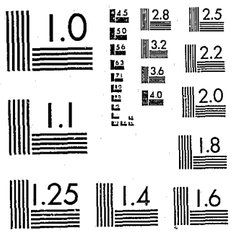

Safe and Secure Neighborhoods

Physical Characteristics and Informal Territorial Control in High and Low Crime Neighborhoods

a publication of the National Institute of Justice

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James L. Underwood
Acting Director

Safe and Secure Neighborhoods:

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May 1982

U. S. Department of Justice
National Institute of Justice

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This project was supported by Grant Number 79-NI-AX-0080, awarded to Research Triangle Institute by the National Institute of Justice, U.S. Department of Justice, under the Omnibus Crime Control and Safe Streets Act of 1968, as amended. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

ACKNOWLEDGEMENTS

We would like to take this opportunity to thank the many people without whose cooperation this study would not have been possible. Several city agencies in Atlanta deserve special thanks. Chief George Napper of the Bureau of Police kindly gave us permission to use the Bureau's computer tapes of reported crimes, and Sergeant Simon Heard was particularly helpful in assisting us in the use of the data. Deputy Chief Bell of the Police Field Operations Office and Officers Steed, Cook, Evans, Dean, and McKenney helped to smooth the way in the study neighborhoods for our household interviewers. The Bureau of Planning was extremely cooperative in providing us with "hands-on" information on Atlanta's neighborhoods and in guiding us to a variety of data sources. Marvin Tolliver, John Matthews, and John Heath were especially helpful in this regard. The City of Atlanta's Management Information System, directed by Samit Roy, provided us with the tapes and documentation for most of the secondary data used in this study. Trina Jackson of the Atlanta Regional Commission gave us valuable assistance in the use of various geocoded computer files. We would also like to thank the many people in Atlanta - neighborhood leaders, police and business people - who freely gave of their time to provide useful information on the nature of the crime problem in the study neighborhoods.

We would like to thank the field staff for the excellent job they did in collecting the household survey data. Field Supervisors Harriet Hance and Nell Tuggle deserve special thanks for their efforts in hiring, training, and supervising the interviewers and in the countless other tasks that needed doing in the survey.

A number of RTI staff members were also instrumental in the study. Larry Leis, Bill Mawby, and Carrie Hund provided their expertise in computer programming. Carrie was also instrumental in compiling the final report. Claire Jo Hamilton participated in the development of the survey instrument, supervised the editors and coders and helped to train the interviewers. Connie Roberson assisted in several phases of the survey. Lisa Garofalo assisted in the selection of the study neighborhoods. Jim Chromy, Director of Sampling, and Anne Clemmer, Rick Williams, and Sarah Wheeless drew the sample for the household survey and provided technical assistance. Brenda Young typed the report with her usual competence and cheer.

Richard Titus, the study's technical monitor, and Fred Heinzelmann, Director of the Community Crime Prevention Division of the National Institute of Justice, gave us valuable advice and guidance throughout the project.

ABSTRACT

The Safe and Secure Neighborhoods study addresses the issue of how some urban neighborhoods maintain a relatively low level of crime despite their physical proximity and social similarity to high crime areas. The basic research question is: Why are some neighborhoods relatively safe that would be expected to be unsafe because of their proximity to dangerous areas and their social and economic characteristics? The study explores differences in various dimensions of the concept of territoriality (spatial identity, local ties, social cohesion, informal social control) and physical characteristics (land use, housing characteristics, street type, boundary characteristics, etc.) in three pairs of neighborhoods in Atlanta, Georgia. Neighborhoods within pairs are adjacent and are matched on racial composition and economic status but have distinctly different crime levels. The data base consists of a sample survey of households in the study neighborhoods that focuses on measurement of the dimensions of territoriality and various secondary data sources on physical characteristics and crime on the property, block, and neighborhood level. The results indicate that differences in physical characteristics distinguish between matched high and low crime neighborhoods to a far greater extent than do differences in the measures of territoriality. Low crime neighborhoods are more insulated from surrounding areas than are high crime neighborhoods. The flow of outsiders into and out of low crime neighborhoods is inhibited because land use is more homogeneously residential, there are fewer major arteries, and boundary streets are less travelled. Low crime neighborhoods are also surrounded by areas of higher socioeconomic status than are high crime neighborhoods. There are relatively few differences in informal territorial control between high and low crime neighborhoods. Where differences exist, informal territorial control is more characteristic of high crime than of low crime neighborhoods. It appears to be an expression of fear of existing crime rather than a strategy to maintain safety. Assessments by residents of the amount of crime in the neighborhood are consistent with objective neighborhood crime rates but fear, avoidance, and protective behavior do not differ significantly between low and high crime neighborhoods. There is little relationship between assessment of the amount of crime in the neighborhood and fear, avoidance, or protection.

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I. INTRODUCTION

The decay of the nation's cities has been a major domestic issue for almost two decades. Crime is often viewed as a major factor in the decay process, acting as both cause and effect. Once viable neighborhoods have become unlivable, as people are afraid to leave their homes at night, neighbors isolate themselves from each other, and businesses leave the area, and with them, jobs. However, some older urban neighborhoods have remained viable despite being surrounded by decay. The purpose of this study is to investigate how some urban neighborhoods maintain a low level of crime despite their proximity and similarity to relatively high crime areas.

The notion that the responsibility for crime control cannot rest solely with the police has been given increasing credence by researchers, law enforcement agencies, and the public. The community, it is believed, must play a role. Attention, therefore, is becoming focused on the influence of informal social control processes in deterring crime as well as on the physical and social characteristics that appear to support these processes.

Oscar Newman (1972) states that mechanisms for informal citizen surveillance are missing in our cities because of both the transience and heterogeneity of many neighborhoods and the failure of building design to foster interaction among neighbors. This view, however, fails to recognize the diversity among urban neighborhoods. While many neighborhoods fit Newman's description, residents of some neighborhoods have been able to maintain or create social cohesiveness, a sense of shared identity with and responsibility for the neighborhood. The stereotype is the old, stable "urban village", but other neighborhoods may display similar qualities. Residents of these neighborhoods would be expected to be better able to defend their neighborhood against crime than residents of other neighborhoods, often located in close proximity. While this seems a plausible hypothesis, it has rarely been subjected to systematic examination.

Two major bodies of research have emerged which attempt to account for differences in crime rates among neighborhoods. One set of studies emphasizes physical characteristics such as the spatial arrangement of buildings, street design, diversity of land use, and the like. This approach was originally inspired by Jane Jacobs (1961) and later by Oscar Newman (1972). The other set of studies is concerned with the social correlates of crime - residential stability, racial and economic composition, and neighborhood change. Research on the social correlates of crime originated with the urban ecological perspective developed at the University of Chicago in the 1920's (Bordua, 1958-1959; Lander, 1954; Shaw and McKay, 1942; Sutherland and Cressey, 1966).

Implicit in both bodies of research is the assumption that the design of the physical environment or socioeconomic characteristics affects the ability of neighborhood residents to maintain control over the physical space which

they inhabit. This informal territorial control makes neighborhood residents more or less able to defend their neighborhoods against crime. Thus, territoriality - the maintenance of control over an area by the inhabitants of that area - appears to be the critical intervening variable that mediates the relationship between the social and physical environment and the level of criminal activity, and perhaps, fear of crime (Suttles, 1968, 1972).

There is a long tradition of research on the social correlates of crime and more recent literature on the relationship between the physical environment and crime and on the effect of neighborhood social cohesion on fear of crime (Hartnagel, 1979; Skogan and Maxfield, 1980; Taylor, et al. 1980). However, the role of the informal social structure of neighborhoods in the defense against actual crime remains largely unexamined. In addition, there have been few comparisons of the relative effects of physical characteristics and informal social structure on neighborhood crime. The major question addressed in this study is: Are there differences in physical characteristics and informal territorial control in relatively safe and unsafe neighborhoods that are adjacent and similar? More specifically:

1. Are there systematic differences in the methods and levels of informal territorial control in high and low crime neighborhoods?

2. Are there differences in physical characteristics in high and low crime neighborhoods?

3. Are physical characteristics or informal territorial control more important in differentiating low and high crime neighborhoods?

4. Are individual reactions to neighborhood crime consistent with objective crime measures, and, if not, what characteristics of individuals and their environment account for these discrepancies?

These questions are addressed in a study of three pairs of demographically similar and physically adjacent high and low crime neighborhoods in Atlanta, Georgia.

The following section of this report discusses the conceptual approach and presents a model of neighborhood safety. The third section describes the research methods. The fourth, fifth, and sixth sections present the results of the data analysis on differences between high and low crime neighborhoods in physical characteristics, informal territorial control, and reactions to crime, respectively. The seventh section summarizes results and offers concluding remarks.

II. CONCEPTUAL APPROACH: THE ENVIRONMENT, TERRITORIALITY, AND NEIGHBORHOOD CRIME

Abundant literature exists on the relationship between neighborhood physical and social conditions and crime. However, there are several major problems with this body of research. One is that studies showing a relationship between poverty and crime take a monolithic view of low income neighborhoods. They do not explain why some poor neighborhoods are relatively safe, while others are dangerous. Second, studies tend to examine either social conditions or physical design, rather than taking both into account. Third, while many studies infer that the effect of social or physical characteristics on crime is transmitted through informal social control, this latter factor is seldom actually measured.

This study focuses on both objective characteristics of neighborhoods that have been linked to crime and the informal territorial control in neighborhoods that is believed to transmit the effects of objective conditions. The literature on the relationship between the objective conditions and crime will be reviewed first. Objective conditions are defined as physical design, social characteristics, and characteristics of neighborhood boundaries. Informal territorial control and its relation to crime will be discussed later.

A. Neighborhood Environment and Crime

1. Physical characteristics. Three general categories of physical characteristics have been associated with neighborhood crime: building type, land use, and street design. The underlying theme of this research is that physical design can either foster or retard social interaction among neighbors, informal street surveillance, and a proprietary attitude toward the neighborhood. All of these are believed to deter crime.

a. Building type. Oscar Newman's (1972) study of the effect on crime of physical design, particularly buildings and streets, spawned a large number of subsequent studies on the notion of defensible space (Reppetto, 1974; also, see Gwaltney and Yin, 1978, Gwaltney, 1978, and Taylor, et al., 1980 for literature reviews). Newman found in a study of public housing that the taller the building, the higher the crime rate. He also reported that residents of high-rise public housing displayed greater animosity toward police than those in low-rise projects. He inferred from these findings that in tall buildings there is a forced disassociation between dwellings and street activities and a sense of alienation both from the surrounding neighborhood and other residents of the project. Thus, areas with a high proportion of high-rise dwellings would be expected to have higher crime rates than those characterized by low-rise structures. However, Mawby's (1977) study of public housing projects in Britain found no association between high-rise and low-rise buildings and offense rate. In addition, Newman's study was limited to public housing. His findings may not apply to privately owned buildings.

Related to the issue of height, it has also been found that neighborhoods with a high proportion of single-family dwellings have lower crime rates than those dominated by multi-family dwellings (Boggs, 1965; Reppetto, 1974). The explanation offered for this finding is that residence in a single-family dwellings encourages more of a proprietary attitude toward the surrounding area than residence in a multi-family building.

b. Street design. Proponents of the defensible space perspective assert that the more the street design is able to delineate public and private areas, the greater its effectiveness in reducing crime. Gardiner (1978) argues that the location of a major artery in a residential area encourages crime. A street that accommodates large numbers of people living outside the neighborhood increases both the number of potential victims and offenders in the neighborhood. In addition, the large number of people who use these streets makes it difficult for residents of the area to distinguish neighbors from strangers, and therefore weakens the neighborhood's informal surveillance capacity. Studies have found that the location of major arteries in residential areas increases residential burglary (Dietrick, 1977; Fowler, et al., 1979, Newman and Wayne, 1974) and fear of crime (Fowler, et al., 1979; Baumer and Hunter, 1979). Thus, low crime neighborhoods are expected to have fewer major streets than adjacent high crime neighborhoods.

Several other aspects of street design are also believed to affect crime. Building setbacks, street lighting, and visual obstructions created by shrubbery, high fences, and the like all directly affect the ability of neighborhood residents to informally surveil the area. Surveillance is more difficult in blocks with severely staggered building setbacks than in blocks with straight line setbacks (Newman, 1972). The findings on the effect of street lighting on crime are mixed. A study by Wright, et al. (1974) found that the intensity of lighting had a negative effect on violent crime like assault and robbery but little effect on property crimes. In contrast, Reppetto's (1974) study of residential crime found no systematic relationship for either robbery or burglary.

c. Land use. Jacobs (1961) asserts that diverse land use is a key element in crime deterrence. By diverse land use, Jacobs means that neighborhoods and blocks within neighborhoods have many different functions, that is residential, commercial, institutional, and leisure. Multi-functional areas will attract a continual flow of people throughout the day and evening hours. Jacobs suggests that this is the most effective means of insuring informal surveillance, what she refers to as "a basic supply of activities and eyes" (1961: 40). In contrast, the domination of a single land use, regardless of what it is, results in a scheduling of use, such that the area is guaranteed to be deserted for long periods of time. Despite the persuasiveness of Jacobs' arguments, diversity per se may not be sufficient to reduce crime. Dietrick (1977) found that residential burglary occurred more frequently near commercial areas. Moreover, certain commercial establishments (liquor stores, bars, adult book stores) and service facilities (methadone clinics) may attract.

potential offenders to the area and thereby promote crime (Minnesota Crime Prevention Center, 1978a, 1978b). Thus, both the extent and type of diversity must be taken into account. In addition, land use that creates boundaries may also have an effect on crime. Depending on its location, a railroad, expressway, or commercial district may help to reduce crime by creating or reinforcing neighborhood boundaries or may help to increase crime by slicing through the core of the neighborhood.

2. Social characteristics. Research on the social correlates of crime has a long history, beginning with the classical ecological studies of Chicago in the 1920's. The bulk of the literature shows that crime is most prevalent in poor, nonwhite, transient areas. The usual explanations are that such areas both breed and attract criminals and lack the cohesion to deter criminals coming from within or outside. However, the major problem with this research is that it usually does not go beyond simple statistical correlations to an understanding of the underlying relationships.

Four neighborhood social characteristics have been emphasized in the literature: economic status, race, residential stability, and life cycle stage of the residents.

a. Economic status and racial composition. Many studies show that crime rates tend to be highest in low income, predominantly black neighborhoods near the city's core (Bordua, 1958-1959; Chilton, 1964; Lander, 1954; Polk, 1957-1958; Report of the National Advisory Committee on Civil Disorders, 1968; Reppetto, 1974; Savitz, 1960; Schmid, 1960a, 1960b; Shaw and McKay, 1942). However, it may not be that a high percentage of blacks or poor people, per se, promotes crime but rather that they tend to have low rates of home ownership which may discourage the formation of close ties to and a sense of responsibility for the neighborhood.

b. Residential stability. Studies have suggested that crime is lower in residentially stable than in unstable neighborhoods (Coleman, 1976; Sutherland and Cressey, 1966). The underlying assumption is that long-term residence results in the formation of strong emotional ties to the neighborhood, the ability to distinguish between neighbors and strangers, and the development of informal interaction with others living in the area. These qualities are often viewed as the best defense against crime. Suttles reports in his study of a poor Chicago neighborhood that stable Italian, Mexican, and Puerto Rican communities were able to form "an extensive communication network in which personal information is freely revealed and can travel beyond the range of face-to-face relations" (1968: 88). These areas had fewer burglaries and robberies than surrounding areas. Blacks, who lived primarily in a large public housing project, were unable to form what Suttles refers to as a "stable moral community." One major reason for this was the enforced transiency, since it was necessary to move out once the family's income exceeded a certain level.

Poor and black neighborhoods are typically viewed as targets for crime. However, this may be true because these areas also tend to be transient. In attempting to explain differences in crime between neighborhoods, it is therefore important to separate the effects of stability from those of economic and racial composition.

c. Life cycle stage of residents. The life cycle stage of individuals is defined by their age and family type. Abundant individual level evidence links crime to adolescence and early adulthood. Neighborhoods with a large proportion of adolescents would therefore be expected to have high crime rates, particularly for crimes which tend to be locally committed (Reppetto, 1974). Victimization surveys show high rates of fear of crime among the elderly but low rates of victimization. (Erskine, 1974; Hindelang, 1974; Skogan and Maxfield, 1980). Thus, neighborhoods with a high percentage of elderly people would be expected to have high fear of crime but low rates of objectively measured crime (Patterson, n.d.).

With regard to family type, neighborhoods with a large number of families with young children, that is family oriented neighborhoods, may be well defended against crime (Boggs, 1965). Suttles (1972) asserts that children and mothers with children have the clearest view of the internal structure of the neighborhood and the greatest stake in its safety, because they spend more time on the street than others. They tend to know more people in the neighborhood and are most involved in information exchange. In contrast, neighborhoods dominated by childless households may not be as well defended, because fewer people are on the street during the day. Thus, holding other variables constant, family oriented neighborhoods should have lower crime than neighborhoods dominated by childless households.

Equally as important as internal characteristics in differentiating between high and low crime neighborhoods may be the characteristics of neighborhood boundaries.

3. Characteristics of neighborhood boundaries. The critical difference in crime levels between two adjacent neighborhoods may be the characteristics of their other borders. A "buffer zone" or "no-man's land" (Suttles, 1968) separating two neighborhoods is an area in which no one lives permanently and over which no one exercises control. It is, therefore, regarded as dangerous. Railroads, expressways, and large industrial concentrations are examples of such areas. Because few people venture into them, they may inhibit potentially antagonistic people from entering a neighborhood. Furthermore, anyone who crosses such boundaries is likely to be immediately obvious to neighborhood residents. Thus, a neighborhood with such a "buffer zone" may have less crime than a nearby area without one. Second, a low crime neighborhood may be a transition area between a transient, low income neighborhood and a stable, middle income neighborhood. In this case the low crime neighborhood would be closer to an area that is likely to have lower crime, or at least fewer criminals residing there, than the adjacent but high crime neighborhood. In a related

vein is the possible spill-over of crime from nearby areas. Two adjacent and similar neighborhoods may have different crime rates because the high crime neighborhood is surrounded on its other borders by high crime neighborhoods. Crime from nearby areas may, therefore, spill over and increase the level of crime. While there is little empirical evidence on this issue, it is hypothesized that the characteristics of boundaries may be as important as internal characteristics in distinguishing between adjacent high and low crime neighborhoods.

Objective physical, social, and boundary characteristics presumably have a direct effect on crime and an indirect effect, by promoting or inhibiting informal territorial control. This concept is comprised of several dimensions. The following discussion describes these dimensions and their hypothesized effect on neighborhood crime. A conceptual model is formulated, which delineates the interrelationships among the dimensions of territorial control, the linkages between these dimensions and objective neighborhood characteristics, and the direct and indirect effects of both on crime and reactions to crime.

B. Informal Territorial Control and Crime: A Conceptual Model

The basic premise of the model is that the effects of objective social and physical characteristics of neighborhoods on neighborhood crime are mediated by informal territorial control, and in addition may have direct effects. Territoriality refers to the maintenance of control over a given area by the inhabitants of that area. A territorially distinct neighborhood develops when the residents maintain a set of patterned interactions and share a sense of collective identity (Hunter, 1975). This shared identity and patterned interaction form the basis of what Suttles calls the defended neighborhood (1972). The defended neighborhood is a means of maintaining order, given the limitations of formal means of social control. Order is maintained through informal rules limiting individual movement and the segregation of groups that may conflict with each other.

While the concept of territoriality is clearly relevant to neighborhood crime, the elements that comprise this concept and their interrelationships are not well specified. The elements that we believe to be imbedded in the concept of territoriality are: territorial identity, social ties, social cohesion, and social control.

1. Territorial identity. We hypothesize that territorial identity and local social ties provide the foundation for neighborhood safety (Foley, 1952; Hunter, 1975; Keller, 1968; Suttles, 1972). Territorial identity refers to a shared understanding on the part of the residents of the boundaries of the neighborhood and the extent to which the neighborhood is viewed as a distinct social and spatial unit. Territorial distinctness is often expressed by a shared neighborhood name. There may, however, be several levels of identification (Fried and Gleicher, 1961; Jacobs, 1961). Residents of territorially distinct neighborhoods may identify most or all of the area as being "their

neighborhood" in a general sense. However, specific types of social interaction, such as friendships, neighboring, shopping, and so on may be concentrated into a more narrowly circumscribed area. Such sub-areas may include the individual's block and several adjacent blocks. The sub-area may be defined by the location of everyday social interaction, while the larger area may be defined by political or service delivery jurisdictions, homogeneity of social or physical characteristics, clear physical boundaries, or historic tradition (Keller, 1968; Hallman, 1977). Furthermore, it may be that identification with a small area is more conducive to informal social control than identification solely with an area covering many blocks which may be officially designated as a neighborhood. Safe neighborhoods within generally high risk areas may be those that are segmented into small, manageable spheres of social control, while the adjacent unsafe areas may be composed of an undifferentiated plane. The notion of segmented space leading to effective social control is analogous to Suttles' (1968) concept of ordered segmentation in the social organization of some poor neighborhoods.

2. Local ties. We would argue that local social ties are also a necessary component of safe neighborhoods and are typically defined by the amount and intensity of neighboring, the presence of family and friends in the neighborhood, participation in local institutions, such as work, church, and school, involvement in local voluntary associations, and use of local facilities. Without these two dimensions - spatial identity and local ties - the informal social control of an area would appear to be unlikely. The first defines the area that residents feel they can safely venture into and conveniently surveil. The second provides the familiarity among residents that is necessary in order to distinguish between neighbors and strangers.

3. Social cohesion. It is hypothesized that social cohesion, both structural and affective, is a basic element of neighborhood safety. Cohesion, we suggest, consists of three underlying dimensions - information exchange, emotional attachment to the neighborhood, and shared norms and values.

Information exchange refers to the use of local contacts for information on a wide range of topics, including jobs, housing, neighborhood activities, neighborhood problems, and the location of safe and unsafe areas in and around the neighborhood.

Emotional attachment, the affective component of cohesion, is also an important element of territorial control. Simply knowing what goes on in a neighborhood is not sufficient to maintain safety. It is also necessary to care about what goes on, thus providing the motivation to actively surveil the neighborhood and take action if a crime or attempted crime is witnessed. Emotional attachment refers to a sense of commitment to the neighborhood. This definition distinguishes attachment from neighborhood satisfaction. Ahlbrandt and Cunningham (1979) found that neighborhood attachment and neighborhood satisfaction are independent dimensions. A person may be highly satisfied with his or her neighborhood yet have a low level of commitment to

it. The problem with measuring satisfaction is that most respondents express positive feelings toward their neighborhoods (Keller, 1968; Gerson, et al., 1977). This may be because people prefer to appear positive about their lives to interviewers. In contrast, what we are interested in measuring is a sense of commitment to the neighborhood. Do residents feel the neighborhood is a real home to them? Do they plan on staying in the neighborhood? How would they feel if they had to move away from the neighborhood?

Shared characteristics, the third dimension of social cohesion, refers to the extent to which individuals feel that others in the neighborhood are similar to them in age, education, and income and have the same ideas about important aspects of life (e.g., childrearing, standards for home maintenance).

Social cohesion, in itself may act to deter crime generated from within the neighborhood. The sense of attachment should inhibit residents from victimizing other residents. But the main influence of social cohesion should be its effect on informal social control.

4. Informal social control. The relationship between social cohesion and social control has been a major theme in sociology since the work of Durkheim, Toennies, and Weber in the late 19th century, and Wirth's (1970) urban ethnographies in the 1930's. The thrust of the argument has been that the decline of locally based social cohesion in favor of metropolitan and even nationwide communities has led to the deterioration of local social control. This is a byproduct of the increased size and organizational scale of society and the advances in the technologies of transportation and communication that have allowed individuals to separate the location of work and recreation from the residential location (Craven and Wellman, 1974; Keller, 1968; Gerson, et al., 1977; Janowitz, 1967; Stein, 1960; Webber, 1970). While these changes hold true on a societal level, contemporary neighborhoods exist which do serve as a locus of social control (Gans, 1962; Suttles, 1968; Fried, 1963; Fried and Gleicher, 1961).

Informal social control is comprised of several dimensions: informal surveillance, movement governing rules, and direct intervention. The first refers to the casual but active observation of neighborhood streets that is engaged in by individuals during the course of daily activities. It includes recognizing and paying careful attention to strangers in the neighborhood and keeping an eye on neighbors' homes and property.

Movement governing rules, a second dimension of social control, refer to the avoidance of areas in or near the neighborhood or in the city as a whole that are perceived as unsafe. This may take the form of personal avoidance or rules governing the movement of one's children. It may also be specific to certain times of the day. Suttles (1972) defines the existence of these rules as one of the essential elements of the defended neighborhood. These rules require detailed knowledge of neighborhood spaces. He further states that

those who are the most integrated into local information networks, i.e., mothers and children, are the most likely to be aware of and apply movement governing rules.

