no) collective benefits. The cost of the entire volume of burglaries has been shifted to the nonparticipants. If the program had not existed, this cost would have been shared more equitably among households in the area.

Which of these outcomes occurs may depend on the proportion of residents who are participating. As the percentage of participants increases, the first or second outcomes discussed above may become more likely, but no research has been done to determine this. If participation reaches close to 100% within an entire urbanized area, then the burglars must move to another city, abandon crime, or begin burglarizing the participating households. If the latter choice is made by a substantial number of burglars, then the private benefits of participating (as well as the collective benefits) may decline as a function of exceptionally high participation.

The implication of the displacement phenomena, if it occurs, is that the private effects of the program must be measured by comparing participating and nonparticipating households. To measure the public effects, it is necessary to compare the burglary rate of an area large enough to include both the private effect and its displacement.

To assess the effectiveness of antiburglary programs for participating households (that is, the private benefits), one must ascertain what the burglary rate for participants would have been if they had not participated in the program. Through comparison of the expected rate (the rate they would have experienced if they had not participated) with the actual rate, the impact of the program can be estimated.

Similarly, to estimate the public (collective) benefits of the program, it is necessary to estimate the burglary rate of the entire area (including participants and nonparticipants) and to compare this with the rate the area would have experienced if there had been no program. Unfortunately, there were no simple ways to obtain an expected rate either for the participants or for the area as a whole. Because households were not randomly selected for inclusion in the program, there are only two possible estimates of the expected burglary rate. One of these is the preprogram rate for households that later participated and the other is the concurrent burglary rate of nonparticipating households. There are problems with both of these.

As noted above, preprogram victimization data were available only on a citywide basis and, therefore, could not be divided into those who later participated in the program and those who did not. The only source of data for determining the preprogram rates of persons who later participated or did not were the official police statistics. However, there were two reasons not to use these. First, participation in the program clearly increased the probability of reporting crimes to the police. This would have produced an increase in the official (reported) burglary rate for participating households. Second, households that experienced a burglary were especially motivated to participate in the program. In fact, police officers often informed burglary victims about the program and sought their participation. Thus, the use of historical burglary statistics for the participating households would have shown an abnormally high burglary rate prior to their participation and an almost automatic decline afterward. This presented a classic regression to the mean problem.

There also were problems, however, in assessing the private effects by comparing participating and nonparticipating households using the 1974 victimization survey data. The most obvious problem was the possibility of a selection bias, in which the participants differ systematically from the nonparticipants prior to their inclusion in the program. If so, then there is every reason to expect a difference in their burglary rates that is independent of the program.

There is no perfect solution to this problem of research design, but the strategy that was used involved comparing participants with nonparticipants who lived in the same section of the city and introducing statistical controls for other variables within each area that were related both to participation and to the burglary rate. In effect, the assumption was made that the burglary rate for participants within Area X of the city would have been the same as the rate for nonparticipants in Area X if the former had not participated in the program.

If a difference exists between participating and nonparticipating households that appears to be related to the program, then it is necessary to determine whether the reduction in crime for participants was matched by an increase for nonparticipants, or whether there were some collective benefits. For this part of the analysis, the preprogram victimization survey rates for the entire city were compared with the postprogram rates. In addition, the official burglary statistics from the police, both pre and post, were adjusted for differences in reporting percentages (as reflected in the two victimization surveys). Although neither of these designs, alone, is a very good one, it was believed that the two in conjunction might shed some light on the issue of collective versus private benefits. The examination of the other propositions did not present nearly such complex design issues. The question of whether the program resulted in increased recovery rates was examined using the 1974 victimization survey data in which comparisons were made of the recovery rates for engraved and nonengraved items.

The impact of the program on "private" versus "collective" protection was examined by dividing the various types of actions reported in the victimization survey into those that benefited the individual and those that benefited the entire neighborhood. (These scales are discussed below.) Using multiple regression analysis, the independent effect of attending block meetings on these types of activities was assessed.

