

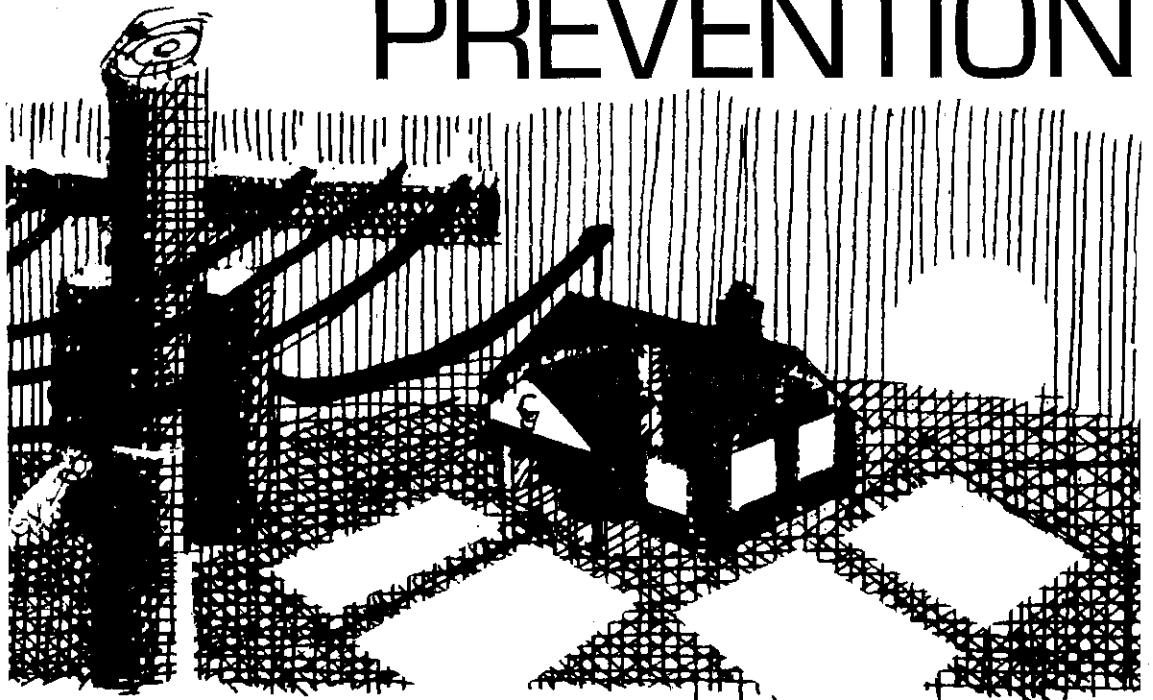
**COMMUNITY  
SERVICES**

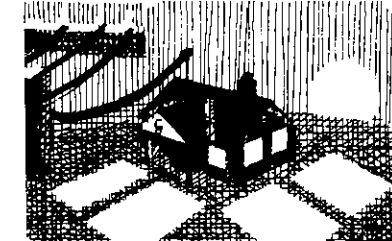
December 1985



WRDC 28

# CRIME and CRIME PREVENTION





## Statistical Analysis Centers for Crime Data

### Alaska

Department of Public Safety  
Pouch N  
Juneau, AK 99811  
(907) 465-4345

### Arizona

Statistical Analysis Center  
Department of Public Safety  
Post Office Box 6638  
Phoenix, AZ 85005  
(602) 262-8082

### California

Bureau of Criminal Statistics  
Post Office Box 13247  
Sacramento, CA 95813  
(916) 739-5166

### Colorado

Division of Criminal Justice  
Department of Public Safety  
1325 S. Colorado Blvd., B-700  
Denver, CO 80222  
(303) 866-3331

### Hawaii

Hawaii Criminal Justice  
Data Center  
465 South King Street  
Honolulu, HI 96813  
(808) 548-2090

### Idaho

Technical Services Unit  
Department of Law Enforcement  
6081 Clinton Street  
Boise, ID 83704  
(208) 334-3161

### Montana

Planning and Research Bureau  
Montana Board of Crime Control  
303 North Roberts Street  
Helena, MT 59620  
(406) 444-3604

### New Mexico

Statistical Analysis Center  
Law Enforcement Academy  
p.o. Box 2323  
Sante Fe, NM 87503  
(505) 827-3033

### Oregon

Crime Analysis Center  
Department of Justice  
100 Justice Building  
Salem, OR 97310  
(503) 378-8056

### Utah

Commission on Criminal and  
Juvenile Justice - Rm 137  
Utah State Capital Building  
Salt Lake City, UT 84114  
(801) 533-7932

### Washington

Forecasting and Estimation  
Division  
Office of Financial Management  
Insurance Building, AQ44  
Olympia, WA 98504  
(206) 754-2811

### Wyoming

Center for Criminal Justice  
Research  
DCI, Boyd Building, 4th Floor  
Cheyenne, WY 82002  
(307) 777-7512XD

The provision of safety from crime and violence is a recognized function of government, with much of this responsibility centered at the local level. Municipal police departments, county sheriffs' offices, district attorneys and local judges have primary responsibility for maintaining law and order, with assistance from state and federal agencies as needed.