The third dimension of informal social control involves direct intervention. This may involve residents questioning both strangers and residents of the neighborhood about suspicious activities. It may also include chastening people for certain behavior and admonishing children. This form of direct social control should be particularly effective in conveying an image of a cohesive and well regulated neighborhood. It may also help to establish social norms for the area. Suttles (1972) suggests that this form of social control is most often fostered by mothers with young children and by children themselves.

5. Territoriality and reactions to crime. The expected effect of territoriality on subjective reactions to crime, such as fear of crime, is not clear-cut. On the one hand, it makes sense to expect that the greater the informal social control, the lower the fear of crime. If the neighborhood has a tradition of residents watching out for one another and knowing what areas to avoid, then people would not be expected to fear crime, at least within the local area. Studies have found that the more the individual feels a part of the neighborhood, the less the fear of crime (Baumer and Hunter, 1979; Yancey, 1971). On the other hand, neighborhoods whose residents are plugged into local information networks may exhibit more fear of crime than other neighborhoods because the residents are more aware of crime. Skogan and Maxfield (1980) found that conversations with friends and neighbors about crime are fear provoking, regardless of the objective levels of neighborhood crime.

A conceptual model appears in figure 1. It serves as an organizational framework for the study. The concepts contained in the model - physical conditions, social conditions, and territoriality - are compared between several pairs of demographically similar and physical adjacent high and low crime neighborhoods. In addition, selected linkages within the model are empirically examined.

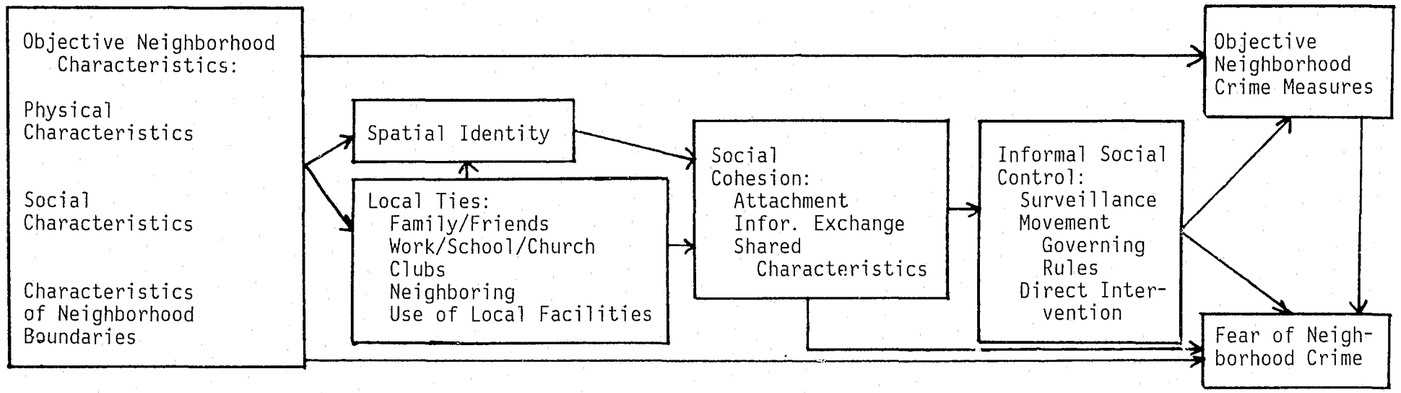

Figure 1. Model of Neighborhood Safety

III. RESEARCH METHODS

This section describes the selection of study neighborhoods, the secondary data used in the analysis of physical characteristics of high and low crime neighborhoods, the household survey conducted in the study neighborhoods in order to measure various dimensions of territoriality, and the organization of the data analysis.

A. Selection of Study Neighborhoods

The study neighborhoods were selected in Atlanta, Georgia. Atlanta has several advantages for a study of this type. First, preliminary evidence indicated that relatively safe neighborhoods existed adjacent to high crime areas in Atlanta. A study of crime in Atlanta conducted by the Atlanta Police Department and the Urban Life Center of Georgia State University provided maps of the geographic distribution of each index crime in 1970 (Atlanta Regional Metropolitan Planning Commission, 1971). A number of neighborhoods were located which were low in most or all of the index crimes but appeared to be adjacent to high crime neighborhoods. The second advantage is that the Atlanta city government has a neighborhood based planning program. The City Charter requires sub-area planning and citizen involvement in this process. This required the delineation of approximately 150 neighborhoods. These neighborhoods were defined on the basis of homogeneity and natural boundaries. The benefits of officially designated neighborhoods include published information on their physical and social characteristics and neighborhood planning committees that may provide important insights into neighborhood conditions. Third, discussions with personnel in the City Planning Bureau and the Bureau of Police indicated that computerized data on land use, housing characteristics and reported crimes were available at the address level.

Study neighborhoods were selected in pairs. One member of each pair had a low rate of reported crime, and the other had a high rate relative to the first. The three criteria for selection, other than the difference in crime rates, were comparable racial composition, comparable economic status, and physical adjacency. It was important to control for racial and economic composition, because this would be an obvious explanation for neighborhood crime differences. Physical adjacency was also important, because we were interested in determining what prevented crime in the high crime area from spilling over into the low crime area. Pairs of neighborhoods were eliminated if one or the other member was predominantly industrial or commercial, an officially designated historic district, or dominated by publicly owned housing.

Additional controls other than race and economic status could have been introduced. However, once two or more of the obvious explanatory variables

were controlled, we wanted to allow other factors to vary. Two neighborhoods similar in racial and economic composition and located in the same area of the city would be expected to have similar crime rates. In fact, this was typically the case among the 150 neighborhoods examined. We were interested in discerning what differentiated neighborhoods that did not conform to the general pattern; that is, what accounted for the relatively low (or high) level of crime in a neighborhood which would be expected to have a higher (or lower) crime rate because of its social composition and location.

The neighborhoods were selected, in part, by careful examination of a series of computer maps of reported crimes. Crimes were mapped by census blocks for the entire city.

Reported Part I crimes in Atlanta in 1978 were aggregated from individual addresses into census blocks.* This was accomplished by attaching the geocodes from the 1980 DIME file to the crime file. The UNIMATCH program was utilized to attach census tracts, blocks, and mapping coordinates from the DIME file to address level crime records.** Because of errors in address information, 17 percent of the crime addresses could not be matched to DIME file geocodes. Of the 57,315 Part I crimes in Atlanta, 47,589 (83 percent) were matched to DIME file geocodes. Eight major crimes -- murder, rape, robbery, assault, residential burglary, commercial burglary, larceny, and auto theft -- were summed into the approximately 5,000 blocks that comprise the City of Atlanta.

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*The most recent crime information available at the outset of the study was 1978.

**The DIME file is a computerized file produced by the Census Bureau which contains for each block side in a metropolitan area the census tract, census block, beginning and ending address numbers, and mapping coordinates. UNIMATCH is an address matching program that is designed to match and attach address level geographic codes from one file, like the DIME file, to another address level file.

The next step was to merge the block level crime counts with the R.L. Polk Profiles of Change data for 1978.*** The Polk data set contains counts, by block, of households and commercial establishments. Unfortunately, block level population counts were not available. The 1970 census counts of population were too outdated to be appropriate. For this reason, crime rates were based on housing units. The crime rate was defined as the number of each index crime per 100 housing units. Counts of commercial establishments were used to calculate commercial burglary rates. This is not an ideal solution because the number of people per housing unit is likely to differ systematically in different areas of the city. It is, however, preferable to relying solely on raw frequencies as an indicator of the relative amount of crime. Since the neighborhood pairs that were eventually selected were similar in economic and racial characteristics, these differences were likely to be minimized.

A series of computer maps of crime frequencies and rates were generated. A separate map of frequencies and of rates was produced for each of the eight major crimes. The inner portion of Atlanta was mapped on a larger scale than the outer portion because of the greater density of blocks in the former. The mapping symbols were divided into five categories, representing the lowest 25th percentile of crime frequencies or rates, between the 25th percentile and the median, between the median and the 75th percentile, between the 75th and 95th percentiles, and above the 95th percentile.

The maps were examined in order to delineate groups of blocks low in crime that were adjacent to groups of blocks high in crime. High and low crime levels were defined both by the block's ranking on an ordinal scale based on percentiles and on its relative ranking compared to adjacent blocks. A mylar overlay showing neighborhood boundaries was used in examining the maps in order to see whether crime levels were at least roughly consistent with neighborhood boundaries and as a means of providing a spatial orientation to the block maps. The spatial pattern of crime frequencies and rates did, in fact, tend to follow neighborhood boundaries quite closely, that is, there appeared to be more variation in crime levels between than within neighborhoods.

***The Profiles of Change is a survey conducted by the R.L. Polk Company of all households and commercial establishments in over 300 cities. The survey includes items similar to the U.S. Census, such as economic status, household composition, building vacancies, housing tenure, residential stability, and number of residential and commercial units. The major advantage of this data set is that it is the most current data available for population characteristics and housing counts. In addition, the information is available aggregated into census blocks on tape and aggregated into Atlanta's officially designated neighborhoods in published volumes. The two disadvantages are incomplete coverage of households due to nonresponse and the lack of information on race.

Potential study neighborhoods were selected by locating pairs of adjacent neighborhoods with distinctly different crime levels. This is not to suggest that the low crime member of the pair was expected to have no crime, but that it was sufficiently lower in crime than an adjacent neighborhood so that the difference was clearly noticeable by visual inspection. This could have meant, for example, that the crime level in the blocks in the low crime member of the pair tended to fall between the first and the 25th percentile for a given crime, while the blocks in the high crime member tended to fall between the 75th and 95th percentiles. The comparison of crime levels between adjacent neighborhoods was made separately for the eight major crimes to insure that differences did not reflect only one or two crime types. Neighborhood land use maps were used in conjunction with the block level crime maps in order to eliminate from further consideration areas that were, for example, higher in crime than adjacent areas because they contained a major commercial center, or lower in crime because they were predominantly open land or a large industrial area.

This process resulted in a list of seven pairs of candidate neighborhoods. A profile of crime and socioeconomic characteristics was produced for each neighborhood. This profile contained:

(1) a count of crimes in the eight major categories and total crimes.

(2) number of crimes per block.

(3) crime rates: crimes per 1,000 population for murder, rape, robbery, assault, larceny, auto theft, and total crimes; crimes per 100 households for residential burglary; crimes per 100 commercial establishments for commercial burglary (population, household, and business counts for neighborhoods were obtained from R.L. Polk Profiles of Change, 1977/78).

(4) socioeconomic status of neighborhood residents: percent female headed households with children, percent professional and managerial household heads, percent vacancies, percent owner-occupied, percent jobless (obtained from R.L. Polk Profiles of Change, 1977/78).

(5) racial composition: based on Atlanta Regional Commission's census tract level population estimates for 1978; tracts were matched as closely as possible to neighborhoods.

Table 1 is a summary of the profile data for each candidate pair of neighborhoods. Crimes per capita, household, or business could not be calculated in several instances because the neighborhood boundaries used by Polk differed too radically from those used by the Atlanta City Planning

Table 1. Crime and Demographic Profile of Neighborhood Pairs Considered for Selection

Neighborhood	Total reported crimes 1978	Total Blocks	Total reported crimes per block 1978	Total population[4] 1978	Total reported crimes per 1,000 population 1978	% non-white 1978	% Female headed households with children 1978	% Professional managerial household heads 1978	% Two canvass vacancies[5] 1978	% owner occupied 1978	% jobless household heads 1978
City of Atlanta	57,315	-	11.5	381,209	150.4	60.4	13.5	14.5	3.7	41.5	26.8
Dime matched[1]	47,589	4,972	9.6	-	124.8	-	-	-	-	-	-
Morningside-Lenox Park (L)[2]	361	87	4.2	7,309	49.4	0.7	3.6	28.5	1.4	65.9	17.6
Virginia Highland (H)[2]	766	81	9.5	7,209	106.3	1.0	4.2	19.0	2.6	39.9	25.3
Upper	188	33	5.7	-	-	-	-	-	-	-	-
Lower	578	48	12.0	-	-	-	-	-	-	-	-
Pittsburgh (L)	368	95	3.9	3,951	93.1	94.1	15.4	4.0	7.6	35.1	31.4
Mechanicsville (H)	455	79	5.8	4,497	101.2	98.7	28.8	3.2	5.9	10.5	39.3
Dixie Hills (L)	237	42	5.6	4,217	56.2	99.9	13.2	8.9	4.1	49.3	19.4
Grove Park (H)	867	86	10.1	8,359	103.7	98.3	14.9	7.6	6.2	44.6	24.8
Peoplestown (L)	224	33	6.8	2,313	96.8	98.5	20.9	3.9	10.2	30.9	33.8
Summerhill (H)	445	65	6.9	4,285	103.9	74.6	31.4	2.1	6.6	10.7	43.3
Peachtree Heights East (L)	50	15	3.3	999	50.1	0.4	5.1	35.4	1.2	49.8	22.9
Garden Hills (H)	295	30	9.8	3,710	79.5	1.2	5.6	25.4	1.3	46.1	21.9
South Atlanta (L)[3]	188	40	4.7	-	-	83.6	42.3	2.6	3.1	17.7	47.1
Lakewood Heights (H)[3]	353	51	6.9	-	-	53.4	8.0	7.6	8.7	55.6	22.6
Thomasville (L)[3]	54	20	2.7	-	-	86.0	20.2	5.8	1.7	57.9	29.8
Leila Valley (H)[3]	69	7	9.9	-	-	98.3	27.8	4.5	4.7	37.7	41.8

1/ This crime count represents the number of reported crimes for which the address could be matched to the geographical codes on the DIME file. It is lower than total reported crimes because some addresses could not be matched.

2/ (L) indicates the low crime member of the neighborhood pair. (H) indicates the high crime member of the pair.

3/ The crime rate per 1,000 population could not be calculated for these neighborhoods because the data source from which the population data were drawn used a different set of boundaries for these neighborhoods than is currently in use in the city of Atlanta.

4/ Population counts in 1978 were available on the neighborhood level, but not the block level.

5/ Housing units that were vacant in two consecutive annual canvasses.

SOURCES: Crime counts - tape of reported crimes in Atlanta in 1978, Bureau of Police; Population counts and economic indicators - R.L. Polk Profiles of Change: Annual Review, 1977-78; Race - tract level population estimates, Atlanta Regional Commission, 1978 (tracts that most closely approximated neighborhood boundaries were aggregated).

Bureau and in this study. Values for these three variables were therefore unavailable in these instances.*

Two pairs of neighborhoods were eliminated at the outset. Lakewood Heights and South Atlanta were deemed inappropriate, because the former had a higher percentage of whites and was of substantially higher economic status than the latter. (South Atlanta shows a low vacancy rate because of a large housing project to the west of the neighborhood. This project was included in the boundaries used by Polk.) In addition, the probable reason for Lakewood Heights' higher number of crimes per block is a large commercial district in its southwest corner. Leila Valley and Thomasville were also eliminated because of the lack of racial comparability. The remaining five pairs were sufficiently strong possibilities to warrant further investigation in a site visit made to Atlanta.

A three-day site visit was made by two members of the research team. Informal interviews were held with city planners who were working in the candidate neighborhoods, police zone commanders, and the staff of the SAFE project, a neighborhood crime prevention coordinating program. Most of this trip, however, was spent in the candidate neighborhoods, driving down virtually every block. This was extremely important, since secondary data often do not give as complete a view of a neighborhood as direct observation. Particular attention was paid to observing the comparability of housing type and land use between neighborhoods in a given pair.

Two of the five candidate pairs were rejected based on the information obtained in the site visit. Peachtree Heights East and Garden Hills were rejected, because the northern border of the latter is dominated by a large commercial area which directly adjoins one of the largest retail districts in Atlanta. This is likely to be the explanation for its relatively high crime rate. Peachtree Heights East, by comparison, is a small, almost entirely residential neighborhood. Summerhill and Peoplestown were also rejected. Considerable land in Summerhill has been cleared for a large stadium and adjacent parking lots. Large sections remain cleared but vacant. The disruption caused by the stadium seriously weakened the comparability of these two neighborhoods.

The three remaining pairs were Dixie Hills/Grove Park, Pittsburgh/Mechanicsville, and Morningside-Lenox Park/Virginia-Highland. With one modification, these pairs became the study neighborhoods. Below is a description of each of the pairs.

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*1970 U.S. Census data could have been used, but it was felt that these data were too outdated to be useful.

B. Characteristics of Study Neighborhoods

1. Dixie Hills and Grove Park. As can be seen from the summary table, both Dixie Hills and Grove Park are lower middle class black neighborhoods. These neighborhoods are approximately four miles west of the central business district. The four-lane collector street that is part of the northern border of Dixie Hills forms the southern border of Grove Park. (See Map 1.) The southern border of Dixie Hills is an expressway and railroad. Part of its western border is also an expressway. Its eastern border is a four-lane collector street. There is a 50-acre park in the center of the neighborhood. There are several small parks scattered throughout Grove Park and a 20-acre park near the neighborhood's northeast corner. Grove Park is bordered to the east by a 2-lane collector street, to the west by small neighborhood streets and to the north by a creek and surrounding wooded area. Streets in both neighborhoods tend to take the form of curving drives and cul-de-sacs.

Both neighborhoods have a somewhat suburban appearance, with most of the housing built within the last 30 years, according to the 1970 Census of Housing. Many of the single-family residences, particularly the newer ones, are surrounded by large, well kept yards. Each neighborhood, however, has at least one low income pocket. Most of the residential land in both neighborhoods is zoned for four to eight units per acre.

The economic indicators are approximately equal to the city average, although both neighborhoods are lower than the city average in percent professionals and managers and slightly higher than the city average in owner occupancy. An address level file of structures, known as the PLAN file,* indicates that 96.6 percent of the residences in Grove Park are one- or two-family, compared to 96.5 percent in Dixie Hills. A slightly higher percentage in Dixie Hills are single family, 92.2 percent, relative to Grove Park, 85.2 percent. However, both neighborhoods have a higher percent of single-family residences than any of the other study neighborhoods. Neither neighborhood contains public housing. There is a small development of Section 236** housing in Grove Park, which contained 32 apartment units, according to the Bureau of Planning's records.

The crime rate, as measured by crimes per block and crimes per 1,000 population is almost twice as high in Grove Park as in Dixie Hills. This is not due to a particularly high rate in one crime but is generally true for all major crimes. Rates of specific crimes are shown in table 2.

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*The PLAN file is described below.

**Section 236 is a federal program providing interest reduction payments on mortgages on rental housing designed for occupancy by low-income families.

NPU-J

MAP 1

1=Dixie Hills
2=Grove Park

MAP 1.3

1" = 2170'

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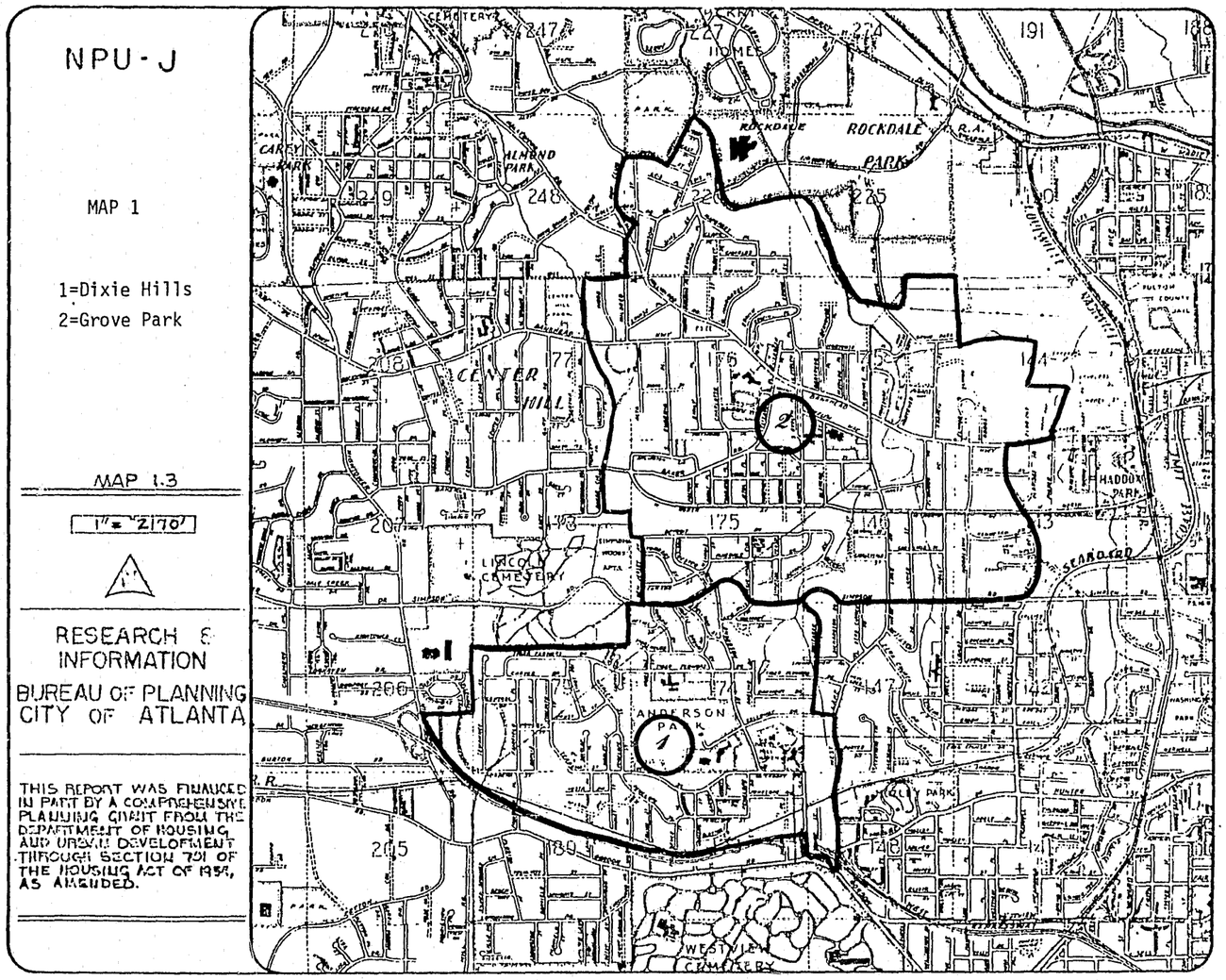


Table 2. Index Crimes in Study Neighborhoods

Reported Crimes, 1978	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	Grove Park (High)	Dixie Hills (Low)	Mechanicsville 1/ (High)	Pittsburgh (Low)
Murder						
Number	2	0	0	0	2	6
Per Block	0.04	0.00	0.00	0.00	0.06	0.06
Per 100 Households	0.07	0.00	0.00	0.00	0.27	0.29
Rape						
Number	7	1	12	4	3	10
Per Block	0.15	0.03	0.14	0.10	0.09	0.11
Per 100 Households	0.23	0.07	0.34	0.24	0.41	0.48
Robbery						
Number	41	10	74	9	14	26
Per Block	0.85	0.30	0.86	0.21	0.42	0.27
Per 100 Households	1.33	0.72	2.11	0.54	1.92	1.26
Assault						
Number	54	10	92	33	57	68
Per Block	1.13	0.30	1.07	0.79	1.73	0.72
Per 100 Households	1.76	0.72	2.63	2.00	7.82	3.29
Residential Burglary						
Number	174	46	207	72	30	65
Per Block	3.63	1.39	2.41	1.71	0.91	0.68
Per 100 Households	5.66	3.32	5.91	4.36	4.12	3.14
Commercial Burglary						
Number	30	16	65	22	17	51
Per Block	0.63	0.48	0.76	0.52	0.52	0.54
Larceny						
Number	209	87	365	81	50	111
Per Block	4.35	2.64	4.24	1.93	1.52	1.17
Per 100 Households	6.79	6.27	10.42	4.90	6.86	5.37
Auto Theft						
Number	61	18	52	16	5	31
Per Block	1.27	0.55	0.60	0.38	0.15	0.58
Per 100 Households	1.98	1.30	1.48	0.97	0.69	1.50
Total						
Number	578	188	867	237	178	368
Per Block	12.02	5.70	10.08	5.64	5.39	3.87
Per 100 Households	18.79	13.55	24.74	14.34	24.42	17.80

1/ Includes only the part of the neighborhood below Georgia Avenue.

SOURCE: Crime Count - Tape of reported crimes in 1978, Atlanta Bureau of Police; Household Counts - Atlanta Bureau of Planning, PLAN file.

The number of crimes per block in Grove Park is approximately equal to crimes per block in the entire city, but is lower than the number of crimes per 1,000 population in the city. In general, the number of crimes per 1,000 population is lower in the study neighborhoods than in the city. This is probably owing to the fact that the city total reflects the large number of crimes committed in the central business district, where relatively few people reside. In this study, high crime neighborhoods are those that have high crime rates relative to matched neighborhoods, not necessarily relative to the city average.

