

PORTLAND POLICE BUREAU  
CRIME PREVENTION DIVISION

Evaluation of the Home Security Program

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## Summary of Findings

1. The program was successful in delivering services to its target population. 82% of those reached during 1979 were low-income elderly residents. In addition, 21% of the program recipients were minority, and 12% of those reached were handicapped.
  
2. The average cost of site-hardening a home during 1979 was \$134.26. This amount is less than what a program participant would pay if such services were purchased privately. The program's advantage however, is that most participants would be unable to afford the service or might be afraid to have someone other than the police enter their homes to install locks.
  
3. Data from several sources indicate the program is having a positive effect on burglary rates:
  - An analysis of 260 homes site-hardening during the last six months of 1978 showed a reduction of 70% in the burglary rate between pre and post site-hardening 12 month periods.
  
  - An independently conducted telephone survey revealed that no forcible entry burglaries were reported for the 100 randomly selected households reached during 1980.
  
  - An analysis of the forced burglaries during the post site-hardening 12 month period did not suggest that entry into the home was made due to a failure in the site-hardening materials installed.

4. If the program reduces burglary by approximately 70%, an estimated saving of \$12,390 in property loss per year could be realized through the efforts of the Home Security Program.
5. The majority of people felt more secure in their homes after locks were installed. An independently conducted telephone survey showed that 93% of the respondents felt less concerned now about having their home broken into than they did prior to the locks being installed.
6. Satisfaction with the program is quite high as survey results found that 94% of the respondents were satisfied with the quality of the work done on their homes. Letters of appreciation and telephone calls received by the Crime Prevention Division also support this finding.

## I. INTRODUCTION

The Home Security Program is a site-hardening project which provides free locks and security hardware installation to low-income homeowners in Housing and Community Development (HCD) designated neighborhoods. The program serves a special group of Portland residents and as such does much more than site-harden homes. Elderly people are the program's primary beneficiaries. Many of them have been victims of crime and some have developed an exaggerated fear. The installation of locks, therefore, can do more than protect these people from the threat of victimization. It can give them a greater sense of security and reduce their fear. It can provide them with the means to secure their homes when they might otherwise be financially unable to do so.

Accordingly, the basic objectives of the Homes Security Program are to:

1. Target the delivery of services to low-income elderly homeowners;
2. Provide the services at a reasonable cost to the taxpayer;
3. Reduce the fear of crime among program participants;
4. Improve police/community relations; and
5. Reduce the burglary rate.

This evaluation will utilize four measures to determine the extent to which the program is meeting each of its objectives. These measures are:

1. Service delivery by population characteristics;
2. Program costs;
3. Participant attitudes;
4. Reported burglary statistics.

## II. Service Delivery

The service delivery objective of this program is to target services on low-income, elderly residents of the city. Table 1 shows the distribution of services by population characteristics for 1979.

Table 1

Distribution of Services by Population Characteristics

Population	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total %
Elderly	110	110	148	145	82
Handicapped	20	16	14	24	12
Female/Head	97	114	131	124	75
Elderly/Female Head	82	88	— <sup>1</sup>	111	— <sup>1</sup>
Minority	18	49	41	25	21
Total	136	145	179	166	100*

\*Columns will not total because of multiple answers.

The table indicates that 825S of those reached during 1979 were elderly residents. Also significant is the fact that 21% of the program recipients were minority. 12% of those reached were handicapped.

III. Program Costs

Another objective is to provide the service at a reasonable cost to the taxpayer. The Crime Prevention Division computes the cost of site-hardening a home as follows:

$$\frac{\text{Total Wages \& Fringes} \text{ minus } 1/3 \text{ for Administrative work}}{\text{\# of homes site-hardened}} = \text{Labor Costs}$$

1 Data not available.

2 In addition to site-hardening homes, the locks crew staff performs an average of 75 security surveys each month as well as miscellaneous administrative work.

$$\frac{\text{Total hardware costs}}{\text{\# of homes site-hardened}} = \text{Hardware costs.}$$

Labor costs averaged \$80.43 per home during 1979 while hardware costs averaged \$53.83. The average costs of site-hardening a home, therefore, was \$134.26.