To carry out their responsibilities, local law enforcement agencies must compete within the political process for limited tax resources. It is to their advantage, then, to understand the needs and desires of local taxpayers. At the same time it is important that the public become better informed about crime and crime prevention. This two-part report addresses the above issues. Part One includes the following:

- types of crime
- crime statistics
- the extent of crime
- trends in crime rates
- victimization rates
- rural and urban differences
- fear of victimization
- police protection and crime

Unless otherwise noted, the factual material in Part One is extracted from two recent comprehensive reports by the U.S. Department of Justice. These are *Report to the Nation on Crime and Justice: The Data* (October, 1983), and *Criminal Victimization in the United States, 1981* (November, 1983).<sup>1</sup> Unless otherwise stated, the facts refer to the U.S. as a whole. The topic of crime, on the other hand, is too complex to be conveyed with just facts and statistics; many questions have, as yet, only partial answers. Therefore, reference also will be made to recent research findings and conjectures in the literature on crime, criminology, and victimology. Hopefully, a balanced picture of what is and is not known will emerge.

<sup>1</sup>Single copies are available free from the National Criminal Justice Reference Service, Box 6000, Rockville, MD 20850. Cite the report numbers NCJ-87068 and NCJ-90208, respectively, when ordering. Postage and handling are charged for multiple copies.

Part Two of the report will focus on results of a household survey conducted in Oregon as part of a regional program supported by the Western Rural Development Center. In this survey, a random sample of people were asked about the extent to which they feel satisfied with protection from crime and violence. An attempt is made to identify various factors, including crime rates, which cause some people to be more satisfied with police protection than others. People were also asked about the extent to which they had made certain adaptations because of dissatisfaction with police protection. These adaptations include market purchases to augment their safety, political action in the form of contributions of time and money and interaction with neighbors.

Both reports will present capsulized views relating to crime, perceptions of crime and reactions to crime. The first is at an aggregate level, the second at a particular local level. To save space, other key aspects of the criminal justice system--prosecution, adjudication and corrections--will not be discussed even though these also influence the extent of crime and peoples' feelings of safety.

Prepared by  
Joe B. Stevens  
Department of Agricultural  
and Resource Economics  
Oregon State University

## Part One: The U.S. and the West—Facts and Issues

### Types of Crime

The more serious crimes are divided into violent crime and property crime.

- Violent crime includes events such as murder, rape and assault. Robbery is also considered a violent crime because it involves the use or threat of force against a person.
- Property crimes involve the intent of gaining property, usually without the use or threat of force against a person. Larceny (theft), burglary (unlawful entry with intent to commit theft) and motor vehicle theft are the major property crimes.

Almost everyone agrees that violent crime is more serious than property crime. The National Survey of Crime Severity (1977) found that many different types of people generally agree on the relative severity of different crimes. Murder, rape, robbery, and burglary are usually rated in this decreasing order of severity (Evans and Scott, 1984).

Assault is the most common form of violent crime. Simple assault without a deadly or dangerous weapon is more common than aggravated assault with such a weapon.

Property crimes outnumber violent crimes by a 9 to 1 ratio. Larceny (theft) is the most common property crime. In Oregon, for example, the most common forms of larceny without personal contact are theft from motor vehicles (25 percent of reported larcenies), theft from buildings (18 percent), and shoplifting (15 percent). In the U.S., larceny with personal contact (purse snatchings and pocket pickings) accounts for less than 4 percent of all thefts. Almost all of these occur away from home (Skogan, 1981).

### Crime Statistics

Uniform Crime Reports (UCR) are based on certain violent crimes and property crimes which are reported to the police; these are known as Index crimes. National Crime Survey (NCS) data, on the other hand, come from

periodic national surveys which ask about crimes not reported to the police as well as those which are reported.

- UCR data have been collected for nearly 50 years and may be somewhat useful in showing trends. They form the basis for the FBI Crime Reports which are frequently presented by the news media.
- NCS surveys were initiated in 1973 to learn more about crimes not reported to the police.

The various National Crime Surveys have found that only about one-third of all crimes are reported to the police.

Violent crimes are more likely than thefts to be reported to the police, according to 1981 NCS data. Forty-seven percent of violent crimes were reported as compared to 27 percent of thefts.

Many violent crimes such as rape or assault are unreported because they are "private or personal matters." Many thefts are unreported because they were "not important enough to report" or "nothing could be done."

The U.S. is not unique in these respects; some other countries have higher reporting rates and some have lower ones. Nonreporting is not all bad, since it reduces the need to investigate less serious crimes which have little chance of being solved (Skogan, 1984).

Among major property crimes, 67 percent of motor vehicle thefts, 51 percent of household burglaries, and only 26 percent of household larcenies were reported to the police in 1981.

Urban, suburban, and rural reporting rates do not differ significantly from each other (Laub, 1981).

Statistical Analysis Centers for crime data have been established in most of the states. Users desiring data specific to certain Western states may wish to contact the offices listed elsewhere in this report.

### The Extent of Crime

The National Crime Surveys indicate that nearly 30 percent of all households were victimized by at least one crime of violence or theft during 1982 (*Households Touched by Crime, 1982*). About two-thirds of these crimes were thefts, some of which might appear to be unimportant because they were not reported to the police. Many were not reported, however, because the victim felt it would be futile to do so. In any event they represent a transfer of wealth outside our legal framework.

In 1982, about 10 percent of all households were burglarized or one or more members were raped, robbed or assaulted by a stranger. Public opinion polls show that burglaries and violent crime by strangers are high on the list of public concerns and fears; these have been labeled "crimes of high concern."

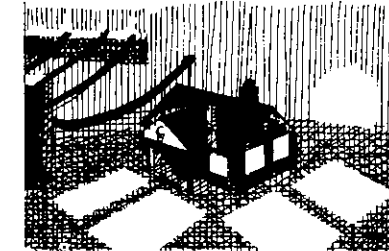
Businesses are actually the prime targets of robbers and burglars. The burglary rate for businesses is 5 times higher than for households; the robbery rate is 10 times higher than for private persons.