2. Pittsburgh and Mechanicsville. Pittsburgh and Mechanicsville are both low income black neighborhoods. Mechanicsville is just south of the central business district, separated from it by an expressway. Pittsburgh is directly south of Mechanicsville, and the two neighborhoods are separated by a railroad and industrial strip. (See Map 2.) Both neighborhoods are bounded by railroad lines, expressways, or major thoroughfares. The railroad lines are usually surrounded by an industrial strip. Each neighborhood has several small parks. There is, in addition, a nine-acre park at the northwest end of Mechanicsville and a 14-acre park on the east side of Pittsburgh. The street pattern throughout most of both neighborhoods forms a dense grid.

Both neighborhoods are below the city average on all economic indicators. They are characterized by small, detached, wood frame houses, many of which are in very poor condition. Housing is fairly dense. Most residential land is zoned at 8 to 16 units per acre. There is no public housing in either neighborhood. Mechanicsville has a 180 unit development of Section 236 housing, and Pittsburgh has a 120-unit development of the same.

The economic indicators and on-site observation suggest that Pittsburgh is somewhat higher in economic status than Mechanicsville (e.g., Pittsburgh has a lower percent of female headed households with children and a higher percent of owner occupancy than Mechanicsville). The primary reason for this seems to be that Mechanicsville undergoes a shift in population and housing characteristics between its north and south halves. The housing in the southern half is comparable to that in Pittsburgh--small, wood frame houses. The PLAN file shows that this portion of Mechanicsville is 86.4 percent one-and two-family housing, compared to 73.1 percent in the northern section. Pittsburgh's housing is 96.3 percent one- and two-family. In addition, the 1970 Census of Housing shows that the housing in the blocks comprising the southern half was 16.0 percent owner-occupied and had a mean value of $5,050 and a mean monthly rent of $59, compared to the housing in the northern half, which was 9.4 percent owner-occupied and had a mean value of $3,956 and a mean monthly rent of $54. The northern half of Mechanicsville has a considerable amount of vacant land. Low-rise apartments are currently being built on some of this land. This will further increase the population and housing differences between the two halves of the neighborhood. Finally, the northwest end of Mechanicsville directly borders on a large public housing project. This could increase its crime rate.

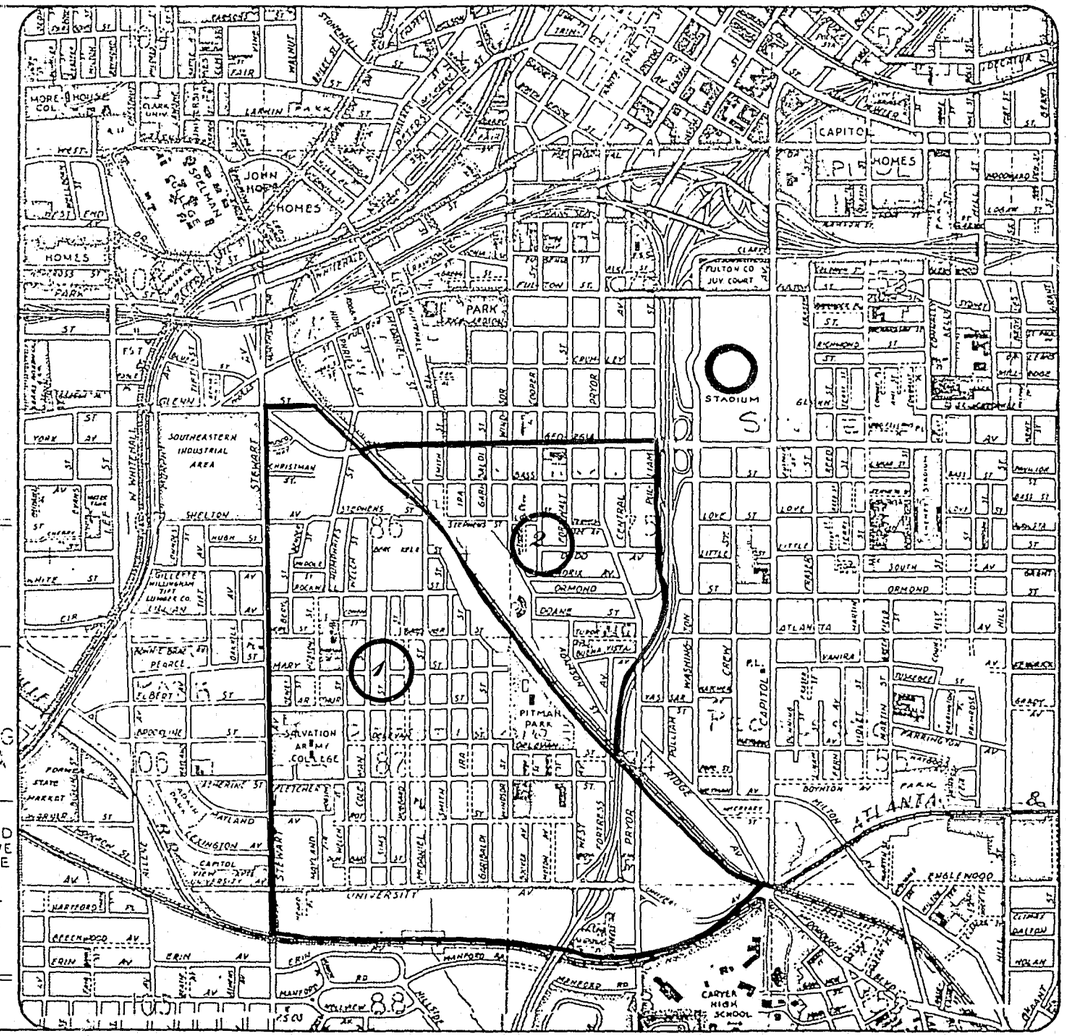
NPU-V

MAP 2

1 = Pittsburgh
2 = Mechanicsville

MAP 1.4

1" = 1560'



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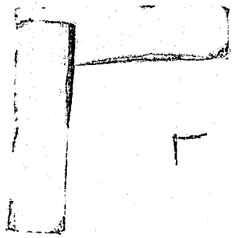

Because of these intra-neighborhood differences, the research team decided to use only the southern half of Mechanicsville. The appropriate dividing line appeared to be Georgia Avenue, a major east-west thoroughfare. Comparability between the two neighborhoods was maximized in this way.

To insure that the higher crime rate in Mechanicsville was not attributable to higher crime in the northern end, crimes per block were calculated for the southern half only.* The result was a total of 5.4 crimes per block. Hence, crime in Mechanicsville remained substantially higher than in Pittsburgh. Once again, this is not a reflection of differences in a single crime type. Mechanicsville's crime rate is higher than Pittsburgh's in four out of the eight crime types (robbery, assault, residential burglary, larceny), approximately equal in three crime types (murder, rape, commercial burglary), and lower in auto theft. (See table 2.)

3. Virginia-Highland. The third pair of neighborhoods is Morningside-Lenox Park and Virginia-Highland. Both are white and middle to upper income. They are approximately three miles northeast of the central business district. The Polk data suggest that Morningside is higher in economic status than Virginia-Highland. However, the differences did not appear sufficiently great to have eliminated this pair at the outset. But on-site observation confirmed the differences. The housing in Morningside was obviously larger, more expensive, and more likely to be owner-occupied. Clearly, this neighborhood pair did not satisfy our criterion of comparable economic status.

This left the research team in a dilemma, because it was felt that the inclusion of only predominantly black pairs would weaken the study's generalizability. However, in examining the block level crime data, it became apparent that the southern end of Virginia-Highland had substantially more crime than the northern end. The line of demarcation seemed to be Virginia Avenue, a major east-west street. The average number of crimes per block in the northern end was 5.7, compared to 12.0 in the southern end. Local informed observers suggested that this difference was caused by Ponce de Leon Avenue, a major thoroughfare that forms the southern border of the neighborhood. They emphasized in particular a block long commercial strip that had the reputation as a meeting place for drug dealers and prostitutes. But the crime that may exist in this block was not reflected in our data, because it is on the south side of the neighborhood's southern border and therefore was not contained in the official neighborhood boundaries. In addition, when all the blocks along Ponce de Leon Avenue were eliminated, the number of crimes per block, 9.7, was still substantially higher than in the northern half of the neighborhood. Rates of all crimes were higher in the southern half than in the northern half.

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* During this phase of the study, it was not possible to calculate crimes per population and household for the southern half of the neighborhood because the Polk counts of population and households are not available at the block level.

NPU·F

MAP 3

1=Upper Virginia Highland

2=Lower Virginia Highland

MAP 1.4

1" = 3400'

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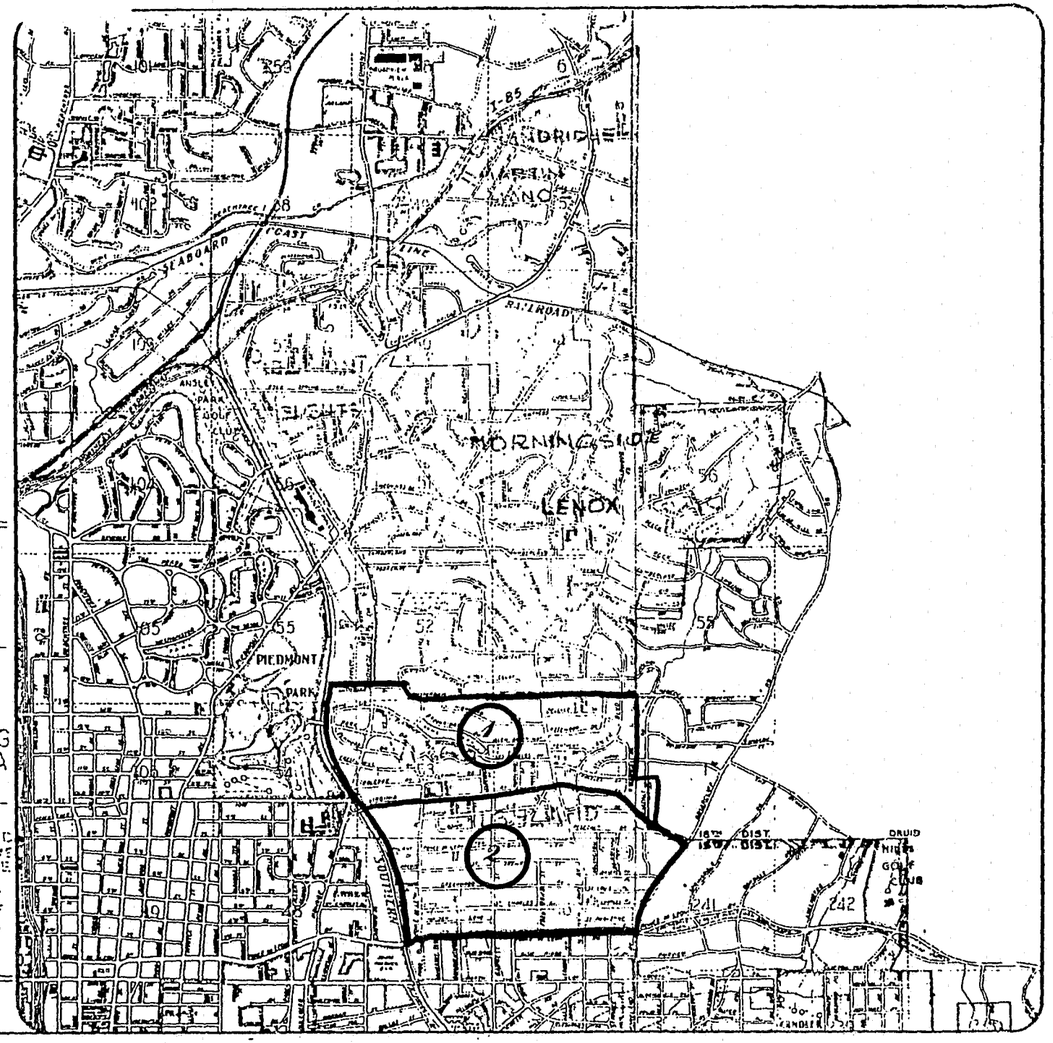

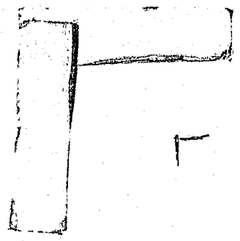

The two halves of the neighborhood are roughly comparable in economic status, although the upper half is somewhat higher than the lower. According to the 1970 Census of Housing, the population in both halves is 95% or more white. The mean housing value is $17,932 and the mean rent is $102 in the northern end, compared to $15,578 and $98, respectively in the southern end. Ninety-five percent of the housing is one- and two-family in the northern end, compared to 80.4 percent in the southern end, according to PLAN file data. In general, the northern half of the neighborhood is characterized by small stone or brick detached homes that are 40 to 50 years old. A number of the homes have been upgraded by young, professional newcomers to the neighborhood. The southern half contains this type of housing along with a number of newer garden apartments. There is no publicly owned housing in either half of the neighborhood. Residential areas throughout most of the neighborhood are zoned at four to eight units per acre.

Both parts of the neighborhood are somewhat suburban in appearance. Most of the residential lots have small yards. The streets tend to be wide and curving, and there are a number of cul-de-sacs. The southern half also has streets that form a more typical urban grid. As mentioned above, the southern border of the lower half of the neighborhood is a major four-lane street. The eastern border of both is the city limit with a residential area on the suburban side. The western border of each is a railroad with an industrial strip. The northern border of the upper half is a small neighborhood street. The dividing line between the two halves, Virginia Avenue, is a major thoroughfare that is predominantly residential.

While the two halves are not as comparable as would be preferred, they seem to be sufficiently so to be worth including in the study. The case for using this neighborhood was strengthened by the fact that no other pair of adjacent white neighborhoods came close to meeting the criteria for selection.

C. Neighborhood Site Visits

Two to three members of the research team made a three day site visit to each of the three neighborhood pairs. The purpose of these visits was two-fold: to conduct informal interviews with informed observers and to do a windshield survey of physical and land use characteristics.

The following people were interviewed in each neighborhood: the Neighborhood Planning Unit Chairperson,* the president of the neighborhood organization, the Police Zone Commander, police on both the day and night shift, and local realtors. Although the topics varied somewhat according to the type of informant being interviewed, individuals were usually asked to describe: the socioeconomic characteristics of the neighborhood; changes,

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*Atlanta is divided into 24 Neighborhood Planning Units, each of which contains a half dozen or more neighborhoods. The six study neighborhoods are in three different NPU's.

if any, that the neighborhood had recently experienced; types, location, and level of crime in the neighborhood; who committed crime in the area, especially residents versus outsiders; effects of crime on the quality of neighborhood life; factors in the neighborhood that explain the high or low level of crime; how to deter crime in the neighborhood; and organized crime prevention activities. The purpose of these interviews was to further familiarize the research team with the study neighborhoods and to gain insight into the dynamics of neighborhood crime that might be useful in developing the survey instrument. The interviews were completed prior to finalizing the instrument.

The second task in the site visits was the windshield survey. Every facing block in each of the neighborhoods was included. The research team drove down each block, completing the form shown in figure 2. The purpose was to obtain information on physical characteristics that was not available from secondary sources but is viewed in the literature as relevant in the explanation of neighborhood crime. Most of the variables rated on the survey measure physical impediments to informal surveillance of the area--building set-backs, street lights, parking facilities, and visual obstructions.

D. Secondary Data Sources

The two major sources of secondary data are the address level reported crime file used in the neighborhood selection and the PLAN file. The file of reported index crimes is described above. The PLAN file is a computerized file maintained by the City of Atlanta's Planning Bureau that contains information on every parcel of land within the city limits. The file includes address, census tract, census block, neighborhood code number, land use code, floor area of structure, year of construction, number of residential units, number of stories, and assessment value. This file was used as the sampling frame for the household survey (see section E below). It was also used in the data analysis to measure a number of physical characteristics of parcels and blocks in the study neighborhoods. Other secondary data sources utilized in the analysis of physical characteristics include a detailed street map with streets coded by type (major, collector, local) and neighborhood profiles published by the Planning Bureau which contain information on the location of parks, schools, and other neighborhood facilities.

E. Household Survey in Study Neighborhoods

1. The instrument. The major focus of the instrument was the measurement of the various dimensions of territoriality - spatial identity, local ties, social cohesion, and informal social control. Other items included in the instrument concerned subjective reactions to crime (fear, avoidance, protection, etc.), assessment of the amount and kinds of neighborhood problems, victimization, and demographic characteristics. Most of the items were fixed choice, although there were a number of open-ended questions. (The instrument appears in appendix C.)*

*Appendices A and B are available on loan from the National Criminal Justice Reference Service, P.O. Box 6000, Rockville, MD 20850.

Figure 2

WINDSHIELD SURVEY

Tract_____ Block_____ / Tract_____ Block_____

Building Set-Back

1. Uniform
2. Moderately staggered
3. Severely staggered

Street Lights

1. Yes
2. No

Parking

On street

1. Yes
2. No

Driveways

1. Yes
2. No

Parking lots

1. Yes
2. No

Land Use

1. Residential
2. Residential/Commercial
3. Residential/Industrial
4. Commercial/Industrial
5. Commercial
6. Industrial

Visual Obstructions

1. Unobstructed
2. Partially obstructed
3. Mostly obstructed

Comments_____

_____

_____

Vacant lots (Circle separate number for each side of block)

1. 1 0
2. 2 Less than 25 percent of one block face
3. 3 25 percent or more of one block face

Neighborhood _____

2. Pre-Test. Ten pre-test interviews were conducted by two interviewers in two neighborhoods in Durham, North Carolina. The neighborhoods were lower to lower middle income and predominantly black and hence were similar to four of the six study neighborhoods. Both interviewers were well acquainted with the pre-test neighborhoods and had professional social science training. It was felt that pre-test interviewers of this type would provide high quality feedback. The results of the pre-test were very useful in detecting awkward or inappropriate wording, inadequate response choices, and the like. Discussions with the interviewers following the pre-test were also helpful in preparing the training manual for the field interviewers.

3. Sample selection

a. Overview. The target population consisted of persons who reside in the six study neighborhoods. A sample of 100 responses from each neighborhood was sought.

The expected precision of percentages calculated from the sample are discussed below. Simple random sampling of households in neighborhoods is assumed for discussion purposes. The stratified design which was actually used should reduce the variance of most estimates.

The variance of the estimate of a percent, P, when simple random sampling is employed can be expressed as

$$V(\hat{P}) = P(100 - P)/n$$

where

P = the true percent for the population studied;

$\hat{P}$ = the estimate of the percent based on the sample; and

n = the size of the simple random sample.

Standard errors of the estimate (square root of the variance) for selected values of the estimated percentage, P, and for selected sample sizes are shown in table 3. Note that if the sample size is 100 households and the actual percent is 50 percent, the estimate of that percent will have a standard error of 5.0 percent assuming simple random sampling or an equivalent (some effective sample size) design is employed. A smaller standard error results for P greater than or less than 50 percent.

Considering cost and noting that a standard error of 5 percent was acceptable, a sample size of 100 responses per neighborhood was desired. It was assumed that the response rate would be 80 percent and the vacancy rate 5 percent. Thus, a sample of 132 (100/.80 x .95) households per neighborhood was selected.

Table 3. Standard Errors of Estimating Percentages Assuming Simple Random Sampling[1/]

Sample size (effective sample size[2/])	Estimated Percentage					
	1 or 99	2 or 98	5 or 95	10 or 90	25 or 75	50
50	1.4	2.0	3.1	4.2	6.1	7.1
100	1.0	1.4	2.2	3.0	4.3	5.0
200	0.7	1.0	1.5	2.1	3.1	3.5
400	0.5	0.7	1.1	1.5	2.2	2.5
600	0.4	0.6	0.9	1.2	1.8	2.0
900	0.3	0.5	0.7	1.0	1.4	1.7
1200	0.3	0.4	0.6	0.9	1.3	1.4
1500	0.3	0.4	0.6	0.8	1.1	1.3
2000	0.2	0.3	0.5	0.7	1.0	1.1
4000	0.2	0.2	0.3	0.5	0.7	0.8

[1/] Tabled values are one standard error. For the purposes of constructing confidence intervals, the analyst must choose the appropriate multiple of the standard error; e.g., the estimated value plus or minus two standard errors produces approximate 95 percent confidence intervals.

[2/] Tabled values are based on simple random sampling (SRS). Alternate designs may be more or less efficient than simple random sampling. The effective sample size for an alternate design is defined as the SRS sample size that would yield the same variance and standard error of the estimate.

b. Sampling frame construction and stratification. The sampling frame for each neighborhood consisted of a list of residential properties located within the boundaries of the defined neighborhood. Only properties which were used for residential purposes were included in the frame. Properties for which any type of Federal or local funding had been provided were excluded both from the target population and from the sampling frame. The basic listing of properties was available in computer-accessible form (PLAN file) and contained the following information about each property:

(1) A unique identification code;

(2) A property use code; and

(3) Some indication of the number of housing units on the property.

A stratified single stage sample was drawn. The sampling units were individual housing units. Stratification variables included number of housing units and geography (ID code). Sampling rates and average size housing units are specified separately by neighborhoods in table 4.

c. Sample selection. Sample stratification was achieved by sorting the list of properties within a neighborhood by the number of housing units per property and by ID code. A zoned selection procedure developed by Chromy (1979) was utilized to select one housing unit from each of 132 equal-sized zones for each neighborhood list.

The selection procedure requires a random start and a closed circular listing to determine zone boundaries.* Suppose a neighborhood contains N properties. A random start, K, between 1 and N is selected to identify the first element of zone 1. The list is then reordered to consist of initial elements K through N followed by the elements 1 through K-1.

To accommodate this feature of the sample selection procedure and allow zones to contain similar properties, the initial ordering of properties was modified by assigning a negative sign to the number of housing units per property if it is an odd number. As an example, if a neighborhood contained properties with 1, 2, 3, 4, and 5 housing units the ordering proceeded as follows:

(1) All properties with 5 housing units listed in geographic order;

(2) All properties with 3 housing units listed in geographic order;

*Prior to construction of zone boundaries, all residential properties with 20 or more housing units were listed in the field and the housing unit count corrected where necessary. This helped to increase the accuracy of zone boundaries.

Table 4. Sampling Rates for Six Study Neighbohoods

Name	Sample Size	Total Housing Units	Sampling Rate	Total Properties	Housing Units Per Residential Property
Virginia-Highland Upper	132	1,385	0.0953	1,015	1.36
Virginia-Highland Lower	132	3,041	0.0434	1,095	2.78
Grove Park	132	3,359	0.0393	1,802	1.86
Dixie Hills	132	1,562	0.0845	1,023	1.53
Mechanicsville	132	716	0.1844	327	2.19
Pittsburgh	132	1,997	0.0661	1,319	1.51

SOURCE: Atlanta Bureau of Planning, PLAN file.

(3) All properties with 1 housing unit listed in geographic order;

(4) All properties with 2 housing units listed in geographic order; and

(5) All properties with 4 housing units listed in geographic order.

This procedure was designed to guarantee that the sample would be distributed across all geographic areas and across all property sizes (housing units per property).

The sample was identified by listing selected properties and noting the number of households to be selected per property. Households in selected properties were then enumerated and a simple random sample of the specified number of households was identified.*

One respondent from each household was randomly selected. The interviewers obtained a listing of all permanent residents aged 18 or over. This information was obtained from any responsible individual in the household. The interviewer then selected through the use of a random number table the individual to be interviewed. This person answered questions of two types:

(1) Objective information pertaining to the entire household;

(2) Objective and opinion data pertaining to the respondent as an individual.

Technically, a weighting factor equal to the number of eligible respondents might have been used for the purposes of summarizing the individual data. These weighting factors would not have been equal within neighborhoods, since one, two, or more eligible respondents resided at each sample household. Use of equal weights instead of those based on the number of eligible respondents in the individual level analyses may have tended to overrepresent those persons residing in single-person households. However, it is unlikely that that use of this weighting factor would have substantially altered the results. There were no significant differencies in the mean household size of neighborhoods within pairs. In addition, the unweighted age and sex composition of each neighborhood were not significantly different from the age and sex composition weighted by household size. Given that these two variables are most likely to be affected by household size, it is unlikely that weighting other variables by this factor would alter the estimates.

*All residential properties with two or more dwelling units were listed in the field in order to obtain apartment numbers. The required number of dwelling units was then randomly selected.

4. Field work. The field staff consisted of 21 interviewers and RTI's on-site field supervisor in Atlanta. Most of the interviewers had prior interviewing experience with RTI or other research organizations.