The redistributive effects of the program were studied by comparing the correlation of socioeconomic variables with the amount and type of protection. This analysis was conducted within the randomly selected portion of the sample, which included self-selected participants in the program and within the CPB-selected participants. We would expect an income or social-class bias to be present in the first group, given that those who are better off tend to purchase more private protection. This could be the case either because they have a greater demand for protection or because they are able to afford it, or both.

Within the CPB group, however, the service was, in effect, delivered directly to the consumer at no charge. Hence, there is no reason to think that those who are better off would avail themselves to a greater extent of this "free" good unless, of course, those who are better off prefer more protection even when it's free.

#### EFFECTS OF THE PROGRAM

## **Effect on Participating Households**

Homes that participated in the CPB program, as indicated by the display of an antiburglary decal, had lower burglary rates than homes that did not (see Table 4.1). The use of the decal was selected as the primary indicator of participation because this was one of the few aspects of participation that was readily visible to a potential burglar. Most homes that displayed the decal also had taken numerous other preventive actions.

For the entire city, the difference between participants and nonparticipants was about 30 burglaries per 1,000 households. If it is assumed that participating households would have had the same rate as

TABLE 4.1	Effect of Participation on Burglary Rates of
	Participating Households (in percentages)

Area	Participating Homes	Nonparticipating Homes	All Homes
Portland (totals) (N = 1,959)	6.87*	10.1*	9.65
Street-lighting area (N = 311)	8.4*	24.0*	21.0
CPB high-priority area (N = 115)	7.7*	21.0*	17.3*
N.E. Portland (N = 43)	7.9	11.3	10.8
Remainder of city (N = 1,015)	6.6	9.4	9.0
Special CPB participant sample (N = 87)	n.a.	n.a.	<b>n.</b> a.

NOTE: The entries in the cells are the proportion of households that had one or more burglaries, corrected to an annual rate, after they began displaying a CPB sticker signifying that they had engraved their property and were participating in the neighborhood watch program. The street-lighting area and the high-priority area were targeted for house-to-house canvassing and neighborhood meetings. Participants from other areas were primarily self-selected.

\*Indicates a statistically significant difference using a Z-test of proportions.

nonparticipants in the absence of the program, then the "reduction" in burglaries is about 32%.

The most marked differences were in the two census tracts designated as high-priority areas for the Crime Prevention Bureau and in the Street Lighting Area of Portland. These areas had the highest levels of participation. In the CPB area, 30% of the residents reported that they had attended a meeting, and in the street-lighting area 16% said they had attended.

The information in Table 4.1 was obtained by calculating the percentage of homes with stickers that were burglarized one or more times after the stickers were displayed. The number of months of opportunity for burglaries to occur was calculated (based on the dates when the stickers were displayed), and the rate was then adjusted to a yearly equivalent.

The lower burglary rates for participating households could be attributed to the antiburglary program, but other factors must be considered. First, it is possible that a self-selection process was operative and that persons less apt to be burglarized were more apt to participate in the program. The logic of this is not self-evident, however, and it is just as likely that people who had been burglarized recently were more apt to participate in the program. In addition, the Seattle study found no evidence of a consistent bias introduced by self-selection of participants (Matthews, 1975). Also, this sort of bias is even less likely in Portland within the target areas of the city, because the CPB was actively "recruiting" these individuals.

Another possible confounding factor is that there was some type of socioeconomic variable producing both the higher participation rate and the lower burglary rate. Bivariate and multivariate analyses did not detect any evidence of this, however. Participants within each area tended to have slightly higher educational levels than nonparticipants, but these differences were not statistically significant and there were no significant differences in income. Analysis of the race of participants indicated that they were more likely than nonparticipants to belong to a minority group and that minorities, on the whole, had higher victimization rates. Thus, this variable could not have produced a spurious positive effective.

#### **Effect on Citywide Burglary**

No baseline victimization data were available for specific areas within the city. However, the LEAA-sponsored survey of 1972 can be used to estimate the collective benefits of the antiburglary program for city residents as a whole. And official records for these time periods can be adjusted for differences in reporting (as indicated by the victimization surveys) to produce a second pre-post estimate of the overall impact.