### Trends in Crime Rates

Whether crime has increased in the past decade depends on which crime statistics are used.

- The Uniform Crime Reports (crimes reported to police) show a 39 percent increase in Index Crimes between 1971 and 1981. Violent crime increased by 46 percent during this period.
- The National Crime Surveys, however, fail to confirm this increase in crime. The percentage of households touched by crime--reported or unreported violence or theft--has actually trended downward from 32 percent in 1975 to 26 percent in 1984.

Increased reporting of crime by citizens accounts for part, but not all, of the difference between UCR and NCS data. The two data series have



substantial differences in population and coverage. The NCS base is the number of households, which has expanded rapidly, while the UCR base is population. NCS data do not include crimes against businesses.

## Victimization Rates

**Considering both reported and unreported crime, the NCS data indicate that different types of people have very different chances of becoming victims of crime.**

- Young, single, black males who live on low incomes or are unemployed in large cities are the most likely to become victims of violent crimes.
- Victimization rates for violent crime are lower for females than for males. They decline for both sexes as age and family incomes increase.
- Victimization rates for property crime generally follow the same pattern. Burglary rates fall as family incomes increase, but motor vehicle theft rates rise.

**Victimization rates reflect the life styles of different types of people.** Violent crime rates are the lowest for high-income, widowed white females over 65, not because they are least vulnerable to attack, but because they tend to avoid risky situations (see Fear of Victimization below).

## Rural and Urban Differences

**Urban areas have the highest victimization rates, including crimes not reported to the police.** The 1981 National Crime Survey (1981) found that crimes of violence were highest in the central cities of Standard Metropolitan Statistical Areas (SMSA's). These are urbanized areas of one or more contiguous counties that generally include at least one central city of 50,000 or more inhabitants. Crimes of violence in SMSA central cities averaged 52 per 1,000 persons age 12 and over. Suburban areas within SMSA's had 33 crimes of violence per 1,000 inhabitants in 1981.

Rural counties, or those outside SMSA's, had the lowest victimization rate for violent crime—24 per 1,000 inhabitants.

Victimization rates against property follow the same pattern. Burglary rates, for example, were highest in the central cities (120 per 1,000 households), followed by suburban areas (80 per 1,000) and rural areas (68 per 1,000).

**Reported violent crime has increased the least in those areas which are the most rural.** Reported rates of violent crime increased by 37 percent in the SMSA's between 1973 and 1981. This rate increased by 49 percent in cities located outside the SMSA's, but by only 17 percent in the rural areas of counties outside the SMSA's.

**Reported property crime, however, has increased the most in areas outside the SMSA's.** Reported rates of property crime increased by 55 percent in non-SMSA cities and by 51 percent in non-SMSA rural areas between 1973 and 1981, but by only 37 percent in the SMSA's.

**According to the U.S. Department of Justice, reported UCR Index crimes are highest in the Western states.** This may seem puzzling if one thinks of the West as "rural," but the West is not rural in terms of population. In fact, the thirteen Western states have 79 percent of their inhabitants in SMSA's compared to 72 percent for the U.S. as a whole. These SMSA's are, admittedly, often geographically large and include some very rural outlying portions.

The Western states have especially high rates of reported property crime; eight of the ten U.S. states with the highest burglary rates are in the West (Kowalski, et al., 1980).

Considering only non-SMSA areas, Western states have higher reported crime rates than do most other regions of the U.S.

Reported crime rates are computed for resident populations; counties with substantial tourism and resort areas would have inflated crime rates.

**The patterns of victimization among people in urban and rural areas are quite similar.** In either area, for example, males have higher victimization rates than females, and the young are more likely to be victimized than older persons (*Crimes Against Persons, 1979*).

These differences are often greater within rural areas. The difference between male and female rates, for example, is greater in rural areas than in urban areas.

## Fear of Victimization

**Anxiety about physical harm from criminal acts comes from three sources—direct experience, interpersonal communication, and the media. There is ample opportunity for unfounded anxiety.**

In any year, about 33 of every 1,000 adults are victims of a violent crime. This is somewhat more common than being injured in a motor vehicle accident (23 per 1,000), but less common than being injured at work (68 per 1,000) or at home (105 per 1,000).

Both interpersonal communications and the media stress the more infrequent and violent forms of crime. Not coincidentally, these are often more "newsworthy." Among the 19 murders in Houston during September 1973, for example, 15 were reported in the major morning newspaper (Antunes and Hurley, 1977). Only 2 of the 2,518 burglaries—and none of the larcenies—were reported.

In spite of this journalistic bias, most people think that the media underemphasizes the crime problem, rather than overemphasizing it (*Public Opinion About Crime, p. 16*).

**When people worry about crime, they worry about being injured by strangers.** Except for murder, most violent crimes are committed by strangers. Only about 13 percent of these crimes, however, occur in or around the victim's home. Staying home and restricting one's activities will usually reduce exposure to crime, but this too, may be a form of victimization.

**Most people think that crime is increasing, but they view it as a national rather than local problem.**

Among residents of eight large cities, 82 percent thought that crime had increased nationally. On the other hand, only 40 percent thought that crime in their neighborhood had increased (*Public Opinion About Crime, p. 15*). There is a strong tendency to view one's own neighborhood as less dangerous than other neighborhoods, even in high risk areas.

**Some people who have the greatest fear of crime, particularly older people and females, often have the lowest victimization rates. The experts don't agree on whether this reflects an "irrational" fear of crime or whether it is due to avoidance of risky situations.**

• The main argument behind the "irrational fear" theme is that biased media coverage and distortions in interpersonal communications cause people who are physically vulnerable to be excessively fearful.