A two-day training session was conducted in Atlanta by the members of the research team and the field supervisor. The research team prepared a training manual in addition to using the standard RTI interviewer manual. The interviewers were given the survey instrument and training manuals to review several days prior to the training session. The first day of training was spent explaining the purpose of the project, reviewing the instrument, and giving special training for the open-ended questions. For example, the diagrams published by the FBI illustrating the types of behavior that constitute each Part I crime were used to familiarize the interviewers with crime categories. Following the end of the first day, each interviewer conducted one practice interview (not with a sampled household). During the second day, problems encountered in the practice interview were discussed. In addition, each interviewer conducted at least one mock interview with another interviewer or a member of the research team. The "respondent" noted and discussed problems with the "interviewer" when the mock interview was completed. Interviewers who appeared to have particular problems conducted two or more mock interviews. The interviewers then received their assignments and began the field work. The interviewers were assigned to study neighborhoods by race. Males were used more heavily than females in the two low income neighborhoods, since these areas were more visually threatening than the other study neighborhoods.

The field supervisor reviewed the first two interviews immediately after completion with each interviewer in order to address problems or misunderstandings. The interviewers were instructed to edit their own work in the field and to report to the field supervisor on a weekly basis or more often if necessary. The research team also received weekly reports from the field supervisor.

Several measures were taken at the outset of the field work to assure potential respondents of the legitimacy of the study and the interviewers. Lead letters were sent to every household in the sample. The Chief of Field Operations of the Atlanta Police Bureau and the commanders of each police zone were notified of the study at the outset of the field work. In addition, the president of one of the study neighborhood associations, who was interviewed in an earlier phase of the study, placed an announcement in the neighborhood newsletter.

It was originally planned that the field work would be completed within six weeks. However, several problems caused the field work to be extended by four weeks. These problems are discussed below.

5. Response rate. A total of 801 residential units were contacted. The original sample contained 792 units (132 in each neighborhood). An additional nine units were contacted because of apartments located in what were originally believed to be single-unit dwellings. When this occurred, an attempt was made to obtain interviews from all additional units.

The major problems encountered in the field were not outright refusals but rather a higher than expected vacancy rate and a large number of households where no one was found at home even after repeated contacts. Out of the 801 households contacted, there were a total of 85 outright refusals, or 10.6 percent. This is only half of the expected rate of 20 percent. However, there were 124 vacancies, or 15.5 percent. This is over triple the expected rate of five percent. This reduced to 677 the number of households from which to obtain the desired sample of 600. An additional problem was the difficulty in finding people at home. The interviewers were originally instructed to make three attempts to contact screening respondents. However, it became apparent shortly after the field work began that this rule should be relaxed. Interviewers were therefore instructed to make additional contacts when necessary. As many as 10 to 12 attempts were made in some cases without finding a screening respondent at home. There were a total of 53 households where no one could be found at home for screening and an additional 16 that were not at home after at least two interview appointments were made. When these 69 cases were subtracted from the 677 occupied units, there remained 608 households that were candidates for completed interviews. A completed sample size of 600, or 100 per neighborhood, was therefore unrealistic, especially within existing time and budget constraints.

It was decided to aim for a minimum of 80 completed interviews per neighborhood. Significance tables were consulted to see if there were substantial losses in precision in a sample of 80 versus 100 in estimating confidence intervals around proportions, testing for significant differences between two proportions, and testing the significance of R. The losses in all cases were extremely small, and it did not seem worth the extra expense of drawing a supplementary sample or continuing with additional follow-up efforts for difficult to obtain interviews once the goal of 80 was reached.

Table 5 shows for each of the six study neighborhoods the number of completed interviews, the response rate, and the rate of the actual to the desired number of interviews. The response rate varied from 66.7 percent to 87.0 percent, with an overall response rate of 77.3 percent. This came close to the response rate of 80 percent that was assumed in selecting the sample. Four of the six neighborhoods approached or exceeded this rate. However, the interviewers had serious problems in both Upper and Lower Virginia-Highland in finding people at home after three or more attempts. These neighborhoods also had a higher than average refusal rate (19.3 percent in the former and 14.5 percent in the latter). The rate of actual to desired completed interviews varied from 80.0 percent to 93.0 percent, with a total of 87.2 percent. This figure reflects the difficulties experienced in the

Table 5. Interview Response Rate

	(1) Total Residential Units Contacted	(2) Total Occupied Units	(3) Completed Interviews	(4) Non-Response	(5) Response Rate (3)/(2)	(6) Desired Number of Completed Interviews	(7) Actual/ Desired (3)/(6)
Virginia-Highland Upper	135[1/]	120	80	40	66.7	100	80.0
Virginia-Highland Lower	138[1/]	118	83	35	70.3	100	83.0
Grove Park	132	107	87	20	81.3	100	87.0
Dixie Hills	132	120	93	27	77.5	100	93.0
Pittsburgh	132	112	93	19	83.0	100	93.0
Mechanicsville	132	100	87	13	87.0	100	87.0
Total	801	677	523	154	77.3	600	87.2

[1/] There are a greater number of residential units in Upper and Lower Virginia-Highland than in the other neighborhoods because of apartments discovered at addresses that were believed to be single-unit dwellings. In these cases an attempt was made to obtain interviews from all dwelling units at the address.

two Virginia-Highland neighborhoods and the higher than expected vacancy rate. High vacancies were especially problematic in Grove Park and Mechanicsville. However, neighborhoods with a high vacancy rate also tended to have a high response rate and the converse, so that one problem offset the other. Because of this, a respectably high rate of actual to desired interviews was achieved.

No primary data were collected for non-respondents. However, because the sample was drawn from the PLAN file, there was information available on the housing characteristics of non-respondents. Comparisons were made between respondents and non-respondents to ascertain whether there were systematic differences. Comparison variables included number of dwelling units in the structure, number of stories, mean assessed value of single-family residences, and mean floor area of single-family residences. These are very rough proxies of the economic status of sampled households. The results in table 6 indicate that there are no significant differences between respondents and non-respondents in any of the available housing characteristics.

6. Editing and coding. The instruments were processed on a flow basis as they came back from the field. Editing and coding specifications were developed and a codebook was written. The editors and coders were supervised by a member of the research team. Every questionnaire was checked by this supervisor at the outset of editing and coding, and every fifth was checked after the editors and coders had several days of experience. An initial set of codes was developed for open-ended questions after about half of the interviews were back from the field. These codes were updated as necessary. In order to have an extra check on the quality of the field work as it progressed, the editors maintained a log of the numbers and types of errors made and the length of each interview for every interviewer. This was used to inform the field supervisor of interviewers who appeared to be having particular problems in administering the instrument.

Following the editing and coding, the instruments were keypunched with 100 percent verification.

F. Organization of Data Analysis

The analysis was composed of three parts: (1) a series of significance tests of differences in physical characteristics between neighborhoods within the three matched pairs; (2) a series of significance tests of neighborhood differences in dimensions of territoriality; and (3) a multivariate analysis of subjective reactions to crime. The significance tests involved the concepts included in the model of neighborhood crime control discussed earlier. Physical characteristics were measured by both parcel level and block level data obtained from secondary sources. Measures of dimensions of territoriality and reactions to crime were based on the household survey.

Table 6. Housing Characteristics of Respondents and Non-Respondents

Units	Number of Residential Units Per Structure: Respondents (%)	Non-Respondents (%)	Number of Stories in Residential Units: Stories	Respondents (%)	Non-Respondents (%)
1	45.7	47.9	1	62.7	65.1
2-3	23.7	22.6	2	34.2	31.5
4-9	7.8	8.2	3	2.9	3.4
10+	22.9	21.2	4	0.2	0.0
	100.0	100.0		100.0	100.0
Total	523	146	Total	523	146
	$\chi^2 = 0.624$	NS		$\chi^2 = 0.748$	NS

	Mean Assessed Property Value - Single-Family Residences: Mean	Standard Error		Mean Floor Area - Single-Family Residences: Mean	Standard Error
Respondent	$5,682	$224	Respondents	1,507 ft.	55.9
Non-respondent	6,333	348	Non-respondents	1,617	92.6
	t = 1.43	NS		t = 0.96	NS

SOURCE: Household Survey; Housing Characteristics - Atlanta Bureau of Planning, PLAN file.

The analysis of the entire conceptual model was precluded by the limitation in resources. The significance tests of differences between matched neighborhoods were regarded as the most critical phase of the analysis, since they directly addressed the question of what physical characteristics and social processes differentiate similar and adjacent high and low crime neighborhoods. All of the concepts in the model were included in the series of significance tests, but not all of the hypothesized linkages between concepts were directly tested.

One set of linkages in the model was examained. This analysis focused on the prediction of subjective reactions to crime. These reactions include assessment of the amount of crime in the neighborhood, an index of worry about specific types of neighborhood crime, an index of fear of potential threat in the neighborhood, behavior directed at avoiding crime, and behavior directed at protecting one's home and family from crime. The decision was made to concentrate on this part of the model in the analysis because of its relevance to neighborhood crime control policy. Studies have found that fear and behavioral reactions to crime do not always correspond to the risk of victimization (Erskine, 1974; Hindelang, 1974) or to levels of crime in the neighborhood (Furstenberg, 1971; Wilson, 1976). Much of the analysis in this study concerns the factors that differentiate high and low crime neighborhoods. But it is a matter of considerable interest to see whether reactions to crime are consistent with neighborhood crime, and if not, what other factors explain fear and crime related behavior. The effects on reactions to crime of several dimensions of territoriality, physical characteristics of blocks in which respondents reside, and objective crime measures were tested. Several models were compared for their ability to predict crime reactions.

IV. PHYSICAL CHARACTERISTICS OF HIGH AND LOW CRIME NEIGHBORHOODS

The defensible space approach to urban crime suggests that the opportunities for crime are increased when the physical features of neighborhoods discourage their privacy and insulation. The argument is that certain types of land use and streets attract more potential victims and offenders into the neighborhood than do other types and destroy the ability of residents to distinguish between "insiders" and "outsiders." The result is that opportunistic crimes such as robbery, burglary, larceny, and auto theft will be more likely to occur.

This analysis compares the type and distribution of land use, housing type, street type, and characteristics of neighborhood boundaries between matched, adjacent high and low crime neighborhoods.

A. Land Use, Housing Type, and Street Type

Table 7 indicates that there are significant differences in land use between high and low crime neighborhoods.* Specifically, residential properties are more prevalent in low crime than in high crime neighborhoods and vacant land is less prevalent in low crime than in high crime areas. The lower the economic status of the neighborhood pairs, the lower the proportion of residential land use and the higher the proportion of vacant land. This is consistent with the generally more deteriorated appearance of the lower income neighborhoods, particularly Mechanicsville and Pittsburgh. However, within matched pairs, land use varies by neighborhood crime level. It should be noted that one reason for the highly significant differences is the large number of cases. Land use differences in the Virginia-Highland pair, while statistically significant, are not really substantively significant. In both neighborhoods, almost 90 percent of all parcels were residential, with a slightly higher percentage in the low crime neighborhood. In general, though, proportions of residential and vacant properties do distinguish between high and low crime neighborhoods in the black pairs, but are only marginally important in the white pair. There was little difference between matched neighborhoods in the percent of properties with commercial, manufacturing, park, or other land uses.

Differences in the number of housing units per structure are highly significant among all three neighborhood pairs. It has been suggested (Boggs, 1965; Reppetto, 1974) that residence in a single-family dwelling encourages more of a proprietary, protective attitude toward surrounding areas than residence in an apartment. The evidence indicates that low crime neighborhoods

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*In this and subsequent analyses, statistical significance is defined at the .05 level or above. Otherwise, observed differences are not considered to be significant.

Table 7. Land Use and Housing Characteristics of Study Neighborhoods

	Lower Virginia Highland (High) (%)	Upper Virginia Highland (Low) (%)	Grove Park (High) (%)	Dixie Hills (Low) (%)	Mechanicsville (High) (%)	Pittsburgh (Low) (%)
Land Use[1]						
Residential	86.5	89.8	79.1	83.7	51.7	72.5
Other Residential[2]	0.4	0.0	0.1	0.1	1.1	0.05
Commercial[3]	4.3	2.0	4.1	1.9	5.5	5.7
Manufacturing	0.2	0.2	0.0	0.0	1.7	0.6
Cultural[4]	0.2	0.0	0.0	0.0	0.0	0.1
Parks and Recreation	0.0	0.3	0.2	0.2	0.6	0.3
Vacant Land	7.7	7.4	15.9	12.1	38.1	19.1
Miscellaneous	0.7	0.4	0.5	2.1	1.3	1.7
	100.0	100.0	100.0	100.0	100.0	100.0
Total Properties	1,266	1,129	2,347	1,224	633	1,819
	$\chi^2 = 6.0$ $p < .05$		$\chi^2 = 11.0$ $p < .01$		$\chi^2 = 93.0$ $p < .01$	
Housing Units Per Structure						
One	59.4	75.4	85.2	92.5	54.4	70.6
Two-Three	24.8	22.2	12.3	4.5	34.9	27.2
Four-Nine	7.4	2.1	1.4	1.6	7.0	1.4
Ten or More	8.4	0.4	1.1	1.5	3.7	0.7
	100.0	100.0	100.0	100.0	100.0	100.0
Total Residential Properties	1,095	1,014	1,856	1,024	327	1,318
	$\chi^2 = 127.5$ $p < .01$		$\chi^2 = 47.52$ $p < .01$		$\chi^2 = 66.3$ $p < .01$	

1/ Land use categories were collapsed into residential and nonresidential in the calculation of χ^2 values. This was done because the large number of cells with an expected value of less than 5 when the detailed categories are used may make the χ^2 test invalid.

2/ Includes group quarters, residential hotels, mobile homes.

3/ Inclues wholesale trade, retail trade, and services.

4/ Includes libraries, museums, zoos, auditoriums, stadiums, movie theaters.

SOURCE: Atlanta Bureau of Planning, PLAN File.

have significantly more single-family dwellings than high crime neighborhoods.* The proportions vary from 70.6 percent of all residential properties in Pittsburgh to 92.5 percent in Dixie Hills. Unlike land use patterns, the number of housing units per structure does not seem to vary by income or racial composition of the neighborhood.

Table 8 shows the distribution of street type and commercial and residential land use among blocks in the study neighborhoods. Street type was defined as major thoroughfares - four or six lane major arteries - or small neighborhood streets - streets that were neither major thoroughfares nor collector streets. Presence or absence of a particular street type in a block was determined by whether that type formed at least one boundary of the block. The results indicate that low crime neighborhoods tend to have fewer major streets and more small, neighborhood streets than high crime neighborhoods. The only pair for which these differences are not significant is Upper and Lower Virginia-Highland. However, while the differences are not significant, they are in the expected direction. The relatively small number of blocks in these two neighborhoods increases the sampling error and therefore decreases the likelihood of attaining significance. Nevertheless, 41.7 percent of the blocks in Lower Virginia-Highland contain a major thoroughfare compared to 27.3 percent in Upper Virginia-Highland; 14.6 percent of the blocks in the former contain a small street, compared to 27.3 percent in the latter. Thus, the evidence suggests that high crime neighborhoods are more likely to contain what Gardiner (1978) refers to as major "movement generators." In some cases, as in Grove Park, the major artery cuts through the center of the neighborhood. In other cases, these streets form neighborhood boundaries. In contrast, low crime neighborhoods are more likely to have small one-way and two-lane neighborhood streets.

It was mentioned above that low crime neighborhoods have a greater proportion of residential properties than high crime neighborhoods. However, as important as the amount of residential land use is its distribution within the neighborhood. It is expected that blocks in low crime neighborhoods will be more homogeneously residential than blocks in high crime neighborhoods. The evidence supports this expectation. Residential distribution varies significantly between all three neighborhood pairs. Almost half of all blocks in Upper Virginia-Highland are 95 percent or more residential, compared to slightly more than one-quarter in Lower Virginia-Highland. Similarly, 40.5 percent of

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*Single-family residence is a rough indication of home ownership. The household survey found that 45.7 percent of all respondents resided in single-family dwellings and that 40 percent of respondents were home owners. This suggests that few people live in rented single-family dwellings. The only neighborhood that had a substantial difference between single-family residence and home ownership was Pittsburgh. In this case, 45.2 percent lived in a single-family residence but only 31 percent were home owners. In the remaining neighborhoods the two percentages were roughly equal.

Table 8. Distribution of Land Use and Street Types of Blocks in Study Neighborhoods

	Lower Virginia Highland (High)	Upper Virginia Highland (Low)		Grove Park (High)	Dixie Hills (Low)		Mechanicsville (High)	Pittsburgh (Low)	
	P (St. Error)	P (St. Error)		P (St. Error)	P (St. Error)		P (St. Error)	P (St. Error)	
Street Characteristics[1/]									
% of Blocks with Major Thoroughfare	41.7 (7.191)	27.3 (7.873)	NS	29.1 (4.925)	2.4 (2.381)	$p < .01$	66.7 (8.333)	31.6 (4.794)	$p < .01$
% of Small Blocks with Neighborhood Street	14.6 (5.148)	27.3 (7.873)	NS	29.1 (4.925)	64.3 (7.483)	$p < .01$	24.2 (7.576)	44.2 (5.122)	$p < .05$
Total Blocks	48	33		86	42		33	95	
Distribution of Commercial Land Use[2/]	(%)	(%)		(%)	(%)		(%)	(%)	
0-4% of Block is Commercial	72.9	93.9		73.3	81.0		66.7	63.2	
5-9% of Block is Commercial	4.2	0.0		14.0	11.9		9.1	17.9	
10-24% of Block is Commercial	12.5	0.0		9.3	7.1		15.2	8.4	
25-49% of Block is Commercial	8.3	6.1		2.3	0.0		9.1	5.3	
50-100% of Block is Commercial	2.1	0.0		1.2	0.0		0.0	5.3	
	100.0	100.0		100.0	100.0		100.0	100.0	
Total Blocks	48	33		86	42		33	95	
	$\chi^2 = 5.7$	$p < .05$		$\chi^2 = 1.0$	NS		$\chi^2 = 0.0$	NS	

Table 8. (Continued)

	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	Grove Park (High)	Dixie Hills (Low)	Mechanicsville (High)	Pittsburgh (Low)
	(%)	(%)	(%)	(%)	(%)	(%)
Residential Composition of Neighborhood Blocks[3/]						
0-49% of Block is Residential	12.5	9.1	11.6	4.8	48.5	22.1
50-74% of Block is Residential	12.5	9.1	27.9	19.1	39.4	23.2
75-89% of Block is Residential	25.0	18.2	29.1	28.6	9.1	43.2
90-94% of Block is Residential	22.9	15.2	14.0	7.2	0.0	5.3
95-100% of Block is Residential	27.1	48.5	17.4	40.5	3.0	6.3
	100.0	100.0	100.0	100.0	100.0	100.0
Total Blocks	48	33	86	42	33	95
	$\chi^2 = 3.9$	$p < .05$	$\chi^2 = 8.0$	$p < .01$	$\chi^2 = 8.3$	$p < .01$

1/ One-tailed rather than two-tailed t-tests of significance were used, since directionality in proportionate differences was hypothesized.

2/ Commercial distribution categories were collapsed into less than 5% and 5% and over in the calculation of χ^2 values. This was done because the large number of cells with an expected value of less than 5 when the detailed categories are used may make the χ^2 test invalid.

3/ Residential composition categories were collapsed into less than 95% and 95% and over in Upper/Lower Virginia-Highland and Grove Park/Dixie Hills and less than 50% and 50% and over in Mechanicsville/Pittsburgh in the calculation of χ^2. See note 2.

SOURCE: Street Type - Atlanta Bureau of Planning, Major Thoroughfare Plan Map; Land Use - Atlanta Bureau of Planning, PLAN File.

the blocks in Dixie Hills are 95 percent or more residential, compared to 17.4 percent in Grove Park. Land use is more heterogeneous in the low income black neighborhoods. The proportion of residential properties is lower in these neighborhoods, and land use is less homogeneous within blocks than in the other neighborhoods. However, the blocks in the low crime member of this pair have significantly more residential land use than do blocks in the high crime member. Slightly more than half of the blocks in Pittsburgh are 75 percent or more residential, compared to 12.1 percent of the blocks in Mechanicsville. Almost half of the blocks in Mechanicsville are less than 50 percent residential, compared to less than one-quarter of the blocks in Pittsburgh. Thus, the data indicate that land use is both more homogeneous and more dominated by residential dwellings than is land use in high crime neighborhoods.

The findings for the distribution of commercial land use among blocks are not as clear-cut. Commercial property comprised a very small proportion of all properties in the study neighborhoods. Table 8 shows that few blocks are 50 percent or more commercial and most are less than five percent commercial. Virginia-Highland is the only pair with significant differences in the distribution of commercial land use. Over 90 percent of the blocks in the low crime member of the pair are less than five percent commercial, compared to approximately 70 percent in the high crime member. There are no significant differences in the black pairs. Blocks in Grove Park have somewhat more commercial activity than blocks in Dixie Hills, but the differences are not significant. In both cases, approximately three-quarters of all blocks are less than five percent commercial. The distribution of commercial land use is almost identical in the Mechanicsville/Pittsburgh pair. Two-thirds of the blocks in both neighborhoods are less than five percent commercial. While street type and residential land use differ systematically between low and high crime neighborhoods, commercial land generally does not.

B. Boundary Characteristics

The characteristics of neighborhood boundaries may be as important as their internal features in distinguishing between high and low crime areas. Depending on their characteristics, boundaries may inhibit potential offenders from entering the neighborhood or may encourage them to do so. Railroad lines and expressways may effectively shield the neighborhood from outsiders, while commercial development or major thoroughfares are likely to attract them. Boundaries composed of small neighborhood streets might also provide this shielding function.

Crime rates in two adjacent and similar neighborhoods may also be affected by the characteristics of neighborhoods on their other borders. One of the neighborhoods may have a substantially higher crime rate than the other because of the spill over of crime from areas on its other borders. Neighborhood crime rates may also be increased by the existence of low income, transient neighborhoods in surrounding areas. Such areas would be expected to have either relatively high crime rates or more criminals residing there who may victimize residents of nearby areas.

The characteristics of both surrounding neighborhoods and boundary blocks in the study neighborhoods are examined in this section. Boundary characteristics that are examined include street type, commercial development, whether the boundary street contains a railroad or expressway, and crime rate . These characteristics are shown in tables 9 and 10. The crime rates and socioeconomic characteristics of adjacent neighborhoods are shown in tables 11 and 12.*

Boundaries in high crime neighborhoods are more likely to be major thoroughfares than in low crime neighborhoods. For example, Lower Virginia-Highland is bordered on three out of four sides by major streets; only the southern border of Upper Virginia-Highland is a major street. In two out of the three pairs, boundaries in high crime neighborhoods have a higher percentage of commercial development. Two out of the three low crime neighborhoods have a higher percentage of railroads as boundaries than the matched high crime neighborhoods. The railroad lines in these neighborhoods are often surrounded by small industrial concentrations. The entire southern border of Dixie Hills (low crime), which is its longest border, is a railroad line, accompanied over most of its distance by an expressway. There is no such line of demarcation on any of Grove Park's borders. Similarly, two out of three of Pittsburgh's (low crime) borders are railroads, surrounded by a wide industrial strip. The north end of the neighborhood is industrial as well. In contrast, the only boundary in Mechanicsville (high crime) that contains a railroad is its common border with Pittsburgh. The results for expressways are not clear-cut. There are no expressways on the borders of either Virginia-Highland neighborhood, a slightly higher proportion of the borders of Mechanicsville (high crime) than of Pittsburgh (low crime) contain an expressway, and a higher proportion in Dixie Hills (low crime) than in Grove Park (high crime) contain an expressway.

Relatively few boundaries in any of the neighborhoods were small streets. This is a function of the way in which the City's Planning Bureau in conjunction with neighborhood planning boards defined boundaries. To some extent, neighborhood boundaries are an artifact created by city agencies. Therefore, major streets, railroads, and other prominant lines of demarcation tend to be used as borders. However, designated boundaries in Atlanta's neighborhoods are not completely artificial, since neighborhood planning boards which are composed of residents assist the city in defining borders.

The evidence suggests that neighborhood boundaries in low crime neighborhoods tend to have less commercial land use, to contain a railroad line, and not to contain a major thoroughfare. Expressways as boundaries did not vary in any systematic way. It appears that boundaries in low crime neighborhoods present fewer opportunities for access to outsiders and therefore have fewer potential offenders and victims entering the area. Boundaries in high crime neighborhoods are far more permeable in the sense that they contain more

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*Significance tests were not performed on these data because of the small number of boundary streets and adjacent neighborhoods.