It is difficult to compare program costs to those of the private sector since private sector lock companies do not provide some of the basic services that are provided by the Home Security Program. An average site-hardening job consists of the installation of two double cylinder deadbolt locks, pinning 4 windows, and placing screening on 4 windows. Private lock companies do not install screening so no comparison of an average job can be made.

On the installation of two double cylinder deadbolt locks, however, the following comparison can be made.

Table 2

	Private Sector <sup>3</sup>	Public Sector (Home Security Program)
2 Locks	\$ 60.00	\$ 31.92
Average Labor	16.60	14.70
Service Call	21.00	-0-
Total Cost	\$ 97.60	\$ 46.62

<sup>3</sup> Average cost based on price estimates from three local area locksmith companies.

The cost comparison shows that the Home Security Program can provide site-hardening services at a lower cost than the private sector. Whether or not the program is providing the service at a reasonable cost to the taxpayer must be viewed in terms of the benefits of providing the service to a target population who would otherwise be unable to purchase the service. It is doubtful that low income, elderly residents could afford to purchase the service (or that they would take the time to obtain competitive cost estimates).

#### B. Program Costs Versus Program Benefits

Last year a residential burglary in the City of Portland cost the victim an average of \$590.00<sup>4</sup>. Although the value of property stolen from participants in this program is probably lower, the impact of the economic loss upon the low-income elderly is perhaps greater than it is to most residents of the city.

In analyzing program benefits, one comparison which can be made is to examine the costs of administering the program versus the costs "saved" from deterring a burglary. A simple cost/benefit analysis will permit this comparison. However, the following is assumed:

- 1) The costs of an average burglary in the City of Portland is \$590.00.
- 2) The probability of being burglarized within an HCD-designated neighborhood is approximately 5.4 per 100 households per year.

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<sup>4</sup>City of Portland Police Bureau Annual Report, 1979, p. 23

- 3) Site-hardening efforts reduced the burglary rate by 70% during the 12 month period following the date of site-hardening.

In 540 homes (which is the approximate number of homes site-hardened during 1978<sup>5</sup>), one can expect to find approximately 30 burglaries per year. An analysis of burglaries during 1979 shows burglary was reduced 70%. If the site-hardening program breaks the burglary trend, then it can be assumed that over a one year period approximately 21 burglaries would be prevented in 540 homes. This represents a savings of \$12,390 in property losses per year. These calculations do not take into account those costs borne by the taxpayer each time a burglary is committed (i.e. police investigative services and other criminal justice resources<sup>6</sup>), nor do they account for those burglary costs which are not quantifiable: victim distress and fear, time devoted to repairing or replacing property, etc. If those costs are added to the average cost of a burglary the number of deterred burglaries per year would represent a much greater savings.

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<sup>5</sup> For purposes of program analysis, adequate time for possible victimization following site-hardening must be permitted. Therefore, records of reported burglaries were checked for at least a 12 month period following the site-hardening of homes in the last six months of 1978.

<sup>6</sup> The President's Commission on Law Enforcement and Administration of Justice reported in 1967 that the average cost of criminal justice system resources devoted per burglary was over \$1,000. Given the cost increases since 1967, this value can be expected to be considerably higher. Task Force Report: Science and Technology, (LGPO, 1967) pp. 56-65.

#### IV. PARTICIPANT ATTITUDES

With respect to participant attitudes, the Home Security Program strives to accomplish two objectives:

1. To improve citizen attitudes toward the police;
2. To increase the resident's feelings of safety.

In order to assess whether or not the program was meeting these objectives, the Crime Prevention Division contracted with a local evaluation firm to conduct a telephone survey of 100 randomly selected households served during 1979. The results of this survey are presented in Table 3. A copy of the survey questionnaire and responses per question may be found in the Appendices.