• Recent research by Stafford and Galle (1984), however, supports the avoidance theme. They adjusted the data on victimization rates for a sample of Chicago residents by considering only the time, other than while at work, that people spent away from home as "exposure time." After these adjustments, those with the greatest fear of crime were those who had the highest victimization rates. The authors argue that this contradicts the "irrational fear" theme.

• A third view is that fear of crime is not really related to statistics, such as victimization rates, but to perceived "incivility" in neighborhoods, as reflected by abandoned buildings, vandalism, drug abuse and loitering teenagers (Lewis and Maxfield, 1980).

**People modify their activities based on their own assessments of crime, whether these assessments are accurate or not.** People are more likely to say that the activities of others have been limited, rather than their own (*Public*

*Opinion About Crime*). This is consistent with their feeling that increased crime is a national rather than neighborhood issue.

Personal precautions such as staying home at night seem to be related to individual vulnerability (e.g., age and sex). Household protective measures, for example property marking and door locks, are more nearly associated with higher incomes and neighborhood social ties (Skogan and Maxfield, 1981).

Most of those who become involved in neighborhood crime prevention programs appear to do so as an extension of their general tendency toward community-based voluntary action, not just because of their fear of crime (Lavrakas and Herz, 1982).

## Police Protection and Crime

**Police protection is largely a municipal function.** Cities and towns account for 56 percent of total spending for police protection as contrasted to spending for courts, prosecution, and correction. The remainder is about equally divided among counties, states and the Federal government.

Most areas have between one and three police officers per 1,000 residents.

Per capita police strength has increased by 56 percent over the last two decades, while the reported per capita crime rate has risen 436 percent.

**The police exercise considerable discretion in deciding which laws to enforce, which crimes to investigate and whether to arrest offenders.**

Police resources are limited, laws are sometimes vague, evidence is often lacking and citizens agree that some crimes are more serious than others.

Most investigations are initiated by citizens' reports, but as noted above, most crime is not reported.

**For every five offenses reported to the police, there is approximately one arrest.** The rate of clearance for crimes of violence, is about 43 percent

compared to 17 percent for property crimes.

Response time is crucial. Arrests are made in 34 percent of confrontational crimes which are reported while in progress. This drops to 5 percent if ten minutes or more elapse before reporting.

**There is no simple and clear-cut relationship between police strength and the crime rate.** Both have increased over time, but the matter of causation is hotly debated by the experts.

One recent study has shown that greater police strength results in higher apprehension rates (Zedlewski, 1983). While this in itself is not surprising, the study also found that higher apprehension rates lead to lower crime rates. From a social point of view, this production of deterrence, rather than just the production of arrests, is encouraging.

**The local police produce several outputs, including community service, maintenance of order, law enforcement and crime prevention. People tend to evaluate the police on how well they do each of these things.**

Small may be beautiful. Ostrom and colleagues (1973), for example, found that smaller departments in outlying Indianapolis communities had higher citizen evaluations, lower per capita costs, and a higher percentage of their expenditures for patrol activities than did larger departments within Indianapolis.

People realize that the police have a limited ability to prevent crime. Accordingly, they can and do take some responsibility for their own personal and property safety. The extent to which they do this is addressed in Part Two.

## Part Two: Satisfaction With Police Protection in Oregon A Case Study

In Part One, a number of facts and issues about crime in the U.S. and the West were examined. The purpose of Part Two, on the other hand, is to present facts, opinions, and actions which relate to a smaller group of people in a more specific setting. In this case, a sample of people in Oregon were asked about crime in their community, how it affects them, and what they have done to reduce the extent to which crime is a problem in their lives.

### I. Satisfaction With Personal and Property Safety

#### The Sample

One key objective of the study was to explain why people vary in their satisfaction with police protection, and implicitly, what might be done to increase their feelings of safety. It should be kept in mind, of course, that the police do more than protect people from crime and violence; they also direct traffic, rescue stranded pets, investigate homicides and perform a variety of other tasks. Moreover, their ability to actually prevent crime is limited; people must and do take some responsibility for their own safety.

Personal interviews were conducted with 403 heads of households in four Oregon counties in early 1983. Stratified random sampling techniques were used to identify these households. Two of the counties, Lane and Clackamas, are located in the Willamette Valley. The other two, Deschutes and Jackson, are recreation/retirement areas in central and southern Oregon, respectively. Among the households, 35 percent were residents of three cities. These range in size from about 40,000 for Springfield and Medford to 106,000 for Oregon's second largest city, Eugene. Twenty percent of the households were in the 24 smaller towns within these counties. These towns range in size from 700 to 23,000, with a median population of 3,500. About 45 percent live in rural areas, or outside city limits. The sample thus

includes a broad variety of situations. For example, the respondents differ from each other in some characteristics which are known to be related to victimization and fear of victimization such as age, sex and income. Also, they live in rural areas, towns, and cities where crime rates may differ. Based on the facts and issues in Part One, it seems quite likely that these different people would have different feelings about the extent to which they feel protected from crime and violence by the local police.

#### Crime Rates

Data on reported crime rates were collected for each of the cities, towns, and rural areas for the 1980-1982 period. Two types of crimes were considered. The first was violent crime. This includes murder, rape, aggravated assault (use of a weapon to inflict bodily harm), robbery (use of force or threat of force), and manslaughter. As in the national data discussed in Part One, the violent crime rate per 100,000 population was much higher in the three Oregon cities than in the smaller towns or rural areas (Table 1). Moreover, this rate had increased between the periods from 1974 to 1976 and from 1980 to 1982 in the cities and towns, but had actually declined in rural areas.