Table 9. Characteristics of Boundaries of Study Neighborhoods

	Lower Virginia Highland (High) (%)	Upper Virginia Highland (Low) (%)	Grove Park (High) (%)	Dixie Hills (Low) (%)	Mechanicsville (High) (%)	Pittsburgh (Low) (%)
Characteristics of Neighborhood Boundaries						
% with Major Thoroughfare	95.0	50.0	22.2	5.6	68.8	52.6
% with Small Neighborhood Street	0.0	44.4	25.9	5.6	0.0	0.0
% with Expressway	0.0	0.0	0.0	38.9	25.0	15.8
% with Railroad	20.0	16.7	0.0	50.0	25.0	57.9
% with 10% or More Commercial Land Use	25.0	11.1	18.5	11.1	37.5	47.4
Total Boundary Blocks	20	18	27	18	16	19

SOURCE: Street Type - Atlanta Bureau of Planning, Major Thoroughfare Plan Map; Land Use - Atlanta Bureau of Planning, PLAN File.

movement generators (major streets) and use generators (commercial properties) than low crime neighborhoods. Therefore, they are less effective in insulating the neighborhood from outsiders than boundaries in low crime neighborhoods. While insulation from outsiders may do relatively little to reduce crimes like murder and assault, where the victim and offender are often acquainted, it may be effective in decreasing opportunistic crimes such as robbery, burglary, and auto theft.

It may be argued that the concentration of both major arteries and commercial activity at the boundaries of high crime neighborhoods accounts for the differences in crime rates between neighborhoods in each of the pairs. That is, when commercial crimes occurring at the boundaries are subtracted from the crime rate for the entire neighborhood, there may be no difference in crimes between matched neighborhoods. This hypothesis was examined by categorizing the number of crimes per block for each of the eight major offenses according to whether they occurred in a boundary or an interior block. The results appear in Table 10.

In general, there is little evidence to support the argument that crime differences between matched neighborhoods are attributable to crime differences at the boundaries. In only one pair, Grove Park/Dixie Hills, are crime differences between neighborhoods attributable to the boundary of the high crime neighborhood; the crime rate is roughly equal in the interior blocks of the two neighborhoods. This is primarily a reflection of the very high rate of larceny in the border blocks of Grove Park. In Upper and Lower Virginia-Highland, the crime differences between the two neighborhoods are greater in interior blocks than in boundary blocks. This is especially true for robbery, residential burglary, commercial burglary, and larceny. The rate for most crimes in the high crime member of this pair is roughly equal at the border and in the interior. In the low crime member, the crime rate is substantially higher in border than in interior blocks, although crime at the border is lower than in the high crime neighborhood. The situation is reversed in Mechanicsville/Pittsburgh. In this case, the difference in the crime rate between the high and low crime neighborhoods is attributable to differences between the interior blocks of the two members of the pair. The border blocks of the low crime member actually have a higher crime rate than do the border and interior blocks in the high crime member, due primarily to a high rate of larceny. The remainder of the neighborhood has a substantially lower rate of larceny and other crimes as well. These data indicate that while land use and street types differ systematically between the boundary blocks of high and low crime neighborhoods differences in crime rates are not a function of an especially high crime rate at the boundary of the high crime neighborhood.

The crime rate and socioeconomic characteristics of adjacent neighborhoods are shown in Table 11 and 12, respectively. Data for each neighborhood sharing a common border with the study neighborhood (with the exception of the matched neighborhood) were aggregated.

Table 10. Index Crimes per Block at the Boundary and Interior of Study Neighborhoods

	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	Grove Park (High)	Dixie Hills (Low)	Mechanics-ville (High)	Pittsburgh (Low)
Murder						
Boundary	0.09	0.00	0.00	0.00	0.00	0.00
Interior	0.00	0.00	0.00	0.00	0.12	0.08
Rape						
Boundary	0.26	0.06	0.41	0.17	0.00	0.16
Interior	0.04	0.00	0.02	0.04	0.18	0.09
Robbery						
Boundary	0.91	0.50	1.56	0.22	0.25	0.42
Interior	0.80	0.07	0.54	0.21	0.59	0.18
Assault						
Boundary	1.74	0.44	2.11	1.11	0.88	0.63
Interior	0.56	0.13	0.59	0.54	2.47	0.74
Residential Burglary						
Boundary	2.56	1.28	4.81	1.50	0.31	0.74
Interior	4.60	1.53	1.31	1.88	1 47	0.67
Commercial Burglary						
Boundary	0.87	0.83	1.15	0.44	0.75	1.68
Interior	0.40	0.07	0.58	0.58	0.29	0.17
Larceny						
Boundary	3.83	3.67	9.56	2.06	1.56	3.21
Interior	4.80	1.40	1.81	1.83	1.29	0.62
Auto Theft						
Boundary	1.52	0.50	1.07	0.33	0.13	0.84
Interior	1.04	0.60	0.39	0.42	0.18	0.18
Total						
Boundary	11.78 (23)[1/]	7.28 (18)	20.67 (27)	5.83 (18)	3.88 (16)	7.68 (19)
Interior	12.24 (25)	3.80 (15)	5.24 (59)	5.50 (24)	6.59 (17)	2.74 (76)

[1/] Numbers in parentheses are total blocks.

SOURCE: Tape of reported crimes in 1978, Atlanta Bureau of Police.

The crime levels of surrounding neighborhoods do not lend strong support to the spill over argument (table 11). In the black low-income pair, neighborhoods adjacent to the low crime member have a higher number of crimes per block than do neighborhoods adjacent to the high crime member. In the black middle-income pair, areas adjacent to the high crime member have a higher crime rate than areas adjacent to the low crime member. However, the difference - 7.41 versus 4.07 total crimes per block - is not as great as the difference between the study neighborhoods themselves - 10.08 versus 5.64 crimes per block. In addition, the study neighborhoods each have a higher crime rate than the respective surrounding areas. The white neighborhoods seem to be the only pair for which crime spill-over is likely to play a role in affecting neighborhood crime rates. The difference in total crime rate between neighborhoods adjacent to each member of the pair (19.68 versus 4.56) is greater than the difference between the study neighborhoods (12.02 versus 5.70). In addition, the area surrounding the high crime member of the pair has a higher rate of crime than the neighborhood itself, while the area surrounding the low crime member has a lower crime rate. This suggests that crime from nearby areas may have increased the crime level in the high crime member of this pair. However, this pattern occurred in only one of the three pairs. Thus, differences in crime rates within neighborhood pairs do not appear to be a function of crime levels in surrounding areas.

Another hypothesis to explain the differences in crime rates between the matched neighborhoods is that the low crime member is a transition area from a low income, transient section of the city (of which the high crime member is a part) to a more affluent, stable section. Since the latter sections are less likely to have offenders residing in them, according to research on the social correlates of crime and characteristics of offenders, adjacent neighborhoods are less vulnerable to crime than are neighborhoods adjacent to low income, transient sections. This hypothesis is addressed by examining the socioeconomic characteristics of neighborhoods adjacent to the high and low crime members of the pairs (table 12). The data indicate that low crime members are surrounded by more affluent neighborhoods than are high crime members. Areas surrounding the low crime neighborhoods have a higher rate of owner-occupancy and a lower percent of joblessness than areas surrounding high crime neighborhoods. In the two black pairs, the percent of female-headed households with children is higher in areas surrounding the high crime neighborhoods than in areas surrounding the low crime neighborhoods. The same is true for the percent nonwhite in the Virginia/Highland pair and the Mechanicsville/Pittsburgh pair. Percent professional household heads is also greater in areas surrounding low crime neighborhoods, but the differences are not as great as is the case for owner-occupancy, joblessness, and percent nonwhite.

In general, the data indicate that low crime neighborhoods are surrounded by more affluent areas than are matched and adjacent high crime neighborhoods. This finding suggests that high crime neighborhoods are proximate to areas in which offenders are more likely to live. In addition, these areas are more easily accessible to outsiders by virtue of having major artieries and commercial

Table 11. Index Crimes Per Block in Neighborhoods Adjacent to Study Neighborhoods

	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	Grove Park (High)	Dixie Hills (Low)	Mechanics-ville (High)	Pittsburgh (Low)
Murder	0.08	0.00	0.02	0.01	0.05	0.07
Rape	0.21	0.01	0.18	0.09	0.10	0.12
Robbery	1.78	0.19	0.49	0.13	0.50	0.55
Assault	2.11	0.15	0.95	0.45	1.36	1.76
Residential Burglary	3.26	1.87	2.57	1.34	0.79	1.64
Commercial Burglary	1.53	0.27	0.82	0.54	0.44	0.69
Larceny	9.27	1.74	1.89	1.28	1.53	2.03
Auto Theft	1.45	0.34	0.48	0.23	0.34	0.48
Total	19.68 (156)[1/]	4.56 (89)	7.41 (148)	4.07 (121)	5.11 (185)	7.35 (114)

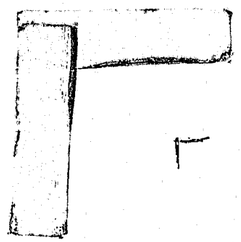
[1/] Numbers in parentheses are total blocks.

SOURCE: Tape of reported crimes in 1978, Atlanta Bureau of Police.

Table 12. Social and Economic Characteristics of Neighborhoods Adjacent to Study Neighborhoods

	City of Atlanta	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	Grove Park (High)	Dixie Hills (Low)	Mechanics-ville (High)	Pittsburgh (Low)
% Nonwhite	60.4	10.9	0.7	98.1	97.7	86.5	71.3
% Female-headed Households With Children	13.5	3.4	3.6	25.1	10.9	28.0	18.1
% Professional/ Managerial Household Heads	14.5	20.6	28.5	7.1	11.6	2.6	5.0
% Two-Canvas Vacancies	3.7	2.7	1.4	4.1	2.3	7.8	8.1
% Owner-Occupied	41.5	21.5	65.9	38.0	69.3	17.1	36.0
% Jobless House-hold Heads	26.8	26.9	17.6	36.3	16.0	40.2	31.4

Sources: Economic indicators - R.L. Polk, Profiles of Change: Annual Review, 1977-78; race - tract level population estimates, Atlanta Regional Commission, 1978 (tracts that most closely approximated neighborhood boundaries were aggregated).



development at the boundaries. In two out of three pairs, the crime rate was not substantially higher in areas surrounding the high crime neighborhoods. However, offenders wishing to commit crimes outside their own neighborhood, particularly juvenile offenders, are likely to do so within a relatively short distance of their residence, logically in areas with easy access. In order to test this hypothesis, information on both the location of the offense and the residence of the offender is required. (The latter, unfortunately, was not available for use in this study.) In addition, a larger sample of neighborhoods is necessary to test whether the characteristics of surrounding areas or the characteristics of boundary streets are more important in determining neighborhood crime levels. The evidence presented here, however, indicates an issue in need of future research - the interplay between the characteristics of border neighborhoods and street boundaries in affecting neighborhood crime rates.

C. Physical Impediments to Informal Surveillance

The variables examined thus far express the relative permeability of high and low crime neighborhoods to outsiders. Land use, street type, and boundary characteristics can either encourage or inhibit the privacy and insulation of a neighborhood. The final set of physical characteristics included in this analysis reflects another dimension of neighborhood safety - impediments to informal surveillance. The variables are building setbacks, presence or absence of street lights, and visual obstructions. This information was derived from a windshield survey of all facing blocks in the study neighborhoods. Building setbacks on a facing block were rated as uniform, moderately staggered, or severely staggered. The more staggered the buildings, the more difficult it is to informally observe activities on the block. Visual obstructions were also rated on a three-point scale. Obstructions include high fences or walls, tall hedges, or densely wooded or overgrown areas. Type of parking was also observed in the windshield survey. Similar to the variables in the previous analysis, it reflects the relative access outsiders have to neighborhood streets. Parking lots afford the most accessibility, driveways afford the least. High crime neighborhoods are expected to have a higher proportion of facing blocks with parking lots or combinations of parking types than low crime neighborhoods. Characteristics of block faces appear in table 13.

The results are mixed. In two out of the three pairs, the low crime neighborhood has significantly more blocks with uniform setbacks than the high crime neighborhood. There is no difference between Mechanicsville and Pittsburgh. Two out of three pairs have no differences in visual obstructions. Pittsburgh has a higher proportion of relatively unobstructed blocks than Mechanicsville. There is no difference in any of the neighborhood pairs in street lighting. Virtually every facing block has at least one light. Based on these results, a strong case cannot be made for the effect of physical impediments to informal surveillance.

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1 OF 4

Table 13. Physical Characteristics of Block Faces in Study Neighborhoods

	Lower Virginia Highland (High) (%)	Upper Virginia Highland (low) (%)	Grove Park (High) (%)	Dixie Hills (Low) (%)	Mechanicsville (High) (%)	Pittsburgh (Low) (%)
Building Setbacks[1/,2/]						
Uniform	48.7	65.5	40.9	61.9	57.4	53.0
Moderately staggered	46.2	34.5	48.6	32.4	38.9	44.0
Severely staggered	5.1	0.0	10.6	5.7	3.7	3.0
	100.0	100.0	100.0	100.0	100.0	100.0
Total Facing Blocks	78	84	208	105	54	168
	t = 1.92	p < .05	t = -3.51	p < .01	t = .56	NS
Street Lights[1/]						
Yes	100.0	100.0	95.9	95.1	94.0	96.7
No	0.0	0.0	4.1	4.9	6.0	3.3
	100.0	100.0	100.0	100.0	100.0	100.0
Total Facing Blocks	110	94	242	122	67	209
			t = .35	NS	t = -.98	NS
Visual Obstructions[1/, 3/]						
Unobstructed	14.5	15.8	13.6	14.8	23.3	35.7
Partially obstructed	80.9	76.8	66.7	71.3	56.7	59.4
Mostly obstructed	4.6	7.4	19.8	13.9	20.0	5.3
	100.0	100.0	100.0	100.0	100.0	100.0
Total Facing Blocks	110	95	243	122	60	207
	t = .26	NS	t = -.31	NS	t = -1.81	p < .01

Table 13. (continued)

	Lower Virginia Highland (High) (%)	Upper Virginia Highland (Low) (%)	Grove Park (High) (%)	Dixie Hills (Low) (%)	Mechanicsville (High) (%)	Pittsburgh (Low) (%)
Parking Types						
On Street Only	1.8	6.3	4.1	4.1	11.3	5.7
Driveways Only	4.6	10.5	4.1	2.5	5.6	4.8
Parking Lots Only	4.6	1.1	7.4	1.6	5.6	7.6
On Street/Driveways	59.1	69.5	65.7	70.5	40.9	65.2
On Street/Parking Lots	3.6	3.2	2.0	2.5	1.4	2.4
Driveways/Parking Lots	8.2	2.1	5.7	5.7	0.0	0.5
All Three	17.3	5.3	9.4	13.1	9.9	4.8
None	0.9	2.1	1.6	0.0	25.4	9.0
	100.0	100.0	100.0	100.0	100.0	100.0
Total Facing Blocks	110	95	245	122	71	210
	$x^2 = 17.81$ $p < .05$		$x^2 = 8.87$ NS		$x^2 = 21.58$ $p < .01$	

1/ One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized.

2/ Categories were collapsed into uniform vs. staggered to calculate t-tests.

3/ Categories were collapsed into unobstructed vs. obstructed to calculate t-tests.

SOURCE: Windshield Survey.

Variations in parking facilities are consistent with the earlier findings on the relative privacy and insularity of high and low crime neighborhoods. In all three neighborhood pairs, the low crime neighborhood has more private parking facilities. The differences are significant in two out of three pairs and in the expected direction in the third. Facing blocks in low crime neighborhoods tend to have fewer parking lots, fewer combinations of all three parking types, more driveways, and more combinations of on-street parking and driveways. These patterns are likely to be a reflection of differences in land use and housing type. Low crime neighborhoods were found to be more residential, to have more single-family housing, and to have fewer major thoroughfares. Thus, parking in these neighborhoods is designed to serve residents and is less available to outsiders than parking in high crime neighborhoods. It would not make sense to argue that parking facilities, per se, affect neighborhood crime rates. However, they are part of a pattern of greater privacy and less accessibility to non-residents that is characteristic of low crime neighborhoods.

V. TERRITORIALITY: A COMPARISON OF HIGH AND LOW CRIME NEIGHBORHOODS

In this phase of the analysis, measures of the four major dimensions of informal territorial control are compared between matched and adjacent high and low crime neighborhoods. The four dimensions are spatial identity, local ties, social cohesion, and informal social control. It is expected that residents of low crime neighborhoods have greater spatial identity, more local ties of friendship, family, organizational membership, and the like, a greater sense of cohesiveness, and exercise more informal social control than residents of high crime neighborhoods. These dimensions are examined in the order in which they appear in the conceptual model. (See section II.)

Measures of territoriality are derived from the household survey. A series of t-tests of significance were calculated. Because the sampling design was likely to produce lower estimates of standard error than a simple random sample, a program was utilized in the calculation of standard errors that takes the design into account (Shah, 1979).* (See section III.E. for a description of the sample design and appendix A for a discussion of the estimation procedure.)

A. Demographic Characteristics

The first step in the analysis was to compare the demographic characteristics of respondents in high and low crime neighborhoods. It was expected that education, income, and race would not differ significantly because neighborhoods within pairs were matched on these variables. Age and sex of respondents were also compared. The results appear in table 14. There are no significant differences in education or income. Residents of Pittsburgh (low crime) are somewhat higher in economic status than residents in Mechanicsville (high crime), but the differences are not great enough to be significant. There are no significant differences in race in the two black pairs; almost all respondents are black. There are, however, significantly more blacks in Lower than in Upper Virginia-Highland, 12 percent and zero percent, respectively. While both neighborhoods are predominantly white, it seemed appropriate to adjust means and proportions for this difference in racial composition. In addition, there are no significant differences in the sex of the respondent, although the proportion of males is slightly higher in two out of three high crime neighborhoods than in the matched low crime neighborhoods. Mean age,

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*A comparison of standard error estimates calculated both by this program and by the statistical package known as SAS for a number of variables showed that the former yields slightly lower estimates than the latter in most cases. The differences, however, were not great. The program was employed in calculating all unadjusted t-tests in order to insure that sampling effects were reflected.

Table 14. Demographic Characteristics of Survey Respondents in High and Low Crime Neighborhoods[1/]

	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanics-ville (High) $\bar{x}$ $s_{\bar{x}}$	Pitts-burgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Mean Age of Respondent	37.0 1.444	42.7 1.756	<.01	41.4 1.910	47.9 1.746	<.01	44.8 1.766	48.4 1.980	NS
Proportion of Male Respondents	.398 .054	.425 .056	NS	.437 .053	.344 .050	NS	.425 .053	.376 .050	NS
Proportion of Black Respondents	.12 .034	0 0	<.01	.97 .020	.99 .011	NS	.98 .016	.98 .011	NS
Proportion with High School Education or More	.90 .030	.86 .033	NS	.47 .059	.52 .048	NS	.28 .047	.34 .049	NS
Proportion with Total Family Income < $10,000 in 1979	.27 .050	.25 .047	NS	.60 .068	.59 .057	NS	.82 .058	.67 .072	NS

[1/]One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized.

SOURCE: Household Survey.

however, is higher in low crime than in high crime neighborhoods, and the difference is significant in two out of three pairs. Because of this difference, means and proportions in all neighborhoods are adjusted for age. An adjustment is also made for sex, because even though the differences between matched neighborhoods are small, sex has been found to be an important predictor of neighborhood activities, perceptions, and reactions to crime. Means and proportions in all neighborhoods are adjusted for age and sex, and are also adjusted for race in the Virginia-Highland pair. Both unadjusted and adjusted statistics are presented.

B. Spatial Identity

Spatial identity, the degree to which the neighborhood is viewed as a distinct social and territorial unit, is measured by three varibles: whether the neighborhood has a name, whether the respondent gives the official neighborhood name, and the size in acres of the area the respondent identified as his/her neighborhood. This last variable was measured by showing the respondent a 1:1000 scale street map of the neighborhood (without boundary lines drawn in) and the surrounding area and asking him/her to draw a line around the area the respondent perceived as the neighborhood. It is expected that residents of low crime neighborhoods would be more likely to think the neighborhood had a name and to give the official neighborhood name. It is also expected that residents of low crime neighborhoods would include more area on their maps than residents of high crime neighborhoods, since the former may be familiar with and feel comfortable in a larger territory than the latter.

The results provide only partial support for spatial identity as a distinguishing feature between high and low crime neighborhoods (table 15). There is a significant difference in only one neighborhood pair in the proportion stating that the neighborhood has a name and the proportion giving the official name. These differences are in the expected direction, but there are virtually no differences in two out of three pairs. The overwhelming majority of residents of all six neighborhoods stated the neighborhood had a name and gave the official name. The area included within perceived neighborhood boundaries varied more systematically. In all three pairs, the area is larger in low crime than in high crime neighborhoods, and the differences are significant in two out of three cases. The differences remain after adjustments were made for race, sex, and age. Thus, residents of low crime neighborhoods seem to identify in a general sense with a larger area than residents of high crime neighborhoods. It is interesting to note that the maps drawn by respondents are larger on the average in white than in black neighborhoods. This does not conform to differences in the actual size of the neighborhoods. Grove Park is by far the largest neighborhood, Virginia-Highland (in its entirety) and Dixie Hills are approximately equal in size, and Pittsburgh and Mechanicsville (in its entirety) are slightly smaller. While the results are mixed, the only variable that systematically distinguishes between high and low crime neighborhoods is size of the area of general identification. The next part of the analysis will examine whether sub-areas of more specific identification exist.

Table 15. Spatial Identity of Residents of High and Low Crime Neighborhoods[1/]

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Mean Area (Acres) in Perception of Neighborhood Boundaries	333.2 34.439	488.5 58.890	<.05	243.03 69.95	399.29 85.51	<.05	218.9 38.065	229.3 27.742	NS	206.02 35.06	239.09 34.12	NS	189.5 18.216	285.99 36.641	.05	191.0 29.34	289.50 28.69	NS
Proportion Stating Neighborhood Has a Name	.93 .033	.95 .025	NS	.865 .043	.864 .051	NS	.71 .047	.91 .035	<.01	.704 .046	.906 .046	<.01	.97 .018	.98 .016	NS	.974 .018	.975 .017	NS
Proportion Calling Neighborhood by Official Name	.813 .053	.890 .027	NS	.690 .070	.764 .080	NS	.731 .043	.899 .038	<.01	.753 .053	.896 .046	<.05	.949 .018	.976 .016	NS	.947 .022	.975 .021	NS

1/ One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized.

2/ Adjusted for age, sex and race.

3/ Adjusted for age and sex.

SOURCE: Household Survey.

C. Local Ties

Local neighborhood ties should be a prerequisite for the maintenance of informal social control. Ties of friendship, neighboring, voluntary association membership, and the like should provide the familiarity among residents that is necessary to distinguish between neighbors and strangers. Such ties may also provide the foundation upon which social cohesion is built. Local ties are measured in a variety of ways. Indirect measures include mean years at the current address, mean years in the neighborhood, whether the dwelling is owned or rented, percent currently married, percent with children, and mean number and age of children. These variables do not specifically measure social ties but rather reflect conditions under which ties are more or less likely to exist. Residential stability, home ownership, marriage, and children, particularly of school age, are all conducive to the establishment of local ties. Direct measures are frequency and variety of neighboring activities, use of local facilities, employment in the neighborhood, membership in voluntary associations that meet in the neighborhood, and friends or relatives living in the neighborhood. The frequency and variety of neighboring and the number of local friends and relatives are measured for the two block area around the respondent's home, in the area more than two blocks away but within neighborhood boundaries, and in the entire neighborhood.* The purpose of this was to find whether sub-areas of specific usage existed and were more pronounced in low crime than in high crime areas. The designation of two blocks within the respondent's home was felt to be a reasonable size within which daily social interaction and other neighborhood activities might be concentrated.

The evidence indicates (table 16) that low crime neighborhoods are more residentially stable than high crime neighborhoods, but these differences are diminished when age is controlled. Mean years at the current address, mean years in the neighborhood, and owner-occupancy are all greater in low than in high crime neighborhoods. The fact that there is a greater difference between Pittsburgh and Mechanicsville in average years in the neighborhood than there is in average years at the current address suggests that low income blacks, particularly in low crime neighborhoods, move frequently but tend to stay in the same neighborhood. When age is controlled, however, their are no significant differences in average years in the same neighborhood. Owner-occupancy is significant only in Virginia-Highland. Differences in average years at the same address were not substantially altered by controlling for age. Low crime neighborhoods tend to be more residentially stable than high crime neighborhoods, although this is in part a function of the higher average age of residents in

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*After the respondent was asked to draw a line around the area regarded as the neighborhood, the interviewers showed the respondent a map with the official neighborhood boundaries designated. The interviewer pointed out the name and location of boundary streets and suggested that this area would be referred to in subsequent questions about the neighborhood.