Table 3  
 Responses of 100 Randomly Selected  
 Participants in the Home  
 Security Program

Subject	1978 %	1979 %
Concern now as opposed to the time before locks were installed about having home broken into:		
More Concerned	1	0
Less Concerned	87	93
About the Same	12	7
Concern now about having home broken into:		
Very Concerned	2	4
Somewhat Concerned	41	50
Not Worried	58	46
-low participant heard about program:		
TV/Radio	31	21
Neighbors/Friends/Relatives	38	43
Newspapers	6	2
Brochures	—*	1
Police	16	17
Other	19	9
Don't Know	—*	7
Whether or not participants could positively identify the police as the program's sponsor:		
Yes	44	31
No	56	69

\*Data not available.

A. Objective 1: Improving citizen attitudes towards the police.

Letter and telephone calls received by the Crime Prevention Division have been supportive of the Home Security Program. This finding is in agreement with the results of the 1979 Home Security Program evaluation. In addition, survey results found that 94% of the respondents were satisfied with the quality of the work done on their homes in the program and 100% of the respondents stated that the workmen who installed the locks on their homes were courteous.

While public response has been favorable regarding the Home Security Program, only 31% of the survey respondents could positively identify the police as the program's sponsor. This value represents a 14% decrease compared to the finding in the 1979 Home Security Program evaluation report.

In order to increase the awareness of those participants who could not identify the police as sponsors of the program, it will be necessary to enforce the Crime Prevention Division's policy of distributing crime prevention material at each site-hardening job. Having Locks Crew staff wear uniforms associating them with the Portland Police Bureau is an additional consideration. It is expected that positive identification of this program with the Police Bureau will improve citizen attitudes toward the police.

B. Objective 2: Increase Participant's Feelings of Safety.

93% of the respondents said that they felt "less concerned" now about having their home broken into than they did before the locks were installed. This value is a 6% increase with respect to the 1979 Home Security Program

evaluation findings where 87% of the respondents stated that they felt "less concerned". Conversely, in another question, only 4% of the survey respondents indicated that they were "very concerned" about having their home broken into now. This finding is in close agreement with the 1979 evaluation results.

In a previous study the responses of elderly persons in several areas containing HCD neighborhoods ranged between 10% to 40% "very concerned". The present findings suggest that participants of the Home Security Program have adjusted their fear to a more realistic level, and that this fear level has remained low for the past two years. •

## ANALYSIS OF REPORTED BURGLARIES

Reduction in the rate of victimization is another goal of the Home Security Program. Retrospective studies cannot however conclusively demonstrate that a program is responsible for a reduction in burglary. The best approach is to collect burglary data on different samples of homes to determine if, over the long run, a pattern of decline in victimization holds. For this evaluation, the Crime Prevention Division looked at:

- (1) Burglary rate in homes site-hardened up to:
  - (a) 3 years (25-36 months) prior to site-hardening date
  - (b) 2 years (13-24 months) prior to site-hardening date
  - (c) 1 year (1-12 months) prior to site-hardening date
  - (d) 1 year (1-12 months) after site-hardening date

(2) Burglary rates established by a telephone survey of 100 randomly selected homes from those secured in all of 1979.

1. HCD Homes Secured up to 1, 2, and 3 Years Prior, and up to 1 year after Site-Hardening date

Columbia Region Information Sharing System (CRISS) records of reported burglaries were checked for 260 homes site-hardened during July-December

1978. Table 4 contains the number of reported burglaries up to 1, 2, and 3 years prior to the site-hardening date and up to one year following site-hardening date for these homes.