In 1974, the total burglary rate for the city was 127 per 1,000 households, if all burglaries at the same house were included in the calculation of the rate. The rate was 96.5, if calculated in terms of the proportion of households with one or more burglaries. The equivalent rates in the 1972 data were 151 (including multiple burglaries at each household), and 115 if using the prevalence measure of households with one or more burglaries. These figures indicate that there may have been a citywide decline in burglaries.

The official burglary statistics obtained from the Portland police department, however, portray a vastly different picture as they show an increase from 68.6 per 1,000 in early 1971 to more than 90 per 1,000 by the end of 1973 and early 1974 (see Table 4.2). The victimization survey data, however, can be used to estimate the proportion of

TABLE 4.2 Effect of CPB Program on Citywid	e Burglary	Rates*
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Month	Official Burglary Rate per 1.000	Proportion of Burglaries Reported to Police	Corrected Burglary Rate
1971			
January-April	68.6	ND	
May-August	75	.50	150
September-December	80	.50	160
1972			
January-April	74	.50	148
May-August	77	.50	154
September-December	77	ND	
1973			
January-April	66	ND	
May-August	83	.66	123
September-December	100	.79	127
1974			
January-April	90	.67	134
May-June	85	ND	

a. The first column contains the official burglary rate, per 1,000, as recorded by the Portland Police Department. The second column shows the proportion of victimization burglaries reported to the police-according to survey respondents. The final column shows the estimated "true" number of burglaries found by dividing the reported burglaries by the percentage of all burglaries that were reported. These corrected figures are very close to the estimated burglary rates obtained from the survey data, which were 151 per 1,000 in 1971-1972 and 127 per 1,000 in 1973-1974. ND = no data.

all burglaries reported to the police and these figures can then serve as an adjustment for the official statistics.

It is commonly known that victimization data from a single survey covering a 12-month period cannot be used to examine trends or change in the crime rates during that same time period because of telescoping and forgetting effects. However, examination of the proportion of burglaries reported in each month of the series did not reveal any pattern that would suggest telescoping or other kinds of recall biases. The forward records check undertaken later on these same Portland victimization data confirmed the fact that there was no relationship between the time lag from interview to incident and any of the details of the crime, provided that the respondent remembered the incident at all (Schneider, 1978).

With the adjustments in the official statistics to take into account the changes in reporting, the official burglary rates showed a drop between 1971-1972 and 1973-1974. If these figures are reliable, the program not only produced significant private benefits, but also benefited the nonparticipants in terms of a citywide decline in burglary rates.

## **Effect on Reporting**

Persons who participated in one or more of the antiburglary activities (attending a meeting, marking property, or displaying a decal) were considerably more apt to report burglaries to the police than were nonparticipants. In the entire city, the percentage increased from 65% (for persons with no information and no involvement) to 80% and above for participants. The same pattern was apparent within each section selected for special analysis, although the smallest effect was observed in the street-lighting area of northeast Portland. The figures for small areas were based on very small numbers of participants and very few burglaries, but the pattern is consistent enough to justify some confidence in the conclusion.

#### **Recovery Rates**

The recovery rate for stolen items was extremely low. Less than 5% of the stolen television sets and auto accessories (such as tape decks) were recovered. It is quite difficult with these data to test the proposition that engraved property is more apt to be recovered than property that is not engraved because of the low frequency with which engraved items were stolen. For example, only six engraved television sets were stolen. The recovery rate for unmarked sets was only 5% and, therefore, 20 engraved televisions would have to be stolen before it would be reasonable to expect that a *single one* would be recovered. There was no evidence that engraved clocks or radios or other small items were more likely to be recovered than unmarked ones.

Bicycles were the only item that seemed to have an improved chance of recovery if they had been engraved. Of the engraved bicycles, 44% were recovered, compared to 15% of the unmarked bicycles. It should be noted that the recovery rate referred to here is measured by whether the stolen item was returned to the owner—regardless of whether it was recovered by the owner personally, by the police, by a neighbor, or by some other person.