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/]

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Residential Stability																		
Mean Years at Current Address	4.5 .941	10.9 1.455	<.01	6.95 1.40	10.59 1.64	<.01	8.7 .876	13.5 1.06	<.01	9.83 1.03	12.58 1.0	<.05	8.7 1.147	11.4 1.295	NS	8.81 1.23	10.64 1.21	NS
Mean Years in Neighborhood	6.0 1.073	12.0 1.567	<.01	8.12 1.36	11.27 1.60	NS	10.9 1.098	15.4 1.223	<.01	11.85 1.18	14.78 1.14	NS	14.6 1.560	18.3 1.540	<.05	14.89 1.60	17.55 1.60	NS
Proportion Owner-Occupied	.24 .030	.64 .045	<.01	.221 .072	.532 .085	<.01	.49 .033	.54 .034	NS	.525 .051	.519 .050	NS	.19 .037	.31 .041	<.05	.192 .044	.292 .044	NS
Family Composition																		
Mean Number of Adults Aged 18+ in Household	1.67 .067	1.81 .076	NS	1.49 .110	1.59 .130	NS	2.03 .087	1.91 .082	NS	2.04 .088	1.97 .085	NS	2.17 .128	2.00 .093	NS	2.14 .112	2.04 .108	NS
Proportion Currently Married	.293 .045	.375 .053	NS	.191 .081	.214 .095	NS	.425 .050	.352 .046	NS	.436 .052	.333 .052	NS	.276 .054	.402 .051	<.05	.276 .051	.413 .050	NS
Proportion Who Have Children	.121 .034	.132 .036	NS	.087 .058	.105 .068	NS	.310 .050	.326 .047	NS	.268 .046	.300 .044	NS	.291 .047	.228 .042	NS	.251 .044	.221 .043	NS
Mean Number of Children	.157 .047	.224 .069	NS	.089 .094	.165 .110	NS	.540 .097	.739 .142	NS	.446 .116	.688 .114	NS	.709 .142	.543 .113	NS	.606 .124	.518 .121	NS
Mean Number of Children of Those Who Have Children	1.3 .153	1.7 .213	NS	.938 .378	1.38 .474	NS	1.74 .157	2.27 .253	<.01	1.69 .241	2.23 .273	NS	2.44 .283	2.38 .223	NS	2.36 .300	2.36 .287	NS
Proportion With Child 0-4 Years Old	.036 .021	.063 .027	.05	.049 .038	.092 .044	NS	.092 .031	.108 .032	NS	.072 .032	.109 .031	NS	.138 .037	.065 .026	<.01	.120 .030	.061 .030	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1] (continued)

	Unadjusted			Adjusted[2]			Unadjusted			Adjusted[3]			Unadjusted			Adjusted[3]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Proportion With Child 5-12 Years Old	.060 .026	.075 .030	NS	.019 .044	.032 .051	NS	.207 .044	.215 .043	NS	.179 .043	.203 .042	NS	.138 .037	.161 .038	NS	.112 .037	.164 .036	NS
Proportion With Child 13-17 Years Old	.036 .021	.038 .021	NS	.013 .033	.013 .039	NS	.092 .031	.140 .036	NS	.082 .034	.117 .034	NS	.138 .037	.075 .028	<.05	.118 .033	.066 .032	NS
Neighboring																		
Frequency of Neighboring Within 2 Blocks	6.95 .657	6.41 .549	NS	7.04 .94	7.0 1.12	NS	5.10 .514	5.20 .480	NS	5.02 .541	5.51 .522	NS	4.23 .530	5.78 .569	<.05	4.17 .551	5.95 .546	<.05
Frequency of Neighboring in Rest of Neighborhood	5.36 .571	3.60 .460	<.01	4.21 .738	2.69 .873	<.05	2.81 .321	2.48 .437	NS	2.68 .404	2.69 .392	NS	2.02 .349	2.48 .318	NS	2.05 .348	2.75 .341	NS
Frequency of Neighboring in Entire Neighborhood	12.28 .999	10.05 .884	<.05	11.26 1.40	9.7 1.67	NS	7.91 .776	7.78 .826	NS	7.70 .860	8.27 .833	NS	6.25 .739	8.17 .786	<.05	6.22 .783	8.59 .774	<.05
Variety of Neighboring Activities Within 2 Blocks	2.38 .177	2.56 .166	NS	2.41 .281	2.73 .331	NS	1.84 .148	1.86 .138	NS	1.78 .163	1.92 .157	NS	1.37 .149	1.68 .145	NS	1.35 .149	1.72 .148	NS
Variety of Neighboring Activities in Rest of Neighborhood	2.13 .201	1.69 .186	NS	1.60 .267	1.23 .316	NS	1.16 .123	.879 .124	NS	1.10 .136	.927 .131	NS	.736 .110	.892 .103	NS	.740 .117	.969 .115	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Variety of Neighboring Activities in Entire Neighborhood	4.49 .330	4.22 .316	NS	4.01 .469	3.93 .557	NS	3.01 .250	2.77 .222	NS	2.89 .269	2.87 .261	NS	2.10 .236	2.56 .217	NS	2.09 .235	2.67 .232	NS
Ratio of Frequency of Neighboring Within 2 Blocks to Total Neighboring	.525 .038	.553 .037	NS	.614 .061	.668 .072	NS	.545 .037	.606 .035	NS	.546 .042	.604 .041	NS	.509 .045	.60 .036	NS	.501 .044	.588 .043	NS
Ratio of Frequency of Neighboring Beyond 2 Blocks to Total Neighboring	.353 .034	.276 .032	NS	.284 .050	.211 .059	NS	.246 .026	.207 .030	NS	.230 .029	.208 .028	NS	.193 .031	.24 .027	NS	.195 .031	.247 .030	NS
Local Facility Use																		
Variety of Neighborhood Facilities Used	3.10 .212	2.49 .200	<.05	3.12 .290	2.62 .342	NS	2.51 .182	1.03 .155	<.01	2.45 .179	1.16 .167	<.01	1.85 .120	1.88 .157	NS	1.83 .138	1.97 .134	NS
Proportion With Main Place of Work in Neighborhood	.111 .031	.068 .030	NS	.032 .051	.000 .060	NS	.060 .030	.097 .031	NS	.061 .034	.102 .033	NS	.082 .036	.081 .036	NS	.082 .036	.081 .036	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Club Membership																		
Number of Organizations Belonged to	1.21 .126	1.13 .100	NS	1.37 .195	1.29 .230	NS	1.08 .083	1.40 .118	<.05	1.04 .110	1.34 .106	<.05	.908 .056	1.18 .088	<.05	.883 .075	1.18 .073	.01
Frequency of Attending Meetings of All Organizations Belonged to	2.25 .276	1.96 .224	NS	2.65 .446	2.41 .526	NS	2.59 .184	3.64 .286	<.01	2.61 .282	3.45 .272	<.05	2.12 .208	3.05 .224	<.01	2.07 .209	3.04 .202	.01
Number of Organizations Belonged to That Meet in Neighborhood	.296 .063	.218 .038	NS	.255 .091	.150 .107	NS	.410 .059	.500 .072	NS	.380 .074	.459 .071	NS	.417 .065	.484 .078	NS	.403 .072	.472 .069	NS
Ratio of Neighborhood Organization Membership to Total Organization Membership	.186 .041	.101 .021	<.05	.133 .053	.031 .063	<.05	.308 .048	.263 .034	NS	.286 .044	.234 .043	NS	.339 .053	.330 .049	NS	.335 .050	.318 .048	NS
Number of Children's Organizations	.096 .048	.147 .073	NS	.017 .092	.068 .109	NS	.310 .077	.457 .104	NS	.266 .092	.407 .090	NS	.372 .092	.411 .120	NS	.317 .109	.408 .108	NS
Number of Children's Organizations that Meet in Neighborhood	.017 .011	.013 .024	NS	.007 .024	.000 .028	NS	.184 .061	.163 .053	NS	.160 .057	.155 .056	NS	.174 .059	.205 .094	NS	.149 .080	.208 .080	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Ratio of Children's Neighborhood Organizations to Total Children's Organizations	.024 .017	.004 .004	NS	.009 .020	.000 .024	NS	.102 .032	.092 .028	NS	.085 .030	.090 .029	NS	.103 .027	.060 .024	NS	.092 .028	.063 .028	NS
Friends in Neighborhood																		
Mean Number of Good Friends Within in 2 Blocks	1.9 .273	2.2 .263	NS	1.72 .457	1.79 .054	NS	2.8 .448	4.2 .717	<.05	2.93 .650	4.51 .639	NS	3.4 .610	4.7 .707	NS	3.54 .643	4.82 .628	NS
Proportion With 3 or More Good Friends Within 2 Blocks	.36 .055	.34 .048	NS	.284 .083	.232 .097	NS	.28 .049	.25 .047	NS	.288 .049	.261 .048	NS	.23 .049	.35 .044	<.05	.233 .049	.364 .047	NS
Mean Number of Good Friends More Than 2 Blocks Away But Within Neighborhood	2.7 .380	3.1 .480	NS	1.72 .807	1.91 .948	NS	2.1 .383	3.1 .825	NS	2.20 .684	3.40 .664	NS	3.4 1.23	4.6 .841	NS	3.71 1.06	4.90 1.03	NS
Proportion With 3 or More Good Friends More Than 2 Blocks Away But Within Neighborhood	.27 .048	.34 .048	NS	.217 .079	.243 .093	NS	.33 .047	.40 .043	NS	.333 .053	.405 .051	NS	.36 .050	.49 .048	<.05	.370 .052	.505 .051	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Proportion With Greater Number of Good Friends Within 2 Blocks Than More Than 2 Blocks Away	.28 .050	.30 .053	NS	.387 .076	.428 .090	NS	.44 .054	.44 .049	NS	.442 .054	.441 .053	NS	.51 .054	.38 .054	<.05	.490 .052	.345 .050	<.05
Mean Number of Good Friends in Neighborhood	4.6 .546	5.3 .653	NS	3.43 1.12	3.71 1.31	NS	4.9 .747	7.3 1.433	NS	5.16 1.22	7.92 1.19	NS	6.7 1.719	9.3 1.374	NS	7.16 1.53	9.72 1.50	NS
Proportion With 3 or More Good Friends in Neighborhood	.53 .053	.51 .052	NS	.409 .086	.324 .101	NS	.56 .053	.52 .049	NS	.567 .055	.518 .054	NS	.53 .051	.57 .047	NS	.536 .054	.575 .053	NS
Proportion With Most or All of Good Friends in Neighborhood	.098 .032	.101 .036	NS	.049 .054	.030 .062	NS	.207 .040	.226 .047	NS	.215 .045	.219 .044	NS	.174 .045	.280 .046	NS	.180 .046	.266 .044	NS
Relatives in Neighborhood																		
Mean Number of Relatives Within 2 Blocks	.10 .024	.10 .025	NS	.027 .036	.032 .042	NS	.8 .205	1.01 .192	NS	.70 .203	1.10 .20	NS	1.00 .160	1.10 .195	NS	.958 .231	1.160 .225	NS
Proportion With 3 or More Relatives Within 2 Blocks	0.00 0.00	0.00 0.00	--	0.00 0.00	0.00 0.00	--	.09 .033	.13 .034	NS	.083 .035	.134 .034	NS	.14 .033	.14 .032	NS	.138 .037	.154 .036	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Mean Number of Relatives More Than 2 Blocks Away But Within Neighborhood	.05 .024	.06 .033	NS	.072 .045	.093 .053	NS	1.10 .273	1.50 .368	NS	1.01 .376	1.50 .369	NS	.793 .193	.804 .264	NS	.835 .229	.924 .224	NS
Proportion With 3 or More Relatives More Than 2 Blocks Away But Within Neighborhood	0.00 0.00	0.00 0.00	--	0.00 0.00	0.00 0.00	--	.14 .040	.17 .034	NS	.135 .040	.187 .039	NS	.08 .030	.09 .030	NS	.084 .030	.101 .029	NS
Proportion With Greater Number of Relatives Within 2 Blocks Than More Than 2 Blocks Away	.040 .020	.040 .022	NS	.025 .030	.029 .036	NS	.18 .046	.30 .052	.05	.169 .047	.307 .046	.05	.28 .045	.28 .046	NS	.261 .049	.277 .048	NS
Mean Number of Relatives in Neighborhood	.100 .038	.100 .045	NS	.099 .062	.125 .073	NS	1.8 .368	2.5 .451	NS	1.71 .449	2.60 .441	NS	1.8 230	1.9 .359	NS	1.79 .348	2.08 .341	NS
Proportion With Most or All of Relatives in Neighborhood	0.00 0.00	0.00 0.00	--	0.00 0.00	0.00 0.00	--	.105 .034	.043 .022	NS	.097 .028	.043 .027	NS	.080 026	.043 .022	NS	.085 .026	.052 .025	NS

(continued)

Table 16. Local Ties of Residents of High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	p	Lower Virginia Highland (High)	Upper Virginia Highland (Low)	p	Grove Park (High)	Dixie Hills (Low)	p	Grove Park (High)	Dixie Hills (Low)	p	Mechanicsville (High)	Pittsburgh (Low)	p	Mechanicsville (High)	Pittsburgh (Low)	p
	$\bar{x}$ $s_{\bar{x}}$	$\bar{x}$ $s_{\bar{x}}$		$\bar{x}$ $s_{\bar{x}}$	$\bar{x}$ $s_{\bar{x}}$		$\bar{x}$ $s_{\bar{x}}$	$\bar{x}$ $s_{\bar{x}}$		$\bar{x}$ $s_{\bar{x}}$	$\bar{x}$ $s_{\bar{x}}$		$\bar{x}$ $s_{\bar{x}}$	$\bar{x}$ $s_{\bar{x}}$		$\bar{x}$ $s_{\bar{x}}$	$\bar{x}$ $s_{\bar{x}}$	
Proportion With 3 or More Relatives in Neighborhood	0.00 0.00	0.00 0.00	--	0.00 0.00	0.00 0.00	--	.21 .049	.26 .043	NS	.202 .047	.270 .046	NS	.21 .043	.17 .037	NS	.208 .042	.193 .041	NS

[1/] One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized.

[2/] Adjusted for age, sex and race.

[3/] Adjusted for age and sex.

SOURCE: Household Survey.

low crime neighborhoods. It is also likely to be a reflection of differences in housing type. It was found earlier that low crime neighborhoods have a higher proportion of single-family residences.*

There are few systematic differences in family composition between high and low crime neighborhoods. There are no differences in the mean number of adults per household. Percent currently married and living with spouse is greater for the low crime neighborhood in only one pair; there are no significant differences when age is controlled. The percentages of respondents with children under age 18 who live at home are almost identical between matched neighborhoods. Few people in any of the study neighborhoods have children; the highest proportion is slightly under one-third. There are no significant differences in average number of children. Among those with children, there is only one pair with a significant difference in average number of children. There are few differences in the age composition of children. The low crime member of the Virginia-Highland pair has a slightly higher percentage of very young children than the high crime member; the opposite is true in the Mechanicsville/Pittsburgh pair. Mechanicsville (high crime) also has a higher percentage of teenagers than Pittsburgh (low crime). However, there are no significant differences in either the proportion with children or the age composition of children when age is controlled.

Neighboring was measured by two indices. One index reflects the frequency of neighboring. Respondents were asked how often they engaged in five different activities with neighbors: helping each other with repairs or other jobs in or around the house; eating meals together; borrowing or exchanging tools, recipes, and the like; visiting; and asking neighbors to watch children when the respondent is not at home. Frequency was measured on a five point scale: almost every day, about once a week, about once a month, less than once a month, and never. The rating for each frequency category was 5, 4, 3, 2, and 1, respectively. Respondents were also asked whether and how often they did each of the activities with people living within two blocks and with people living in the rest of the neighborhood. The frequency index varied between 0 and 25 (five activities each with a maximum score of 5) for neighboring within two blocks and neighboring in the rest of the neighborhood. The two indices were combined for an index of neighboring in the entire neighborhood. Its range was between 0 and 50. The second index measured variety of neighboring activities. The more activities engaged in, regardless of frequency, the higher the index. Its range was between 0 and 5 within two blocks, between 0 and 5 for the rest of the neighborhood, and between 0 and 10 for the entire neighborhood.

There are few significant differences in neighboring activities. The

*Few people live in rented single-family residences, since the proportion of respondents living in this type of housing is almost identical to the percentage of owner-occupancy, 45.7 percent and 40 percent, respectively.

average frequency index within two blocks does not differ significantly between high and low crime neighborhoods, with the exception of one pair. Frequency of neighboring in the rest of the neighborhood, while substantially lower than frequency within two blocks, also has little variation between matched pairs. The only exception is Virginia-Highland, but in this case, the index is higher in the high crime neighborhood. The index for the entire neighborhood is higher in the high crime neighborhood in one pair, equal in another pair, and lower in the high crime neighborhood in the third pair. Given that the maximum value of the index is 25 in the two sub-areas and 50 in the entire neighborhood, the mean neighboring frequency is low in all neighborhoods. There are no differences in the ratio of neighboring frequency in the two sub-areas to neighboring frequency in the entire neighborhood. Similarly, there are no significant differences in the variety of neighboring activities. The mean number of neighboring activities decreases beyond the two block area, but there are no significant differences in either of the sub-areas or the entire neighborhood.

Local facility use was measured by asking the respondent if he/she used any of a series of services potentially available in the neighborhood. These included: grocery stores, restaurants, church, physicians or other medical facilities, clothing stores, auto repair shops, parks or playgrounds, recreational centers, and up to three self-reported items. The respondent was asked whether he or she ever used each of these facilities, and if so, whether it was usually done inside or outside of the neighborhood. A composite score was calculated for each respondent by summing the total number of facilities usually used inside the neighborhood. The range for this index is 0 to 11. The unadjusted means indicate a low level of local facility use in all neighborhoods. In two out of three pairs, local facility use is higher in the high crime neighborhood; there is no significant difference in the third pair. The differences are reduced when sex and age were controlled. The data do not support the notion that local facility use is a source of social ties found in low crime neighborhoods.

Local facility use was also measured by the location of the respondent's workplace. Few respondents work in the neighborhood, and there are no significant differences between matched pairs.

Another source of social ties is organizational membership. Respondents were asked whether they belonged to a church group, PTA or other school association, a trade union or professional association, a political organization, a block or neighborhood association, or a social or recreational group. They were also asked how often they attended meetings of each organization - once a week or more, two or three times a month, once a month, a few times a year, or never - and whether the organization ever met in the neighborhood. Three indices were constructed. One measures the total number of organizations belonged to, the second measures the frequency of participation, and the third measures the number of organizations belonged to that meet in the neighborhood. The first and the third index have potential ranges from 0 to 6, since there

were six types of organizations. The second has a range from 0 to 24, since attendance in each of the six organizations once a week or more was given a weight of 4, two or three times a month had a weight of 3 and so on. A ratio of neighborhood organizations to total organizations belonged to was also calculated.

The respondents were also asked about children's organizational memberships. These included a church group, a school club, Little League or other sports club, scouts, fraternity or sorority, YMCA or YWCA, and other social or recreational groups. Respondents were also asked whether the groups children belonged to ever met in the neighborhood. Indices were constructed to measure the total number of organizations children in the household belonged to and the number organizations they belonged to that meet in the neighborhood. Each index has a range of 0 to 7.

The results indicate that number of organizations and frequency of attendance are significantly higher in two out of three low crime neighborhoods. These differences remain when age and sex are controlled. This does not hold true in Virginia-Highland, the white pair. Residents of black low crime neighborhoods appear to be more involved in voluntary associations than residents of black high crime neighborhoods, but these groups are not necessarily locally based. While the low crime member in each of the black pairs has somewhat greater local organizational membership than the high crime member, the differences are not significant. Similarly, there are no significant differences in the ratio of neighborhood to total organizations. Finally, there no are significant differences in any of the indices measuring children's organizational memberships.

The last series of measurements of local social ties concerns friends and relatives living in the neighborhood. Respondents were asked how many good friends lived within two blocks of their home and more than two blocks away but in the neighborhood. They were also asked how many out of all their good friends lived in the neighborhood - all, most, about half, only a few, or none. Both types of questions were asked in order to measure absolute numbers of friends in the neighborhood and the proportion of total friends. An analogous set of questions was asked about relatives.

Few of the measures of neighborhood friends distinguish between high and low crime neighborhoods. The mean number of good friends in the entire neighborhood and in both sub-areas is slightly and consistently higher in low crime neighborhoods. However, the only case where the differences are significant is the mean number of good friends within two blocks in Grove Park/Dixie Hills. There are no significant differences in the percentage of residents with most or all of good friends in the neighborhood. In only one pair is there a significant difference in the proportion with three or more good friends in each of the sub-areas. There is no evidence that residents of low crime neighborhoods have a greater number of friendships within two blocks of

their home than more than two blocks away. In general, residents of the black, low income neighborhoods have more local freidnships than do residents of the middle income neighborhoods.

Only one of the measures of relatives in the neighborhood differs significantly, and only in one pair. As might be expected, the proportion of respondents with nearby relatives is very low, although higher in the black than in the white neighborhoods. However, having relatives in the neighborhood is not, by and large, a distinguishing characteristic of low crime neighborhoods.

In general, the presence of local ties does not differentiate between high and low crime neighborhoods. Residential stability is the only factor that varies consistently between neighborhoods. This is related in part to the age differences in high and low crime neighborhoods. The greater stability of low crime neighborhoods, as measured by owner-occupancy and years at the current address and in the neighborhood, is also likely to be related to the higher percentage of single-family dwellings in these areas.

D. Social Cohesion

Three categories of variables were used to measure social cohesion - affective attachment to the neighborhood, perceived similarity with neighbors, and information exchange with neighbors. It is expected that residents of low crime neighborhoods will have greater affective attachment, a stronger sense of similarity with others in the neighborhood, and will engage in more information exchange with neighbors than residents of high crime neighborhoods. The results appear in table 17.

Attachment was measured in several ways: percent who are planning on moving within next two years; percent who would be sad about moving; percent who feel the neighborhood has become a better place to live in the last two years; percent who feel the neighborhood will be a better place to live in two years; percent who generally like living in the neighborhood; percent who consider the neighborhood as a real home, not just a place to live; percent who feel their neighborhood is one in which people help each other, rather than going their own way; and percent who feel that residents of the neighborhood have a lot to say about what goes on there, rather than not having much control. Feeling of control in the neighborhood was included as a measure of affective attachment rather than informal social control because it expresses perceptions rather than behavior. The measures of informal social control utilized in this study are more behaviorally oriented (see section E).

The unadjusted means indicate a greater amount of emotional attachment to the neighborhood among residents of low crime areas than among residents of high crime areas. A smaller proportion plan to move within the next two years, and a higher proportion feel that the neighborhood is a real home, that neighbors help one another, and that residents have some control. While the majority of respondents of all six neighborhoods stated they liked living

Table 17. Social Cohesion in High and Low Crime Neighborhoods[1/]

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Affective Attachment																		
Proportion Planning on Moving Within Next 2 Years	.372 .056	.241 .049	<.05	.618 .078	.583 .091	NS	.410 .048	.326 .034	NS	.385 .051	.363 .048	NS	.514 .053	.341 .045	<.01	.514 .049	.387 .045	<.05
Proportion Who Would Feel Sad About Moving	.634 .054	.775 .047	<.05	.521 .078	.634 .091	NS	.337 .050	.438 .043	NS	.358 .050	.400 .050	NS	.279 .049	.359 .049	NS	.290 .049	.343 .048	NS
Proportion Who Feel Neighborhood Has Gotten Better in Last 2 Years	.621 .059	.657 .052	NS	.461 .096	.498 .108	NS	.230 .047	.133 .038	NS	.246 .047	.151 .046	NS	.169 .045	.216 .048	NS	.179 .050	.210 .048	NS
Proportion Who Feel Neighborhood Will Be Better in Next 2 Years	.662 .055	.649 .055	NS	.578 .087	.579 .101	NS	.290 .052	.082 .032	<.01	.298 .046	.095 .043	<.01	.21 .048	.223 .056	NS	.208 .054	.232 .052	NS
Proportion Who Feel That Neighborhood is Real Home	.590 .043	.813 .045	<.01	.433 .074	.593 .088	NS	.553 .049	.717 .044	01	.570 .049	.675 .047	NS	.448 .053	.656 .048	<.01	.457 .050	.631 .049	<.01
Proportion Who Feel People in Neighborhood Help One Another	.407 .058	.713 .048	.01	.360 .083	.640 .097	.01	.500 .047	.656 .045	.01	.517 .054	.639 .052	NS	.506 .057	.615 .056	NS	.504 .055	.613 .053	NS

(continued)

Table 17. Social Cohesion in High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Proportion Who Feel That Residents Have Control Over What Goes on In Neighborhood	.420 .053	.684 .051	<.01	.303 .081	.576 .095	<.01	.333 .041	.427 .056	NS	.360 .055	.416 .053	NS	.259 .044	.389 .058	<.05	.245 .051	.385 .050	NS
Proportion Who Like Neighborhood	.795 .047	.988 .013	<.01	.706 .051	.876 .061	<.01	.644 .045	.731 .042	NS	.664 .048	.694 .047	NS	.529 .049	.761 .042	<.01	.537 .046	.735 .045	<.01
Perceived Similarities	5.33 .379	6.78 .370	<.01	4.71 .590	5.83 .717	NS	3.29 .439	4.24 .594	NS	3.28 .706	4.11 .487	NS	2.04 .469	2.65 .487	NS	2.14 .487	2.34 .471	NS
Proportion Stating That Most People in Neighborhood are Similar to Respondent	.364 .060	.493 .059	NS	.335 .089	.459 .105	NS	.432 .056	.413 .055	NS	.443 .057	.392 .056	NS	.205 .050	.378 .056	<.05	.218 .052	.371 .050	<.05
Information Exchange																		
Proportion Who Read Neighborhood Newsletter	.929 .035	.931 .031	NS	.855 .067	.835 .072	NS	N/A[4/] --	N/A[4/] --	--	N/A[4/] --	N/A[4/] --	--	N/A[4/] --	N/A[4/] --	--	N/A[4/] --	N/A[4/] --	--
Information Exchange With Neighbors	6.46 .581	5.62 .573	NS	7.50 .843	7.24 1.00	NS	4.83 .539	5.15 .489	NS	4.61 .572	5.18 .547	NS	4.88 .469	6.12 .493	<.05	4.79 .549	6.22 .534	<.05

[1/] One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized.