Table 4  
Comparison of Reported Burglary Rates  
Before and After Site-Hardening

Time Period: Up to	Number of homes with one or more forced burglaries	Number of homes not burglarized
<hr/>		
3 years (25-36 months) prior to site-hardening date	<b>7</b>	253
2 years (13-24 months) prior to site-hardening date	<b>8</b>	252
1 year (1-12 months) prior to site-hardening date	10	250
1 year (1-12 months) following site-hardening date	<b>3</b>	257

These data show a decrease from 10 to 3 in the number of reported burglaries up to 1 year prior to the site-hardening date and up to 1 year after the site-hardening date. That is, a decrease of 7036 in reported burglaries. This observed decrease in the burglary rate is probably not due to chance, and much greater than the gradual decline observed in a comparison of 1978 and 1979 city-wide residential burglary rates. Of interest, the 1979 Home Security Program evaluation found a 66% decrease in reported burglaries between pre- and post- site-hardening periods.

Many households request locks shortly after being victimized, thus the reported rate of burglary for this self-selected group could be artificially high preceding the locks installation<sup>9</sup>. For example, the 1979 Home Security Program evaluation found that 56.4% of the households reporting crimes did so 4 months or less before the site-hardening. As seen in Table 4 however, the number of reported burglaries up to one year after the site-hardening date is also less than the number of reported burglaries up to 2 and 3 years prior to the site-hardening date. This finding is significant since previous studies indicate that, in most cases, the reporting rate for burglaries increases after participation in crime prevention activities. In summary, the decrease in reported burglaries found in this study based on statistical and reporting factors analyses indicates that the site-hardening program is having a positive effect on burglary rates.

<sup>9</sup> z - score = 2.18, p is less than .05.

<sup>9</sup> Evaluation of the Home Security Program, Portland Police Bureau, Crime Prevention Unit, 1979.

Evaluation of the City of Portland's Crime Prevention Bureau Program, Office of Justice Programs, 1977, p. 41.

A closer look at the 3 reported forced burglaries following site-hardening for this particular group of households shows:

- One entry was made by breaking a rear window after removing the steel bars from the window.
  
- A second entry was via a bathroom window; the window did not appear to have been locked.
  
- A third method of entry was by breaking a rear window after it had failed to be pried open.

The above analysis of the forced burglaries does not suggest that entry was made due to a failure in the site-hardening materials installed.

## 2. Random Samples of all 1979 HCD Secured Homes

No forcible entry burglaries were reported for the 100 homes surveyed. Two respondents reported attempted burglaries. These data agree with those reported in the 1979 Home Security Program Evaluation.

A P P E N D I C E S

Appendix A - Home Security Program Questionnaire Results

Appendix B - Home Security Program Questionnaire

APPENDIX A  
CASCADE RESEARCH CENTER  
VANCOUVER, WA<sup>a</sup>

Home Security Program Questionnaire Results

N = 100

1. IDENTIFY THE RESPONDENT

85% (85) same as job form

15% (15) other family member

0056 ( 0) new resident

2. WERE YOU SATISFIED WITH THE QUALITY OF THE WORK THAT WAS DONE ON YOUR HOME?

94% (94) yes

6% ( 6) no

3. WERE THE WORKMEN WHO INSTALLED LOCKS ON YOUR HOME COURTEOUS?

100% (100) yes

00% ( 0) no

<sup>a</sup>Telephone survey conducted April 7-11, 1980 by Cascade Research Center using names and survey instrument developed by Crime Prevention Division (CPD) of the Portland Police Bureau. Respondents had some security device installed in their home by the CPD during 1979.

4. HOW CONCERNED ARE YOU NOW ABOUT HAVING YOUR HOME BROKEN INTO?

4% ( 4) very concerned

50% (50) somewhat concerned

46% (46) not concerned

5. COMPARED TO THE TIME BEFORE THE LOCKS WERE PUT IN, DO YOU FEEL MORE CONCERNED, LESS CONCERNED OR ABOUT THE SAME ABOUT HAVING YOUR HOME BROKEN INTO?