The second measure was the property crime rate. This included burglary (unlawful entry to commit a crime), larceny (unlawful taking), and auto theft. Again, as in the national data, property crime was more common in the cities than in the smaller towns and rural areas. As with violent crime, property crime had also increased in the cities and towns but had decreased in the rural areas. This latter trend, it might be noted, is contrary to the national trend where property crime has increased the most rapidly in rural areas.

#### Satisfaction With Police Protection

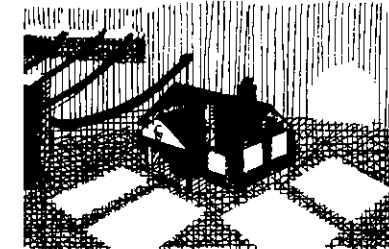
Each respondent was asked to indicate degree of satisfaction with police protection in his/her community. The scale was an 11-point satisfaction scale, ranging from 0 as lowest possible, to 10 as highest. This scale was selected because of its simplicity and documented research value. A numerical scale is arbitrary, of course, in that one person might consider a 6 to be fairly satisfactory while another might not think so. Scales of this type are often used in research on social indicators, however, and it has been demonstrated that they can be useful in spite of their arbitrary nature.

**Table 1. Reported Crime Rates by Location of Respondent<sup>1</sup>**

	Cities	Towns	Rural
<b>Average: 1980-82</b>			
Violent crimes	376	285	183
Property crimes	9,207	6,083	3,986
<b>Change: 1974-76 to 1980-82</b>			
Violent crimes	+ 5	+ 30	- 97
Property crimes	+ 499	+ 947	- 353
Number of households	142	82	179

<sup>1</sup>Reported crimes per 100,000 population, averaged over those respondents who were in the various location categories.

Data source: Oregon Law Enforcement Agencies, *Report of Criminal Offenses and Arrests, 1974-1982*.



Four ratings of satisfaction were obtained from each respondent. The first two were for satisfaction with police protection. One of these was for satisfaction with safety from violent crime, the other for satisfaction with safety from property crime. Two other measures were obtained for overall satisfaction with safety, one for violent crimes, the other for property crime. The average ratings are shown in Table 2 and will be discussed later.

#### Are Crime Rates Related to Satisfaction With Police Protection?

The purpose in assembling data on reported crime rates and on peoples' satisfaction with police protection was to see whether the two are related to each other. To some, the answer may seem obvious; surely people feel safer when they live in communities with low crime rates. The answer is more complicated for a variety of reasons. One is that satisfaction is an attitude held by a person toward a particular object or phenomenon, in this case, toward public safety in the community. Attitudes are known to reflect two underlying factors: (1) how an individual perceives something, the cognitive or perceptual factor, and (2) how he/she evaluates it, the affective or emotional factor. People may agree that city streets are in poor physical condition, for example, yet disagree on whether they should be repaired.

Considering first the cognitive factor, visual perception of criminal activities and police activities is often limited to fairly inconsequential events such as seeing a patrol car go by on the street. One simply does not see crime protection in the same way as other public services such as neighborhood parks and city streets which can be observed. Perception is not limited, however, to what one sees; people also read, hear, and talk with others. Crime statistics are frequently in the news, but it is not clear what frame of reference people have for evaluating this information. In particular, crime statistics may be available for the U.S., for a state, and perhaps for the largest city in that state, but they are often not available for smaller communities.

The other factor which underlies satisfaction as an attitude, the affective factor, also varies among people. Different people have different needs and preferences. One would suspect that those who feel especially vulnerable in a physical sense might have stronger preferences for police protection than would younger and stronger persons. Some who are responsible for others, particularly those with young children, might also feel strongly about the need for adequate police protection. It was not clear how these cognitive and affective factors would affect the

measures of satisfaction with police protection which were obtained from the Oregon respondents. For this reason, both crime rates and various social and demographic characteristics were considered in the statistical analysis of satisfaction. Also, the relation of crime rate to satisfaction was allowed to depend on the effect of personal characteristics, and vice-versa.<sup>1</sup> This allowed satisfaction with police protection to depend on local crime rates, but in a manner that might vary with the characteristics of the respondent. For example, it may be that the satisfaction of older people is more sensitive to the crime rate than that of younger people, but that the satisfaction of both groups depends on the crime rate. On the other hand, it could be that satisfaction with police protection has nothing to do with local crime rates, but depends solely on the characteristics of the respondents. This would raise the nonsensical policy implication that law enforcement officials should concentrate on helping people to become younger, for example, rather than working to reduce the crime rate.

#### Results of The Analysis

The results of the statistical analysis of satisfaction are shown in Table 3. The key finding is that some types of people were more dissatisfied with police protection than others, regardless of the crime rate. In particular, those who live alone, those who live in rural areas, and those who had been victimized during the previous year were the most dissatisfied. Since these results were independent of the crime rate, this indicates that the affective component of attitude may play a large role in determining satisfaction with police protection.

<sup>1</sup>This formulation had been useful in an earlier study of recent in-migrants to Oregon. Older people, females, those with young children, and those with more wealth would have derived the greatest satisfaction from reductions in crime rates, a finding which was made possible by an interaction model. See: Stevens, Joe B., Objective Indicators, Personal Characteristics, and Satisfaction with Safety from Crime and Violence, *Social Indicators Research* 14:53-67, 1984.

Although the crime rate itself was also significant in affecting satisfaction, none of the interaction terms had statistically significant effects. One can conclude, then, that satisfaction with police protection depends not just on crime rates but also on personal characteristics of the people, particularly their residential location. In fact, if one looks at the group averages, those who live in the smaller towns enjoy lower crime rates and greater satisfaction with police protection than do those in the larger cities (Tables 1 and 2). When rural people are considered, however, crime rates are substantially less than in either the towns or the cities. Nevertheless, rural people are just as dissatisfied with police protection on the average as those in the cities. Interestingly, those in the cities face crime rates which are twice as high as those in rural areas.