[2/] Adjusted for age, sex and race.

[3/] Adjusted for age and sex.

[4/] Too few cases to calculate t statistic.

SOURCE: Household Survey.

there, the proportions were higher in low crime neighborhoods. There were no significant differences in the proportions stating the neighborhood had gotten better in the last two years or was expected to improve in the next two years. In general, the level of attachment was highest in the white middle income pair and lowest in the black low income pair. This appears to be a rational reaction to differences in objective living conditions, i.e., housing, quality of services, and the like. However, within matched pairs, residents of low crime areas evidence greater attachment.

The adjusted means suggest that some of these differences are explained by the age composition of low and high crime neighborhoods. Residents of high crime neighborhoods tend to be younger and less residentially stable. They may therefore be less attached to the neighborhood. When age is controlled, the differences between high and low crime neighborhoods diminish. The differences, nevertheless, remain in the expected direction and some are significant.

Perceived similarity with neighbors was measured by asking respondents whether most of the other adults in the area were similar to him/her in age, education, income, child-rearing practices, and maintenance of the house and yard. This series was followed by a question about general perceived similarity with most adults in the neighborhood. The five specific items were combined in an index. A response of "similar" was given a weight of 2, "fifty-fifty" was weighted as 1, and "different" received a weight of 0. The range of the index was 0 to 10. The differences were all in the expected direction, although significance was achieved in only one case. There were no significant differences when age and sex were controlled. The index was lowest in the low income black pair and highest in the middle income white pair. The general measure of perceived similarity varied in the expected direction in two out of three pairs and was significant in one.

Information exchange was measured by the percent who read neighborhood newsletters and an index of information exchange. The index was constructed from questions on how often respondents found about the following things by talking to one another: where to look for a house or apartment, shopping sales, jobs, services such as health care and day care, neighborhood activities such as block parties, unsafe areas in the neighborhood, and who the local troublemakers are. For each of the seven items, "often," "sometimes," "rarely," and "never" received weights of 3, 2, 1, and 0, respectively. The index had a range of 0 to 21.

The index of information exchange did not consistently differ between low and high crime neighborhoods. The difference was in the expected direction only in Pittsburgh/Mechanicsville; there was no significant difference in Dixie Hills/Grove Park, and the difference was opposite to the expected directions in Virginia-Highland. Percent reading neighborhood newsletters was not a good indicator of information exchange, since only Virginia-Highland appeared

to have a regularly published paper. Virtually all respondents read it, and there was no difference between the upper and lower half of the neighborhood. This question was not applicable to the other neighborhoods.

The only measure of cohesion that varied consistently between high and low crime neighborhoods was affective attachment. This was partially explained by age differences between neighborhoods. However, differences that remain probably do not account for differences in crime levels. They may, in fact, be a result of living in a high or low crime neighborhood. The greater affective attachment in low crime neighborhods may also be a function of other characteristics of these neighborhoods, such as more home ownership and residential stability and fewer multi-family dwellings. This interpretation is consistent with the relative lack of importance of information exchange and most measures of local ties in distinguishing between high and low crime neighborhoods.

E. Informal Social Control

Informal social control was measured by three sets of variables - movement governing rules, informal surveillance, and direct intervention. The results appear in table 18.

Movement governing rules refer to the practice of avoiding certain areas because they are viewed as unsafe or threatening. Such rules imply familiarity with the neighborhood and are therefore a potential indicator of informal territorial control. Knowing where it is safe to venture and where it is not may be one way to limit the amount of crime in an area. The presence of these rules is expected to be a characteristic of relatively safe neighborhoods. Respondents were asked whether there were certain areas within two blocks of home and in the rest of the neighborhood that they avoided because they believed them to be dangerous. They were also asked whether each of seven locations was avoided: sidewalks in front of the house, a nearby street corner, a nearby park, a nearby shopping center, a public housing project, an apartment complex, or some other location in the neighborhood.

The results suggest that a slightly higher percentage of residents of high crime areas avoid areas within two blocks of home, in the rest of the neighborhood, and in both sub-areas than do residents of low crime areas. The differences are usually not significant but tend to be consistently higher in high crime areas. This pattern is also found for the total number of areas avoided. There is a tendency for residents of high crime neighborhoods to avoid more neighborhood areas, although when age and sex are controlled, the differences are significant only in Virginia-Highland. Of areas avoided in the entire neighborhood, residents of high crime neighborhoods avoid a slightly higher proportion within two blocks of home than do residents of low crime neighborhoods. This suggests that those living in low crime neighborhoods may feel somewhat more secure in the area immediately surrounding their home. In general, movement governing rules appear to be a response to objectively higher crime levels rather than a strategy for maintaining safety.

Table 18. Informal Social Control in High and Low Crime Neighborhoods[1/]

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Movement Governing Rules																		
Proportion of Respondents Avoiding Areas Within 2 Blocks of Home	.451 .055	.113 .036	<.01	.410 .073	.074 .086	<.01	.407 .055	.393 .052	NS	.382 .054	.366 .053	NS	.321 .051	.241 .046	NS	.315 .050	.242 .049	NS
Proportion of Respondents Avoiding Areas 2 or More Blocks Away But Within Neighborhood	.475 .056	.430 .056	NS	.261 .087	.190 .101	NS	.481 .057	.476 .055	NS	.468 .057	.472 .055	NS	.378 .057	.305 .051	NS	.386 .057	.312 .053	NS
Proportion of Respondents Avoiding Areas in Entire Neighborhood	.238 .048	.038 .022	<.01	.175 .061	.000 .071	<.01	.273 .051	.241 .047	NS	.254 .049	.227 .048	NS	.189 .046	.089 .032	<.01	.176 .041	.083 .039	NS
Number of Areas Avoided Within 2 Blocks of Home	1.10 .185	.139 .052	<.01	.819 .212	.000 .247	<.01	1.10 .184	.966 .161	NS	1.06 .178	.910 .176	NS	1.03 .204	.634 .126	<.05	1.01 .178	.664 .174	NS
Number of Areas Avoided in Rest of Neighborhood	1.00 .151	.689 .122	NS	.497 .208	.049 .247	<.05	1.27 .167	1.20 .186	NS	1.19 .195	1.20 .188	NS	.884 .172	.596 .131	NS	.876 .170	.622 .168	NS

(continued)

Table 18. Informal Social Control in High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Number of Areas Avoided in Entire Neighborhood	2.09 .298	.842 .127	<.01	1.33 .354	.000 .414	<.01	2.34 .307	2.20 .306	NS	2.21 .318	2.16 .311	NS	1.93 .342	1.22 .231	<.05	1.90 .302	1.28 .300	NS
Proportion of All Avoided Areas Within 2 Blocks of Home	.318 .047	.090 .033	<.01	.283 .064	.054 .075	<.01	.256 .042	.239 .035	NS	.246 .041	.221 .040	NS	.227 .041	.174 .036	NS	.225 .040	.181 .040	NS
Informal Surveillance																		
Proportion Who Usually Have Someone at Home During the Day	.447 .056	.532 .056	NS	.293 .089	.290 .102	NS	.554 .053	.761 .046	<.01	.567 .051	.760 .050	<.01	.690 .045	.688 .047	NS	.681 .049	.670 .048	NS
Proportion Who Usually Have Someone at Home During Weeknights	.785 .046	.913 .033	<.01	.780 .061	.881 .072	NS	.747 .042	.924 .029	<.01	.758 .040	.913 .038	<.01	.839 .040	.849 .037	NS	.830 .038	.834 .037	NS
Proportion Who Spend Time Outside Around the House Everyday	.300 .051	.350 .050	NS	.210 .082	.222 .096	NS	.368 .049	.430 .050	NS	.389 .054	.434 .052	NS	.586 .049	.484 .060	NS	.590 .055	.485 .053	NS
Proportion Who Say It Is Easy to Tell a Stranger Within 2 Blocks of Home	.312 .057	.413 .055	NS	.323 .086	.460 .100	NS	.64 .057	.747 .040	NS	.635 .054	.750 .051	NS	.728 .046	.663 .053	NS	.730 .053	.666 .051	NS

(continued)

Table 18. Informal Social Control in High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Proportion Who Say It Is Easy to Tell a Stranger in Rest of Neighborhood	.091 .035	.089 .028	NS	.116 .050	.142 .059	NS	.105 .033	.152 .041	NS	.103 .040	.155 .040	NS	.247 .048	.193 .046	NS	.257 .048	.206 .046	NS
Proportion Who Say It is Easy to Tell a Stranger in the Entire Neighborhood	.092 .035	.089 .028	NS	.128 .052	.154 .061	NS	.095 .036	.154 .042	NS	.093 .041	.153 .040	NS	.240 .047	.195 .047	NS	.250 .048	.197 .046	NS
Proportion Who Watch for Suspicious Looking People Within 2 Blocks of Home	.512 .046	.377 .049	<.05	.498 .085	.321 .101	NS	.750 .041	.725 .050	NS	.749 .049	.706 .047	NS	.765 .047	.692 .053	NS	.755 .049	.686 .048	NS
Proportion Who Watch for Suspicious Looking People in Rest of Neighborhood	.444 .053	.364 .057	NS	.475 .086	.386 .102	NS	.671 .053	.575 .048	NS	.687 .055	.559 .053	NS	.622 .052	.560 .050	NS	.607 .055	.555 .053	NS
Proportion Who Watch for Suspicious People in Entire Neighborhood	.420 .050	.273 .050	<.05	.437 .082	.264 .097	NS	.642 .051	.570 .050	NS	.668 .056	.551 .054	NS	.610 .051	.544 .049	NS	.595 .055	.535 .053	NS

(continued)

Table 18. Informal Social Control in High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Proportion Who Walk Around Neighborhood More than Once a Week	.707 .052	.538 .052	<.05	.691 .080	.551 .094	NS	.322 .054	.280 .050	NS	.303 .048	.322 .047	NS	.678 .051	.570 .052	NS	.676 .052	.600 .050	NS
Proportion Who Look for Suspicious People or Activities on Neighborhood Walks	.432 .059	.366 .062	NS	.499 .085	.414 .102	NS	.698 .063	.689 .059	NS	.735 .064	.679 .060	NS	.735 .051	.757 .051	NS	.728 .054	.749 .054	NS
Proportion of Those Who Walk Around Neighborhood More Than Once a Week Who Look for Suspicious People or Activities	.311 .057	.211 .050	NS	.319 .077	.200 .092	NS	.321 .069	.295 .062	NS	.335 .067	.305 .063	NS	.618 .056	.543 .060	NS	.611 .061	.550 .061	NS
Direct Intervention																		
Attitude Toward Intervention to Help Neighbors	3.22 .076	3.45 .068	<.05	3.27 .109	3.45 .128	NS	3.31 .089	3.48 .069	NS	3.32 .086	3.48 .089	NS	3.61 .063	3.36 .075	<.01	3.64 .084	3.37 .077	<.05
Index of Neighborhood Problems	10.73 .722	5.17 .360	<.01	11.30 .939	6.19 1.10	<.01	8.61 .609	7.14 .717	NS	8.25 .711	7.46 .654	NS	9.49 .683	8.41 .692	NS	9.45 .734	8.63 .706	NS

(continued)

Table 18. Informal Social Control in High and Low Crime Neighborhoods[1] (continued)

	Unadjusted			Adjusted[2]			Unadjusted			Adjusted[3]			Unadjusted			Adjusted[3]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Index of Big Neighborhood Problems	3.23 .384	1.16 .110	<.01	3.48 .428	1.47 .503	<.01	2.80 .227	2.61 .310	NS	2.70 .300	2.67 .276	NS	3.44 .311	3.02 .316	NS	3.37 .334	3.04 .321	NS
Proportion of Big Problems for Which Dealt With Person Responsible	.113 .026	.108 .044	NS	.078 .051	.062 .061	NS	.074 .022	.054 .016	NS	.065 .020	.053 .018	NS	.090 .019	.106 .023	NS	.087 .022	.109 .021	NS
Proportion of Big Problems for Which Get Together With Neighbors	.097 .029	.092 .035	NS	.053 .045	.027 .054	NS	.075 .026	.051 .017	NS	.076 .022	.041 .021	NS	.084 .032	.099 .022	NS	.073 .028	.087 .027	NS
Proportion of Big Problems for Which Called the Police	.099 .022	.063 .027	NS	.123 .032	.090 .039	NS	.043 .016	.024 .011	NS	.041 .014	.023 .088	NS	.026 .009	.028 .012	NS	.027 .011	.030 .011	NS
Proportion of Big Problems For Which Called City Councilman or City Agency	.040 .023	.032 .020	NS	.031 .028	.001 .034	NS	.043 .016	.025 .012	NS	.045 .015	.019 .014	NS	.025 .011	.007 .004	NS	.027 .008	.009 .008	NS
Proportion of Big Problems For Which Took Some Direct Action	.451 .102	.279 .101	NS	.338 .136	.108 .162	NS	.278 .064	.192 .041	NS	.272 .056	.173 .052	NS	.241 .048	.300 .055	NS	.227 .052	.287 .051	NS

(continued)

Table 18. Informal Social Control in High and Low Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Number of Disturbances Seen or Heard in Neighborhood in Last Year	2.50 .183	1.67 .118	<.01	2.59 .222	1.87 .263	<.01	2.91 .143	2.49 .148	<.05	2.81 .178	2.55 .159	NS	2.92 .198	2.93 .166	NS	2.97 .172	3.03 .162	NS
Proportion of Disturbances for Which Called a Neighbor	.157 .033	.042 .020	<.01	.158 .043	.051 .050	<.01	.073 .020	.080 .023	NS	.073 .024	.086 .022	NS	.092 .022	.090 .023	NS	.094 .024	.093 .022	NS
Proportion of Disturbances for Which Called the Police	.159 .032	.064 .023	<.05	.154 .042	.075 .050	NS	.051 .020	.039 .022	NS	.049 .023	.040 .022	NS	.061 .021	.087 .022	NS	.058 .023	.087 .021	NS
Proportion of Disturbances for Which Took Some Direct Action	.458 .072	.221 .061	<.05	.395 .100	.184 .118	<.05	.330 .054	.218 .042	NS	.302 .050	.249 .048	NS	.250 .050	.353 .060	NS	.256 .058	.370 .055	NS

[1/] One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized.

[2/] Adjusted for age, sex and race.

[3/] Adjusted for age and sex.

SOURCE: Household survey.

This appears to be the case for a number of measures of informal surveillance, as well. Several forms of informal surveillance were measured. The most passive form was the extent to which residents spent time in and around the house, providing an opportunity to observe activities on the street. Respondents were asked whether someone in the household was usually at home during weekdays, whether someone was usually at home on weeknights, and how often he/she spent time sitting on the porch, working in the yard, or the like. There were no differences in time spent outside the house. The low crime neighborhood had a higher proportion of households with someone at home during the daytime and evening in only one pair, Grove Park/Dixie Hills. A similar pattern is found in Virginia-Highland, but appears to be explained by the younger average age in Lower Virginia-Highland.

In two out of three pairs, a higher proportion of residents in low crime neighborhoods than in high crime neighborhoods were able to tell strangers from residents within two blocks of home, in the rest of the neighborhood, and in both sub-areas. However, the differences were not significant. In general, a higher proportion of respondents were able to tell strangers from residents within two blocks than in the rest of the neighborhood.

The most active form of informal surveillance is watching out for suspicious looking people or activities in the neighborhod. Respondents were asked if they made a habit of watching out for suspicious people within two blocks of home and in the rest of the neighborhood. They were also asked how often they walked around the neighborhood and whether they made a point of looking out for suspicious people or activities on these walks. A higher proportion of residents engaged in this form of surveillance in high crime than in low crime neighborhoods. The differences were usually not significant, but there was a trend in this direction. Thus, active surveillance, similar to movement governing rules, did not seem to inhibit crime but rather appeared to be an attempt to protect oneself in a high crime area.

The third type of informal social control is intervention. Both expected and actual intervention were measured. The former was measured by asking respondents whether they agreed or disagreed that neighbors should scold neighborhood children for fighting, keep an eye out for suspicious people or events, call the police if a neighbor's house is being vandalized, and use physical force to assist a neighbor who is being mugged. It could be argued that expectations for personal intervention should be higher in low crime than in high crime neighborhoods, that crime is allowed to flourish in the latter because of the residents' passivity. These expectations were not substantiated by the evidence. An index of expected intervention was developed which ranged from 0 to 4 (1 for each of four types of expected intervention). On average, residents of all neighborhoods thought their neighbors should intervene in more than three out of four situations. However, the means were not significantly higher in low crime areas after age and sex were controlled, and in one case, were significantly higher in the high crime area.

Two other measures of intervention concern direct action in dealing with neighborhood problems. Respondents were asked about two types of problems, those that relate to the quality of the neighborhood environment and those that are more directly connected to crime. The first reflects signs of disorder or cues that norms governing public behavior are disintegrating. Hunter (1978) has dubbed these environmental conditions as "incivilities." Skogan and Maxfield (1980) suggest that signs of disorder play as much a role in fear of crime as does actual crime. Respondents were asked whether each of the following was a big problem, somewhat of a problem, or not a problem in their neighborhood:

a. Noisy neighbors; people who play loud music, have late parties, or have noisy quarrels

b. Dogs barking loudly or being a nuisance

c. People not disposing of garbage properly or leaving litter around the area

d. Poor care of property and lawns

e. Peole who say insulting things or bother people as they walk down the street

f. Landlords who don't care about what happens to the neighborhood

g. Purse snatching and other street crimes

h. Presence of drugs and drug users

i. Abandoned houses or other empty buildings

j. Vacant lots with trash and junk

k. People damaging the cars or property of others

l. People drunk in public places like streets or playgrounds

m. Teenagers hanging out on corners or near stores

n. Prostitutes walking the streets or standing on corners

o. Adult movie theaters or adult bookstores

p. Any other big problems

They were then asked whether any of the following direct actions were taken to deal with each of the big problems: dealt directly with the person responsible,

got together with neighbors, called the police, called their city councilman or a city agency, or took some other direct action.

Two indices were developed to measure the extent of perceived signs of disorder. One was an index of total problems. Big problems were given a weight of 2, somewhat a problem was given a weight of 1; the index varied between 0 and 32. The other was an index of big problems. Big problems were given a weight of 1; the index varied between 0 and 16. The only case in which the indices were significantly higher in high crime neighborhoods was Virginia-Highland. In general, relatively few of the problems were believed to be big, and only about half were perceived to be somewhat of a problem or a big problem. These perceptions did not, for the most part, vary according to neighborhood crime levels.

Approximately one-quarter of the respondents took some form of direct action to deal with big problems. The most common was to deal directly with the person responsible for the problem - landlords, troublesome neighbors, or the like - or getting together with neighbors. The least common were calling the police or a city agency. Thus, to the extent that big problems were addressed at all, they seemed to be handled within the neighborhood. There were no significant differences between matched neighborhoods in specific types of action taken. There was some tendency for residents of high crime neighborhoods to take direct action for a greater proportion of big problems.

The second type of neighborhood problem was more directly related to actual crime. Respondents were asked if they had seen or heard any of the following disturbances in their neighborhood in the last year:

a. Young people using foul language in the streets

b. Young people destroying property

c. Young people fighting

d. Suspicious people hanging around

e. Someone trying to break into a house or car

f. A mugging or purse snatching

g. Any other kind of trouble

They were also asked whether and what form of direct action was taken when they saw or heard the disturbance.

In two out of three pairs, a greater number of disturbances were seen or heard in the high crime than in the low crime neighborhoods, although only one

difference was significant when age and sex were controlled. In this case, Virginia-Highland, the proportion of disturbances for which direct action was taken was greater in the high crime member of the pair. There were no significant differences in direct action in the other pairs.

The evidence suggests that informal social control, as it is measured in this study, is not more prevalent in low crime areas. Where differences exist, movement governing rules, informal surveillance, and intervention are more characteristic of high crime neighborhoods. These behaviors appear to be a reaction to prevailing crime, not a means of inhibiting it.

In general, most measures of diminsions of territoriality did not distinguish between high and low crime neighborhoods. Low crime neighborhoods were found to be more stable than high crime neighborhoods, but these differences were associated with differences in age and housing characteristics. With the exception of stability, there were few significant differences in spatial identity, local ties, social cohesion, and social control. Social control, in fact, appeared to be more characteristic of high crime than of low crime neighborhoods.

VI. REACTIONS TO CRIME IN HIGH AND LOW CRIME NEIGHBORHOODS

The previous analysis suggests that certain types of informal social control are more characteristic of high crime than of low crime neighborhoods. This appears to be a response to increased danger rather than a means of maintaining safety. It is therefore expected that perceptions and fear of crime should be greater in dangerous areas. Studies have found that perceptions of the seriousness of crime and fear of victimization are positively related to the actual reported crime rate in the neighborhood (McPherson, 1978; Furstenberg, 1971). Several types of crime reactions are measured in the present study: assessment of the amount of crime in the neighborhood; amount of crime in the neighborhood compared to adjacent neighborhoods and the entire city; source of information about neighborhood crime; fearfulness in the neighborhood; worry about being the victim of specific crimes; avoidance behavior; and protection activities. The comparison of differences in crime reactions between matched neighborhoods appears in table 19.

A. Sources of Information About Neighborhood Crime

Reactions to crime are often stimulated by receiving information about it in the mass media, through neighbors, or simply by personal observation. Respondents were asked whether they received a great deal, some, or no information about crime in their neighborhood from neighborhood newsletters, conversations with neighbors, "just keeping your eyes and ears open," or newspapers, radio, or T.V. For each of these four sources, a weight of two was given for "a great deal" of information, a weight of one was given for "some" information, and a weight of zero was given for no information. A ratio was then calculated for the individual, neighborhood sources (either a newsletter or neighbors), and the mass media as the source of neighborhood crime information compared to total sources. There were no significant differences among any of the pairs in the source of information. In all cases, the mass media was the most important source of information about neighborhood crime.

B. Assessment of Severity of Neighborhood Crime

Respondents were asked how much crime there was within two blocks of home and in the rest of the neighborhood: a lot, some, only a little, or none. These assessments were, by and large, consistent with neighborhood reported crime levels. A higher proportion of respondents in low crime neighborhoods stated there was little or no crime. The differences were in the expected direction and in the unadjusted proportions were significant in almost every case. Adjustment for sex and age diminished the differences, but the assessment of crime remained consistent with objective levels. It is interesting to note that respondents in all neighborhoods believed there was less crime within two blocks of home than in the rest of the neighborhood. Areas of greatest familiarity may seem less dangerous than those in more remote parts of the neighborhood.