00% ( 0) more concerned

93% (93) less concerned

7% ( 7) about the same

6. WHEN YOU LEAVE YOUR HOUSE FOR VACATION, DO YOU HAVE THE NEIGHBORS WATCH YOUR HOME FOR YOU?

93% (93) yes

7% ( 7) no

7. DO YOU LEAVE LIGHTS ON IN YOUR HOME WHEN YOU ARE NOT AT HOME?

88% (88) yes

12% (12) no

8. HAS ANYONE BROKEN INTO OR ATTEMPTED TO BREAK INTO YOUR HOME SINCE THE LOCKS WERE INSTALLED?

2% ( 2) yes

98% (98) no

9. One individual reported someone attempted to forcibly break in by chopping at the door. (Crime Hardened Date: 05-21-79)

One individual reported 3 attempts to forcibly break in, twice through the back door and once through the window. The victim is blind. (Crime Hardened Date: 06-03-79).

10. HOW DID YOU HEAR ABOUT THE LOCKS PROGRAM?

17% (17) Neighbors

21% (21) TV/Radio

2% { 2) Newspaper

1% ( 1) Brochures

17% (17) Police

26% (26) Friends/Relatives

9% ( 9) Other:

5% (5) Senior Citizen Groups

2% (2) Community Centers

1% (1) Loaves and Fishes

1% (1) Sent them?

7% ( 7) Don't Remember/Don't Know

11. DO YOU KNOW WHAT GROUP PROVIDED THE LOCKS AND INSTALLED THEM FOR YOU?

11% (11) Yes, Portland Police

19% (19) Yes, Crime Prevention

2% ( 2) Yes, Other:

1% (1) Firemen

1% (1) St. John Police

68% (68) No

APPENDIX B

HOME SECURITY PROGRAM QUESTIONNAIRE

Instructions to Interviewers:

Identify yourself and ask to speak to the person listed on the job completion form. If that person is not available, you may speak to another adult member of the family (preferably the spouse), who is aware that the locks have been installed in the home. If there is no answer or an appropriate person is not home, make one callback at a later time.

EXAMPLE: Hello, my name is \_\_\_\_\_ of Cascade Research Center.  
May I speak to \_\_\_\_\_. We have been hired to do an evaluation of the program which installed locks or other security devices in your home last \_\_\_\_\_.

1. Identify the respondent:

- \_\_\_\_\_ same as job form
- \_\_\_\_\_ other family member
- \_\_\_\_\_ new resident (end interview)

2. Were you satisfied with the quality of the work that was done on your home?

\_\_\_\_\_ yes \_\_\_\_\_ no

3. Were the workmen who installed locks on your home courteous?

\_\_\_\_\_ yes \_\_\_\_\_ no

4. How concerned are you now about having your home broken into?

\_\_\_\_\_ very concerned

\_\_\_\_\_ somewhat concerned

\_\_\_\_\_ not concerned

5. Compared to the time before the locks were put in, do you feel more concerned, less concerned, or about the same about having your home broken into?

6. When you leave your house for vacation, do you have your neighbors watch your home for you?

\_\_\_\_\_ yes \_\_\_\_\_ no

7. Do you leave lights on in your home when you are not at home?

\_\_\_\_\_ yes \_\_\_\_\_ no

8. Has anyone broken into or attempted to break into your home since the locks were installed?

\_\_\_\_\_ yes \_\_\_\_\_ no

9. If yes, how many times: \_\_\_\_\_; for each burglary:

Forced/Unforced

Method of Entry

a.

b.

c.

10. How did you hear about the locks program?

\_\_\_\_\_ neighbors

\_\_\_\_\_ tv/radio

\_\_\_\_\_ newspaper

\_\_\_\_\_ brochure

\_\_\_\_\_ police

\_\_\_\_\_ friends/relatives

\_\_\_\_\_ other (please describe)

11. Do you know what group provided the locks and installed them for you?

\_\_\_\_\_ yes, Portland Police

\_\_\_\_\_ yes, Crime Prevention Program

\_\_\_\_\_ yes, Other \_\_\_\_\_ no