The reasons for these differences in satisfaction are not entirely clear, but lower population density, less frequent patrols, and longer response times in rural areas may all be important factors. In particular, it should be remembered that the respondents were asked only to state their satisfaction with police protection, not their overall satisfaction with their local law enforcement agencies. The fact that rural people were relatively dissatisfied with police protection may be more nearly a statement of spatial realities than feelings of general dissatisfaction with the police.

## II. Adaptations to Dissatisfaction With Personal and Property Safety

### Consistency Between Attitudes and Behaviors

One would like to think that people are somewhat consistent in their attitudes and behaviors, that they act in a manner which is consistent with the attitudes they express. The fact that this doesn't always happen, however, has long intrigued social scientists and caused frustration among elected officials. In this research, we asked whether those people who were most dissatisfied with police protection were also the most active in taking personal action to increase their safety. Unfortunately, it is not possible to simply add up the different types of actions that people can take. Some of these involve purchasing some item to install on their property such as a door lock, while others involve avoidance behaviors like staying away from certain areas at night. Some involve social interaction such as asking neighbors to watch their house while

they are gone, and some involve political action such as calling the police to request more frequent patrols past their house.

To resolve this, we asked whether those who were most dissatisfied with police protection were also the ones who made the most use of *each* of the various means for enhancing their safety. As noted above, rural people were less satisfied with police protection than those who live in towns or cities. If attitudes and behaviors are consistent, one would expect to find that rural people also bought more locks, contributed more money to local law and order candidates, and/or asked neighbors to watch their property more frequently.

### Types of Adaptations

Among those adaptations that could be made by households, five were selected for study. These were market

Table 2. Average Levels of Satisfaction with Safety from Crime<sup>1</sup>

	Cities	Towns	Rural
<b>Satisfaction with safety: violent crime</b>			
Through police protection	6.27	6.65	6.20
Overall	6.47	7.27	7.14
(Difference)	(+0.20)	(+0.62)	(+0.94)
<b>Satisfaction with safety: property crime</b>			
Through police protection	6.12	6.94	6.14
Overall	6.25	7.21	6.92
(Difference)	(+0.13)	(+0.27)	(+0.78)
Number of households	138	79	163

<sup>1</sup>Satisfaction measured on 0 (lowest) to 10 (highest) scale.

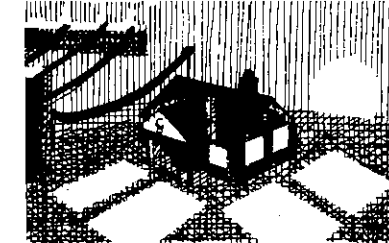
Table 3. Factors Affecting Satisfaction with Police Protection<sup>1</sup>

	Safety from <sup>2</sup> violent crime	Safety from <sup>2</sup> property crime
Satisfaction with:		
Crime rate	-.0040 (.0009)	-.00018 (.00004)
Personal characteristics:		
living alone		-.7831 (.3624)
rural resident	-2.5043 (.5007)	-1.0566 (.4251)
previous victim	-1.1054 (.5095)	-1.6343 (.4910)
Percent of variation in satisfaction explained by the independent variables	11.2%	9.6%
Number of households	368	369

<sup>1</sup>Partial regression coefficients are shown, with standard errors in parentheses. The coefficients should be twice as large as the standard error (ignoring signs) for the relationship to be highly significant. A blank space indicates that the relationship was not statistically significant. Natural logarithms of the satisfaction measures were used. Several interaction terms which lacked significance are not shown.

<sup>2</sup>The satisfaction of a rural resident, for example, would be about 2.50 (violent crime) and about 1.06 (property crime) less than that of a city or town resident. Natural logarithms of the 0 to 10 satisfaction scale are used.





expenditures, asking neighbors to watch the house, dollars contributed for political purposes related to safety, time spent on these political issues, and willingness to pay additional taxes for crime reduction. The frequency of use of these adaptations is shown in Table 4 along with a brief explanation of how the measures were derived.

Most people (78.2 percent) had made some private expenditures to enhance the safety of their household, at an average cost of \$43.39 per year. Yard lights, locks, and watch dogs were the most common items. High cost items such as security alarms and security guards were also observed, but these were used by less than 5 percent of the sample. Nearly a quarter of the sample (21.8 percent) had made no market purchases, appearing to rely instead on items built into the home such as locks and porch lights, and precautionary behaviors such as locking doors and windows.

Political action to increase safety was also observed, but only about 5 percent of the sample felt sufficiently dissatisfied to use this option. Nearly one-fourth of the respondents relied on neighbors to watch the house in their absence. Most people (69 percent) felt that they would be willing to pay some additional taxes, averaging \$50.83 annually, if the household burglary rate could be reduced by one-third.<sup>2</sup> This last form of adaptation is a "what if" type, of course, compared to the other adaptations.

#### The Statistical Analysis

The results of Table 5 show that although the amount of variation in peoples' behaviors which could be explained was fairly small, there was a reasonably high degree of consistency between attitudes and behaviors with respect to public safety. That is, those types of people who were most dissatisfied with police protection were generally the most active in using the various forms of adaptations in order to augment their safety. In particular, rural respondents acted in accordance

with their dissatisfaction by spending more money per year (\$21.86) for household protection than did town residents. City residents were next in terms of market adaptations, spending \$11.73 per year more than did town residents. Rural residents also gave more money (\$2.51 per year) and time (1.77 hours per year) to political candidates and issues relating to public safety. (By construction of the statistical models, these estimates are in addition to those spent or given by residents of the smaller towns).