## Level of Participation

Within the city of Portland, an estimated 27% of the residents engraved some of their household property, 12% displayed an an-

tiburglary sticker, 19% lived in an area where a block meeting (sponsored by the CPB or other group) had been held, and an estimated 10% attended such a meeting. The participation levels were highest in those sections of the city that were designated as high-priority areas. The level of participation in the one area where door-to-door canvassing was used (the CPB area) was almost twice as high as in other parts of the city.

Even without CPB intensive activity, however, a substantial proportion of the citizens apparently were willing to invest their own time and effort to obtain the property markers and stickers.

People were more inclined to engrave their property than to display stickers—only about half of those who engraved property said they put stickers on their doors or windows. Many persons who engraved but had not displayed stickers said they did not have stickers and others said they just had not gotten around to displaying them. In either case, there was a possibility that people did not fully understand the rationale of the program—that the sticker was the initial deterrent.

## **Private Versus Collective Actions**

Four variables were developed to examine whether participation in the CPB program had a more dramatic impact on actions that would benefit the individual household or on those that might have a collective effect. These were (a) protective neighboring, (b) bystander helpfulness, (c) private protection, and (d) the use of antiburglary stickers.

*Protective Neighboring.* Protective neighboring was defined as the extent to which respondents said that persons in the neighborhood would assist in protecting one another's property. There were four questions related to this issue and an additive scale was formed from them.

The questions used in the scale were as follows:

- Do you think the people who live near here would help watch out for your property when you are not home?
- •During the last year have you asked a neighbor to watch your home while you were gone?
- During the last year has a neighbor asked you to watch his or her home while he or she was gone?
- •If you were being attacked or robbed, do you think your neighbors would come to your assistance, or what would they do?

One point was given for a positive response to each of the first three questions. For the last question, a point was given if the respondent said that neighbors would come to assist, another point was given if the respondent said that neighbors would call the police, and a point was deducted if the respondent said neighbors would ignore it.

*Bystander Helpfulness.* Bystander helpfulness was defined as the number of appropriate actions the respondent actually took as a fraction of the total number of opportunities revealed in the survey. Persons who did not have the opportunity to take an appropriate action were excluded from this part of the analysis.

The appropriate actions were found through three questions. One of these asked the respondents whether they had witnessed a crime in progress, another asked whether they had seen or heard something that made them think a crime was being committed, and the third inquired whether they were aware of any burglaries or property theft that had occurred at a neighbor's home while the neighbor was gone. In each instance, if the respondent said that the opportunity had existed, he or she was asked what action was taken. Appropriate actions were scored as one point each and summed to create the index.

*Private Protection.* An index of private security action was created from questions indicating whether the household had a gun or weapon for use in crime prevention, an alarm, theft insurance, outside lights (excluding decorative lights), or a watchdog.

Antiburglary Stickers. The fourth variable was whether the household had displayed antiburglary stickers.

Multivariate analysis was undertaken for each dependent variable, controlling for length of time in the neighborhood, income, renter or homeowner status, prior victimizations, household density (number of persons per room), age of respondent, and physical upkeep of the block.

The results indicated a substantial impact of the antiburglary program for all four variables in the multivariate analysis (see Table 4.3), although the effect on private protection appeared to be less dramatic. Participation in CPB programs appears to have enhanced both public and private protection activities.

#### Effect on Distribution of Protection

Two strategies were used to estimate the effect of the program on the distribution of private protection. First, the multiple regression analysis reported in Table 4.3 shows that income and homeowner

TABLE 4.3	Effect of Attending CPB Neighborhood Meetings
	on Public and Private Protection Activities

	Protective Neighboring	Bystander Helpfulness	Private Protection	Use of Stickers
Attendance at CPB meeting	.21**	.22**	.06*	.28**
Length of time at residence	.06*	08	06	.03
Income	.13**	.06	.24**	.04
Homeowner (rather than renter)	.15**	.00	.19**	.04
Prior victimization burglary violent theft	04* .03 03	.11* .09 .06	01 01 .03	.02 03 .05*
Crowdedness	.01	04	04	01
Age	02	.10	05	.10*
Upkeep of area	.09**	06	07*	.01

NOTE: Entries in the cells are the standardized regression coefficients for each independent variable with each dependent variable when the other variables listed in the table were controlled.