**Table 4. Frequency of Use and Cost of Adaptations to Dissatisfaction with Police Protection**

	Percent of Sample with Item or Activity	Average <sup>1</sup> Annual Cost
<b>Market Expenditures<sup>2</sup></b>		
Yard lights	40.7%	\$ 11.32
Dead bolt locks	36.7	4.97
Watch dogs	31.8	63.10
Rifle or shotgun	23.8	3.46
Hand gun	22.1	4.32
Electric timers	19.3	5.58
Marking personal items	16.4	.87
Security alarms	4.7	53.13
Security guards	1.7	111.11
Any item	78.2%	\$ 43.39
<b>Social Interaction</b>		
Notify neighbors <sup>3</sup> when leaving home	22.0	---
<b>Political Contributions</b>		
Money <sup>4</sup>	1.7%	\$ 68.86
Time	5.0	27.2 (hrs.)
<b>"Willingness to Pay"<sup>5</sup></b>		
For a one-third reduction in the burglary rate	69.0%	\$ 50.83

<sup>2</sup>Although a rigorous test of the validity of these estimates was not possible, they seem reasonable. That is, for the average household in the sample, the expected annual loss from residential burglary was estimated to be \$26.46; this is based on a 4.5 percent chance of being burglarized and an average (net) loss of \$588 per burglary. If the burglary rate were reduced by one-third, this would be an expected cost savings of about \$8.73 per year per household. This implies that, beyond the monetary cost savings, the average household would be willing to pay about \$3.50 per month (\$50.83-\$8.73 divided by 12) to reduce their chances of encountering a surprised burglar or losing irreplaceable items.

<sup>1</sup>Computed only for those households which used the item or activity.

<sup>2</sup>Purchase cost of the item was converted to an annual cost by considering length of life, operating costs, and allocation of cost to household safety (versus other reasons). Length of life was assumed to depend on purchase cost. Operating costs were minimal except for security alarms and watch dogs. Allocations to household safety were lower for rifles, dogs, and hand guns than for other items.

<sup>3</sup>Neighbors are notified every time the respondent is away from home, not just for overnight stays (an additional 45 percent did the latter).

<sup>4</sup>Total political contributions (during 1982) were reduced by the amount of expected tax credits, then multiplied by the respondent's percentage allocation of cost to issues of public safety (as compared to other reasons).

<sup>5</sup>Maximum amount that a household would be willing to pay in higher taxes if the burglary rate could be reduced by one-third (69 percent would have been willing to pay some amount greater than zero).

**Table 5. Factors Affecting the Use of Various Adaptations to Dissatisfaction with Safety from Crime<sup>1</sup>**

	Market Expenditures	Social Interaction	Political Contributions		Willingness to Pay
			Money	Time	
<b>Characteristics which were related to satisfaction with police protection</b>					
Rural resident	21.86 (7.16)	-.108 (.053)	2.51 (1.57)	1.77 (1.45)	
City resident	11.73 (7.48)	-.133 (.056)			28.23 (7.87)
Lives alone	-13.01 (8.32)				32.76 (11.69)
Previous victim	15.78 (8.86)	.068 (.066)			
Income <sup>2</sup>	.87 (.25)	.006 (.002)	.10 (.07)		.95 (.33)
<b>Characteristics not related to satisfaction with police protection</b>					
Age					-.51 (.28)
Education		-.018 (.009)			
Children in household	-11.06 (6.60)			-1.51 (1.44)	19.41 (9.77)
Female respondent	7.31 (5.91)		-1.73 (1.56)		
Percentage of variation explained	8.4%	5.2%	1.7%	0.7%	12.1%

<sup>1</sup>Partial regression coefficients are shown, with standard errors in parentheses. The coefficient should be twice as large as its standard error (ignoring signs) for the relationship to be highly significant.

<sup>2</sup>Annual household income in thousands of dollars.

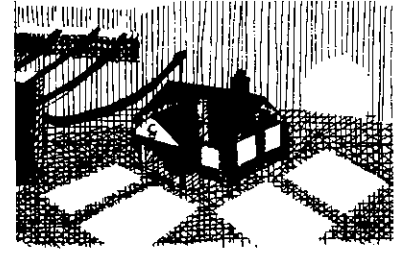
Apparently because of the more extensive use of market adaptations, rural residents were able to significantly increase their satisfaction with safety to levels beyond those provided through "police protection." Their average level of satisfaction with safety from violent crime, for example, increased from 6.20 through police protection, to 7.14 overall. By the same token, it should be noted that city residents were able to enjoy only minor increases in satisfaction in spite of fairly substantial use of market adaptations (Table 2).

Also, respondents with higher incomes spent more for market goods (\$0.87 per thousand dollars) and gave more money to political causes (\$0.10 per thousand dollars) than did those with lower incomes. Not surprisingly, those who had been victimized in the previous year spent more money for household protection (\$15.78 per year) than did non-victims. The social interaction form of adaptation--asking neighbors to watch their homes--was used most frequently by small town residents compared to rural and city

residents, by previous victims, and by those with higher incomes.

#### Policy Implications

Three policy implications can be drawn from these analyses. One is that city, town, and rural residents appear to make somewhat different types of responses to dissatisfaction with police protection. Rural residents, although relatively dissatisfied, were apparently able to bring about significant increases in their overall satisfaction with safety by making substantial use of market expenditures. Although not shown in



the tables, rural residents were more likely to maintain weapons such as rifles, shotguns or handguns and to spend more for lights and security alarms than either city or town residents. They were also more likely to maintain watch dogs but, unlike the above-mentioned items, this was not a very significant difference.

Second, people in the three locations appear to have substantial differences in their degree of unmet need for greater public safety. As noted above, rural residents were able to use the marketplace to gain additional safety. Residents of small towns—those most satisfied with police protection—were able to use social interaction to enhance their safety. City residents, on the other hand, appear to have the greatest unmet need for additional safety. Although this group made substantial use of the market in an attempt to gain additional safety, they were able to make only slight improvements in their overall safety (Table 2). One indication of unmet need is the

high willingness to pay for burglary reduction (\$28.23 per year), a statement of intended behavior which is not shared by rural or town residents. Moreover, the lack of political activism among dissatisfied city residents is consistent with a rational inactivity theme in political science, where the incentive for individual action becomes smaller as the group becomes larger. All of these indications suggest that the degree of disequilibrium with respect to safety is greater in the cities than in towns or rural areas, and that the social gains from additional police resources might be greatest if focused on the cities.

The third implication is that the “willingness to pay” approach to learning about unmet needs may be of some value to local decision makers. There are many opportunities for misuse, however, and professional advice should be sought before a local government spends money to conduct surveys. (In particular, strategic bias should be avoided. This form of bias

could occur if respondents feel that it is in their best interest to exaggerate their needs.) Even if bias can be avoided, there may be some inconsistencies in the results. In Tables 3 and 5, for example, one can note that age was not especially related to satisfaction, but that older people were willing to pay less for burglary reduction than younger people. As a second example of a possible inconsistency in these results, respondents with children and those living alone made fewer market expenditures but indicated a higher “willingness to pay” for burglary reduction.

Crime is an emotional issue, of course, and personal hazards may be dimly perceived. For these reasons, more inconsistencies between attitudes and behaviors might be expected in the realm of safety than with more visible public services such as parks and transportation. As described above, however, the willingness to pay approach did help in identifying city residents as the group with the greatest unmet need for public safety.

## References

- Antunes, G.E. and P.A. Hurley, “The Representation of Criminal Events in Houston’s Two Daily Newspapers.” *Journalism Quarterly* 54:756-760, 1979.
- Evans, S.S. and J.E. Scott, “Effects of Item Order on the Perceived Seriousness of Crime: A Reexamination.” *Journal of Research in Crime and Delinquency* 21 (May): 139-151, 1984.
- Kowalski, G.S., R.L. Dittman, Jr. and W.L. Bung, “Spatial Distribution of Criminal Offenses by States, 1970-76.” *Journal of Research in Crime and Delinquency* 17 (Jan.):4-25, 1980.
- Laub, J., “Ecological Considerations in Victim Reporting to the Police.” *Journal of Criminal Justice* 19:419-430, 1981.
- Lavrakas, P.J. and E.J. Herz, “Citizen Participation in Neighborhood Crime Prevention.” *Criminology* 20 (Nov.):479-498, 1982.
- Lewis, D.A. and M.G. Maxfield, “Fear in the Neighborhoods: An Investigation of the Impact of Crime.” *Journal of Research in Crime and Delinquency* 17 (July):160-189, 1980.
- Oregon Law Enforcement Agencies, *Report of Criminal Offenses and Arrests*, 1982.
- Ostrom, E., R.B. Parks and G.P. Whittaker, “Do We Really Want to Consolidate Urban Police Forces? A Reappraisal of Some Old Assertions.” *Public Administration Review* 33 (Sept./Oct.):423-433, 1973.
- Skogan, W.G., “Assessing the Behavioral Context of Victimization.” *Journal of Criminal Law and Criminology* 72 (2) (Summer):727-742, 1981.
- Skogan, W.G., “Reporting Crimes to the Police: The Status of World Research.” *Journal of Research in Crime and Delinquency* 21 (May):113-137, 1984.
- Skogan, W.G. and M.G. Maxfield, *Coping with Crime: Individual and Neighborhood Reactions*. Beverly Hills, California, Sage Publications, Inc., 1981.
- Stafford, M.C. and O.R. Galle, “Victimization Rates, Exposure to Risk, and Fear of Crime.” *Criminology* 22 (May):173-186, 1984.
- U.S. Department of Justice, Bureau of Justice Statistics, *Households Touched by Crime*, 1982, NCJ-88671, and *Households Touched by Crime*, 1984, NCJ-97689.
- U.S. Department of Justice, Law Enforcement Assistance Administration, *Crimes Against Persons in Urban, Suburban and Rural Areas: A Comparative Analysis of Victimization Rates*. Analytic Report SD-VAD-7, 1979.
- U.S. Department of Justice, Law Enforcement Assistance Administration, *Public Opinion About Crime: The Attitudes of Victims and Non-victims in Selected Cities*. Analytic Report SD-VAD-1, 1977.
- Zedlewski, E.W., “Deterrence Findings and Data Sources: A Comparison of the Uniform Crime Reports and the National Crime Surveys.” *Journal of Research in Crime and Delinquency*. 20 (July):262-276, 1983.

Copies of this publication may be obtained for \$1.00 each from the Extension Service at cooperating universities, or from the Western Rural Development Center, Oregon State University, Corvallis, Oregon 97331. Please write to WRDC for a list of other publications. WRDC programs are available equally to all people.





**WRDC**

Western Rural Development Center  
Oregon State University  
Corvallis, OR 97331  
(503) 754-3621

A regional center for applied social science and community development  
cooperating with Land Grant Universities in:  
Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana,  
Nevada, New Mexico, Oregon, Utah, Washington, Wyoming