\*Statistically significant at .05 level, two-tailed test.

\*\*Statistically significant at or beyond .01 level.

status were related to private protection but not to the use of the antiburglary stickers promoted by the program. Similar relationships were found for other indicators of program participation (such as attendance at block meetings), and for other indicators of socioeconomic status (such as education). Race, in fact, was inversely related to program participation in that minorities were more likely to participate. This reveals that the distribution of the protection offered by CPB was free of the type of social-class bias that characterizes privately purchased protection.

A second analysis was undertaken to determine whether this phenomenon existed only for participants who were recruited through the door-to-door canvassing and neighborhood efforts or whether it held for the self-selected participants from throughout the city. A multiple regression analysis was conducted of the relationship between socioeconomic variables and the use of antiburglary stickers for the citywide sample and then compared with a similar analysis of CPB participants. CITIZEN EFFORTS

The results showed that relatively strong relationships, significant beyond the .01 level, existed in the citywide sample between socioeconomic variables and the use of stickers, the engraving of property, and most other types of private protective behavior (Wilson & Schneider, 1976). However, when the analysis was repeated, for the CPB participant sample, the relationships between socieconomic variables and property engraving or use the sticker dropped to zero or were negative and nonsignificant. The implications of these and other findings merit some discussion.

## POLICY IMPLICATIONS

There are two important policy issues that should be addressed. One of these is whether the results in this study are strong enough to indicate that a positive effect was, in fact, found or whether the apparent effect was actually produced by some unidentified variable. The second has to do with the issue of public versus private benefits and the choices that the communities have in how they operate a burglary prevention program.

The results of this evaluation are certainly clear: The neighborhoodbased burglary reduction program in Portland, Oregon, reduced burglaries for those who participated. In the high crime areas of Portland more than 20% of the homes could expect to be burglarized at least once a year. This was reduced to about 8% for participating households in those areas—a rate approximately the same as for participating households throughout the city.

Critics can identify many shortcomings in the design of this study. There were no surefire methods for ensuring that differences between participating and nonparticipating households were not produced by some type of selection bias or by displacement of crime from participants to nonparticipants. However, a search for some other variable that could be producing a spurious relationship between program participation and the decrease in burglaries did not uncover any possibilities.

There also was no good technique for determining whether or not a citywide burglary reduction occurred (which would indicate a public, as well as private, benefit from the program), but the comparison of victimization surveys showed a decline from 151 per 1,000 to 127 per 1,000 between 1971-1972 and 1973-1974. The official statistics, after correcting for a major increase in the probability of reporting burglaries, also showed a decline of about the same magnitude. Two

tests do not, of course, prove the point, but they contribute to the evidence that the program actually reduced burglaries rather than simply distributed them differently among the population. If the decline in participating households had been produced entirely by displacement to nonparticipating households, then there should have been no change in the citywide rates.

The evaluation also suggests that studies that rely on official statistics will not provide valid results because participation clearly increased the probability of a burglary being reported to the police.

Further investigation of the private versus public impact of the Portland program suggested that attendance at the neighborhood meetings was associated rather strongly with several different types of actions designed to benefit the entire neighborhood, not simply the private protection of the individual. Similarly, the results suggest that the usual positive correlations between socioeconomic status and levels of private protection did not occur in the sample of participants who were "recruited" into participation by the program.

Alternatively, and very important, the results indicated that in the sample that contained the self-selected participants, there was a social-class bias: Those attending meetings, engraving their property, and displaying the decals tended to be in the higher socioeconomic groups.

In retrospect, this study did not settle all policy issues, nor did it establish beyond doubt that the Portland program was effective. It certainly did not show that this model would be effective in all cities under all sorts of conditions. The evaluation, however, did show that the bulk of the evidence favored a positive impact and it showed that the focused, door-to-door canvassing, with a heavy emphasis on neighborhood rather than individual protection, was important.

## NOTE

1. This chapter is a summary and compilation of the results from many reports about the Portland Crime Prevention Bureau and other Impact Cities programs during the years 1974 through 1977.

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