Table 19. Reactions to Crime in Low and High Crime Neighborhoods[1/]

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Sources of Information About Neighborhood Crime																		
Self as Source of Crime Information in Ratio to Total Sources of Crime Information	.245 .017	.219 .017	NS	.273 .027	.255 .032	NS	.318 .018	.335 .018	NS	.322 .019	.341 .018	NS	.352 .013	.338 .010	NS	.353 .012	.337 .012	NS
Neighborhood as Source of Crime Information in Ratio To Total Sources of Crime Information	.351 .025	.378 .025	NS	.332 .037	.366 .044	NS	.206 .018	.242 .016	NS	.204 .020	.245 .019	NS	.234 .016	.230 .017	NS	.231 .018	.237 .017	NS
Mass Media as Source of Crime Information as Ratio to Total Sources of Crime Information	.380 .024	.404 .026	NS	.381 .038	.393 .044	NS	.441 .025	.424 .017	NS	.449 .023	.417 .021	NS	.414 .016	.432 .017	NS	.416 .017	.426 .017	NS

(continued)

Table 19. Reactions to Crime in Low and High Crime Neighborhoods[1/] (continued)

	Unadjusted			Adjusted[2/]			Unadjusted			Adjusted[3/]			Unadjusted			Adjusted[3/]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Assessment of Severity of Neighborhood Crime																		
Proportion Who Say There is Only a Little or No Crime Within 2 Blocks of Home	.545 .066	.743 .037	<.01	.353 .080	.634 .096	<.01	.657 .048	.541 .049	<.05	.685 .056	.517 .056	<.05	.545 .066	.662 .049	NS	.540 .060	.650 .059	NS
Proportion Who Say There is Only a Little or No Crime in Rest or Neighborhood	.186 .063	.353 .054	<.05	.201 .096	.345 .110	NS	.200 .044	.350 .064	<.05	.222 .071	.354 .062	NS	.186 .063	.366 .070	<.05	.191 .068	.361 .070	NS
Proportion Who Say There is Only a Little or No Crime in Entire Neighborhood	.167 .049	.328 .056	<.05	.108 .093	.251 .106	NS	.163 .049	.255 .058	NS	.198 .064	.253 .057	NS	.150 .059	.263 .071	NS	.156 .064	.256 .066	NS
Proportion Who Say Neighborhood Crime is Committed Mostly by People Who Live Outside	.574 .062	.841 .050	<.01	.490 .080	.704 .096	<.05	.355 .056	.500 .060	.05	.359 .064	.487 .062	NS	.394 .060	.420 .063	NS	.391 .059	.428 .061	NS

(continued)

Table 19. Reactions to Crime in Low and High Crime Neighborhoods[1] (continued)

	Unadjusted			Adjusted[2]			Unadjusted			Adjusted[3]			Unadjusted			Adjusted[3]		
	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Lower Virginia Highland (High) $\bar{x}$ $s_{\bar{x}}$	Upper Virginia Highland (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Grove Park (High) $\bar{x}$ $s_{\bar{x}}$	Dixie Hills (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p	Mechanicsville (High) $\bar{x}$ $s_{\bar{x}}$	Pittsburgh (Low) $\bar{x}$ $s_{\bar{x}}$	p
Proportion Who Say Border Neighborhoods Are Less Safe	.778 .049	.957 .024	<.01	.636 .062	.789 .072	NS	.700 .071	.558 .064	NS	.671 .079	.546 .069	NS	.455 .067	.481 .061	NS	.451 .078	.484 .069	NS
Proportion Who Say Neighborhood is Safer Than Rest of Atlanta	.487 .062	.718 .051	<.01	.428 .087	.626 .102	<.05	.341 .046	.461 .047	<.05	.343 .055	.465 .053	NS	.198 .046	.270 .047	NS	.193 .048	.264 .046	NS
Fear of Neighborhood Crime																		
Fear of Neighborhood Crime Index	2.39 .156	2.14 .176	NS	2.29 .246	2.02 .296	NS	2.94 .182	3.06 .159	NS	2.80 .167	3.02 .165	NS	3.39 .178	3.22 .136	NS	3.35 .167	3.18 .163	NS
Worry Over Crime Index	4.71 .393	3.89 .312	NS	4.03 .557	3.05 .659	NS	6.26 .507	5.81 .462	NS	5.59 .474	5.80 .465	NS	6.95 .543	6.32 .566	NS	6.75 .526	6.25 .515	NS
Avoidance and Protection Against Neighborhood Crime																		
Avoidance Index	.506 .087	.494 .076	NS	.508 .122	.433 .145	NS	1.23 .090	1.05 .092	NS	1.19 .104	.963 .100	NS	1.21 .108	1.23 .104	NS	1.14 .09	1.12 .087	NS
Protection Index	2.96 .193	3.04 .159	NS	2.75 .302	2.74 .355	NS	3.01 .174	3.73 .183	.01	3.04 .205	3.74 .200	.05	2.37 .172	2.7 .166	NS	2.40 .173	2.74 .168	NS

[1] One-tailed rather than two-tailed tests of significance were used since directionality in proportionate differences was hypothesized

[2] Adjusted for age, sex and race.

[3] Adjusted for age and sex.

SOURCE: Household Survey.

A higher proportion of residents of low crime than of high crime neighborhoods felt that their neighborhood was safer than the rest of the city. Residents of low crime neighborhoods were also more likely to believe that crimes in the neighborhood were committed mostly by outsiders, although once again, these differences were diminished when sex and age were controlled. While residents of low crime neighborhoods tended to feel that most crime was committed by outsiders, there was no sense of threat from the immediately surrounding area. When age and sex were controlled, there were no significant differences between residents of matched neighborhoods in the proportion feeling that border neighborhoods were less safe.

It might be argued that recent events in Atlanta have heightened awareness and fear of crime. A number of the kidnappings and murders of black children had already taken place when the survey was conducted.* However, the national media coverage and local reaction to the problem (request for Federal assistance in conducting investigations, marches to protest the murders, week-end searches for evidence by neighborhood residents, etc.) was not extensive before or during the field work. That these events were not very salient in the minds of respondents is suggested by the fact that only 12 mentioned kidnapping as one of the crimes taking place within two blocks of home, and 19 mentioned it as one of the crimes in the rest of the neighborhood. When asked what crimes, if any, had increased in the neighborhood over the past two years, kidnapping was mentioned only twice. While this crime probably would not have even been thought of a year ago, recent events appear to have had only a minor impact on people's perceptions of the types of crimes that are most problematic in their neighborhood. Burglary was by far the most frequent response for crimes within two blocks, in the rest of the neighborhood, and increasing in the neighborhood.

C. Fear of Neighborhood Crime

There were two measures of fear of neighborhood crime. One measure taps a sense of threat or lack of security. The second measures worry about being the victim of a specific crime. The first measure was constructed by asking respondents whether each of the following statements was mostly true or mostly false:

a. I'm often a little worried about being the victim of a crime in my neighborhood.

b. I would probably be afraid if a stranger stopped me at night in my neighborhood to ask for directions.

c. I'm not as afraid for my own safety as I am for my family and friends in this neighborhood.

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*Most of the interviews were obtained in August and September 1980.

d. When I have to be away from home for a long time, I worry that someone might try to break in.

e. When I hear footsteps behind me at night in my neighborhood, it makes me feel uneasy.

A fear index was calculated by giving a weight of one to each response of "mostly true." The index had a potential range of 0 to 5.

The worry index focused on specific fear rather than the vague concerns expressed in the fear measure. Respondents were asked whether they were very worried, somewhat worried, just a little worried, or not at all worried about: their home being broken into when no one was at home, being held up on the street or beaten up within two blocks of home and in the rest of the neighborhood, and other household members being held up, or beaten up within two blocks of home and in the rest of the neighborhood. "Very worried," "somewhat worried," "just a little worried," and "not at all worried" were given weights of 3, 2, 1, and 0, respectively. The index ranged from 0 to 15.

There were no significant differences between members of any of the matched pairs in either the fear or the worry index. Residents of black neighborhoods tended to be more fearful and worried about crime than residents of white neighborhoods, but there were no significant differences between high and low crime neighborhoods. Residents were able to accurately assess the amount of crime in their neighborhood, but this perception evidently was not translated into significantly greater fear or worry.

D. Avoidance of and Protection Against Neighborhood Crime

The same was true of behavior engaged in to avoid crime or to protect one's home. Respondents were asked whether in the last year they had done any of the following to avoid crime in the neighborhood: avoided using public transportation in the neighborhood, stayed in at night, or arranged to go with someone when going somewhere in the neighborhood. The avoidance index ranged from 0 to 3.

Respondents were also asked whether they had ever done any of the following things for protection while living at their present residence:

a. had a neighbor pick up your mail and newspapers while you were away

b. had a neighbor keep a watch on your home while you were away

c. engraved identification on valuables

d. installed a burglar alarm in your home

e. taken other security measures, such as using timers on your lights, putting bars on your windows, or adding new locks

f. kept a watch dog

g. kept a gun or other weapon at home

h. taken a course in self-defense

i. joined a program going on in the neighborhood to prevent or reduce crime, such as Neighborhood Watch, Citizen Alert, Block Parent, Business Watch, or a citizen patrol

An index of protection was calculated and ranged from 0 to 9. The most common forms of protection were having a neighbor keep a watch on the home (71 percent of respondents) and employing security measures such as timers, bars, and lights (55 percent). The least common forms were installing a burglar alarm (5 percent) and joining a neighborhood crime prevention program (7 percent). It might also be noted that 49 percent of the sample reported keeping guns and other weapons at home.

There were no significant differences in the avoidance index among any of the neighborhood pairs. While residents of high crime neighborhoods were aware of the greater relative dangers, they did not engage in significantly more avoidance behavior than residents of low crime neighborhoods. In general, residents of black neighborhoods engaged in more avoidance than residents of white neighborhoods.

There was a significant difference in the protection index in only one out of three pairs, Grove Park/Dixie Hills. Protection can function either to maintain safety or as a response to high levels of crime. In the case where the difference was significant, the index was higher in the low crime neighborhood. In the other two cases, it was also slightly higher in the low crime neighborhoods. However, the differences in these cases were not very large. Similar to avoidance, residents of high crime neighborhoods appeared to be aware of the dangers but did not attempt to protect their homes to any greater extent - in fact to a slightly lesser extent - than residents of low crime neighborhoods.

These inconsistencies between awareness of the amount of crime in the neighborhood, on the one hand, and affective and behavioral responses to crime, on the other stimulated an interest in the explanation of each of the reactions to crime. Relative level of neighborhood crime appeared to be an important predictor of the assessment of the amount of crime but seemed to have little effect on fear, protection, or avoidance. Apparently, factors other than objective crime levels determine these reactions. The following analysis examines the ability of six models to predict reactions to crime.

E. Prediction of Reactions to Crime

Five reactions to crime constitute the dependent variables in this analysis: percent stating there is little or no crime in the neighborhood and the indices of fear, worry about being the victim of a specific crime, avoidance, and protection.

The six predictor models used in this analysis were derived from the conceptual model of neighborhood safety presented in section II. The model hypothesizes that objective physical and social characteristics, local ties, social cohesion, informal social control, and objective level of crime all influence subjective reactions to neighborhood crime. Each of these sets of factors constitutes a separate model in this analysis. In addition, there is a sixth model which concerns the effect of perceptions of neighborhood problems on crime reactions. Skogan and Maxfield (1980) found that awareness of signs of disorder in the neighborhood were as important in predicting fear as assessment of the severity of actual crimes.

Regression equations are presented for each of the six models (e.g., local ties, social cohesion) and for each of the five reactions to crime. Each equation includes the unadjusted and adjusted R^2 and the regression coefficient and F test of significance for each independent variable. The F statistic also indicates the relative importance of each independent variable in explaining the variance of the dependent variable. The significant independent variables from each model are entered into an overall "best predictor" regression equation. The six neighborhoods are combined in this analysis. Regression equations for each of the three neighborhood pairs appear in appendix B. However, in the interest of simplicity, the discussion focuses on the combined sample.

The variables age, race and sex were entered into all equations to control for their influence. A dummy variable indicating whether the respondent lived in the high or low crime member of the neighborhood pairs was also included to control for the objective level of neighborhood crime.*

*Income, however, was not included in the models since 155 out of 523 total respondents (29.6 percent) refused to provide this information. Furthermore, those who refused to provide income information differed significantly on several important variables from those who responded. For example, 11 percent of the whites in the sample refused to provide income information, compared to 38 percent of the blacks. Similarly, 38 percent of those with a high school education or less refused to give income data, while 12 percent of those with more than a high school education refused to give this information. Those that reported income also differed significantly from those who did not on the dependent variables of avoidance and protection. Those who refused to respond were more likely to avoid (i.e., stay in at night, avoid using public transportation in the neighborhood, and arrange to have someone accompany them when out in the neighborhood) and less likely to engage in protection behavior than those who responded. Because of the differences in race, education, and two of the dependent variables between respondents and nonrespondents on the income question and the large number of missing values, the inclusion of this variable in the equations would be likely to yield biased results.

Table 20 presents the simple correlations between the various reactions to crime. The highest correlation is between fear of crime and worry over crime (0.59). There is also a moderately strong relationship between both fear of and worry over crime and the neighborhood avoidance index (0.40). The protection index and the perception of little or no crime in the neighborhood, however, are weakly related to the other dependent variables. These data suggest that the fear of and worry over crime lead to the avoidance behaviors, but not necessarily to the adoption of protection strategies. This is similar to the findings of Cohn, et al. (1978) that there is a positive relationship between fear and avoidance, but not between fear and protection. The data also suggest that there is only a weak relationship between the perception of crime in the neighborhood and the fear and worry over crime. The subsequent analysis should help to explain these results.

1. Objective crime model. The objective crime model includes three measures of crime - high/low crime neighborhood, reported index crimes per 100 dwelling units on the respondent's block, and whether or not the respondent or a household member had been victimized in the last year. Interaction terms between neighborhood crime and block crime, neighborhood crime and victimization, block crime and victimization, and the interaction between all three crime measures are also included in the model. In general, table 21 indicates that there is no significant relationship between block and neighborhood crime and the reactions to crime. Age, race, sex, and victimization exhibit the strongest relationship to the reactions to crime. Considering specific reactions, the fear of neighborhood crime is significantly greater among females, blacks and those victimized during the last year. Worry over crime was significantly greater among the young, and as with fear, among females, blacks and those victimized during the last year. Avoidance was more prevalent among the elderly, and among females and blacks. Protection, however, was not significantly related to either demographic variables or objective crime levels. Finally, the perception of little or no crime in the neighborhood is significantly greater among whites and among those who have not been victimized. The measures of block and neighborhood crime levels and the interaction terms were not significantly related to any of the reactions to crime. The R^2s for the total models predicting fear, worry, avoidance and perception of little or no crime are significant at the .01 level. They range between a low of .052 for the perception of little or no crime and .226 for avoidance.

These findings suggest that people in high crime areas not only do not show increased levels of fear and worry, but they also do not take extra precautions to protect themselves from crime. Furthermore, these data indicate that those who have been recently victimized worry about and fear crime more, yet they have not been found to take actions to either avoid crime or protect themselves more than those who have not been victimized.

2. Ecological model. The variables included in the ecological model are the percent of commercial properties in the respondent's block, the presence of a major thoroughfare in the block, the percent of properties in the block

Table 20. Pearson Product-Moment Correlations Among Reactions to Crime[1/]

	Fear of Neighborhood Crime Index	Worry Over Crime Index	Avoidance Index	Protection Index	% Stating There is Little or No Crime in Neighborhood
Fear of Neighborhood Crime Index	1.00	0.59 (.001)	0.40 (.001)	0.09 (.038)	-0.11 (.012)
Worry Over Crime Index		1.00	0.40 (.001)	0.10 (.029)	-0.13 (.004)
Avoidance Index			1.00	0.07 (.092)	-0.08 (.055)
Protection Index				1.00	0.03 (.469)
% Stating There is Little or no Crime In Neighborhood					1.00

[1/] Numbers in parentheses are significance levels.

SOURCE: Household Survey - combined neighborhoods.

Table 21. Objective Crime Model

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.003 (0.51)	-.535 (14.96)**	.872 (33.87)**	.003 (0.31)	-.299 (0.79)	.016 (2.08)	.597 (6.00)*	-.007 (0.50)	-.087 (0.05)	-.004 (0.07)	.114**	.096
Worry Over Crime Index	-.055 (25.97)**	-1.49 (14.52)**	2.11 (25.71)**	.018 (1.40)	-.480 (0.43)	.029 (0.79)	1.68 (6.03)*	-.048 (2 95)	-0.35 (0.00)	.024 (0.27)	.141**	.124
Avoidance Index	.007 (10.69)**	- .562 (54.47)**	.574 (50.03)**	-.001 (0.07)	-.049 (0.12)	.003 (0.26)	.187 (1.99)	-.005 (0.91)	- .150 (0.48)	.016 (3.28)	.226**	.221
Protection Index	.004 (0.75)	.157 (0.96)	-.024 (0.02)	-.004 (0.35)	-.560 (3.49)	.004 (0.08)	-.243 (0.74)	.015 (1.74)	.612 (1.80)	-0.18 (0.93)	.022	.002
People Who Say There is Little or No Crime in Entire Neighborhood	.0001 (0.02)	.055 (3.22)	-.103 (9.82)**	-.002 (1.78)	-.108 (3.52)	.001 (0.07)	-.118 (4.82)*	.003 (1.34)	.106 (1.47)	-.003 (0.61)	.052**	.033

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = total crimes per 100 residential units in respondent's block.
V_5 = high crime neighborhoods.
V_6 = interaction between V_4 and V_5.
V_7 = victim of any crime in last year (respondent or household member).
V_8 = interaction between V_4 and V_7.
V_9 = interaction between V_5 and V_7.
V_{10} = interaction between V_4, V_5 and V_7.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey - Combined Neighborhoods; Crimes in Blocks - Atlanta Bureau of Police Reported Crime Tape.

containing vacant land, whether 95 percent or more of the block is residential, the percentage of single-family dwellings in the block, and whether or not the respondent lives in a single-family unattached house. Table 22 indicates that age, race and sex show the strongest associations with the reactions to crime. In fact, the pattern of significance for the demographic variables is identical to that found in the previous model. Only two of the ecological variables were significantly related to reactions to crime: the percent of commercial properties on the respondent's block and residence in a single-family unattached house. These data indicate that as the amount of commercial property on the block increases so does the fear of crime among block residents, while those living in single family houses are more likely to have taken precautions against crime. None of the other ecological variables were significantly related to the reactions to crime.

The R^2s indicate that the models for fear of crime, worry over crime, avoidance and protection are significant at the .01 level, while the model for perception of crime is not. Only a relatively small portion of the variance in reaction to crime, however, is explained by the variables included in the model. The model for avoidance has the highest R^2 at .21.

3. Local ties model. The measures of neighborhood ties included in the model presented in table 23 are the number of years in the neighborhood, the number of good friends in the neighborhood, the frequency of neighboring in the entire neighborhood, the variety of neighborhood facilities used, the number of voluntary organizations belonged to, and the ratio of membership in neighborhood voluntary organizations to the total number of voluntary organizations belonged to. The data indicate that only two of the reactions to crime are affected by measures of neighborhood ties. Worry over crime is positively associated with both the frequency of neighboring and the variety of neighborhood facilities used, while the index of protective actions is positively related to the frequency of neighboring and the number of community organizations belonged to.

The positive relationship between both neighboring and the use of neighborhood facilities and worry about crime is opposite to the expected direction. Our conceptual model developed in section II hypothesized that local ties should lead to increased social cohesion and informal control, which in turn should lead to a greater feeling of security. This is implied in Suttles' notion of the defended neighborhood (1972). Instead, however, neighboring and local facility use are found to increase worry over crime. A likely explanation for these results is that neighboring and local facility use make people more aware of the crime being committed in the area. Increased worry may be the result of knowledge attained through neighboring of burglaries, assaults and other crimes. Furthermore, those using local facilities may feel more vulnerable to victimization than those who do not.

Beyond increasing worry, neighboring is also significantly related to the adoption of protection strategies. Those who neighbor more protect more. In

Table 22. Ecological Model

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.004 (0.81)	-.526 (14.35)**	.873 (28.54)**	2.73 (6.01)*	.155 (1.00)	-.216 (0.13)	-.012 (0.00)	-.522 (2.77)	-.065 (0.15)	-.178 (1.44)	.121**	.103
Worry Over Crime Index	-.060 (29.33)**	-1.48 (13.99)**	1.87 (16.44)**	5.45 (2.91)	.139 (0.10)	.740 (0.18)	-.363 (0.40)	-.248 (0.08)	-.081 (0.03)	-.018 (0.00)	.125**	.107
Avoidance Index	.006 (8.66)**	-.545 (50.67)**	.530 (35.42)**	.569 (0.85)	.038 (0.19)	.503 (2.19)	.031 (0.08)	-.108 (0.39)	-.086 (0.87)	-.009 (0.01)	.210**	.194
Protection Index	-.004 (0.49)	.084 (0.29)	.069 (0.14)	1.61 (1.59)	-.085 (0.23)	-.819 (1.37)	.115 (0.25)	.283 (0.62)	.675 (12.62)**	-.085 (0.25)	.066**	.047
People Who Say There is Little or No Crime in Entire Neighborhood	-.0001 (0.03)	.055 (3.22)	-.114 (10.12)**	-.070 (0.08)	-.018 (0.26)	.066 (0.23)	.001 (0.00)	.097 (1.94)	.019 (0.26)	-.051 (2.40)	.050	.031

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = percent of parcels in respondent's block with commercial land use.
V_5 = major thoroughfare going through block.
V_6 = percent of parcels within a block with vacant land.
V_7 = whether or not respondent's block is 95 percent or more residential.
V_8 = percent of residential units in respondent's block that are single family dwellings.
V_9 = whether or not respondent lives in a single family unattached house.
V_{10} = high crime neighborhood.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey - Combined Neighborhoods; Housing Characteristics of Block - PLAN File; Location of Major Thoroughfares - Atlanta Bureau of Planning, Major Thoroughfare PLAN Map.

Table 23. Local Ties Model

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.003 (0.40)	-.464 (9.66)**	.777 (20.37)**	.090 (0.35)	-.003 (0.26)	-.007 (0.97)	.008 (0.64)	-.092 (3.23)	-.10 (1.54)	.256 (1.73)	.095**	.075
Worry Over Crime Index	-.059 (17.30)**	-1.36 (10.16)**	1.71 (12.79)**	.445 (1.09)	.002 (0.01)	.009 (0.20)	.066 (5.09)*	-.322 (4.92)*	-.094 (0.17)	.613 (1.21)	.114**	.094
Avoidance Index	.008 (8.37)**	-.514 (38.83)**	.591 (40.32)**	.092 (1.24)	-.002 (0.25)	-.007 (2.72)	.008 (1.86)	-.023 (0.66)	-.009 (0.04)	.084 (0.60)	.203**	.185
Protection Index	.001 (0.08)	.213 (1.87)	-.005 (0.00)	-.230 (2.14)	.012 (3.16)	.001 (0.02)	.046 (18.32)**	-.017 (0.10)	.535 (39.62)**	.118 (0.33)	.186**	.168
People Who Say There is Little or No Crime in Entire Neighborhood	.001 (0.68)	.044 (1.73)	-.106 (7.89)**	-.064 (3.60)	.0006 (0.00)	.002 (2.19)	.003 (1.48)	-.007 (0.41)	-.004 (0.06)	-.037 (0.72)	.050	.029

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = years in neighborhood.
V_6 = number of good friends in neighborhood.
V_7 = frequency of neighboring in entire neighborhood.
V_8 = variety of neighborhood facilities used.
V_9 = number of organizations belonged to.
V_{10} = ratio of neighborhood organization membership to total organization membership.

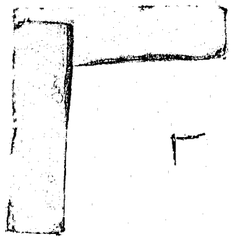
* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 \quad 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey - Combined Neighborhoods.



addition, those belonging to greater numbers of community organizations also protect more. In general, then, more contact with other members of the community appears to precipitate both increased worry and increased protective action.

The R^2s reveal that the total models for fear of crime, worry over crime, avoidance and protection are significant at the .01 level and that they explain between .095 and .203 percent of the variance.

4. Social cohesion model. The measures of social cohesion included in the model are whether the respondent feels a sense of control over what goes on in the neighborhood, whether the respondent feels the neighborhood is a real home, the index of information exchange with neighbors, the degree to which information about crime is obtained from neighbors rather than other sources, and whether the respondent feels similar to or different from others in the neighborhood. In general, the data in table 24 indicate that social cohesion appears to play a large role in reactions to crime. In particular, the amount of information exchanged with neighbors is significantly related to four of the five dependent variables.

The fear of neighborhood crime is negatively related to both a feeling of control over neighborhood activities and a feeling that the neighborhood is a real home and is positively related to information exchange with neighbors. Similarly, worry over crime is negatively related to a feeling of control and positively related to information exchange. Thus, a feeling of control over neighborhood events appears to lessen both the fear of and worry over crime, while information exchange with neighbors appears to increase fear and worry. It is surprising that sense of control in the neighborhood would have an opposite effect on fear and worry over crime as information exchange with neighbors, since both independent variables can be viewed as measures of social cohesion. However, their zero-order correlation is only a weak .18.

Avoidance was also positively associated with information exchange. Those who exchange information with neighbors appear more likely to stay in at night, not to use public transit in the neighborhood, and to have someone accompany them when they are out in the neighborhood. This is probably due to higher levels of fear among this group of people.

Finally, the adoption of protection strategies is positively related to feelings that the neighborhood is a real home, the exchange of information with neighbors, the neighborhood as a source of information about crime and perceived similarity of self with neighbors. The positive relation between protection and both perception of the neighborhood as a real home and perceived similarity suggests a stake in the residence and the neighborhood in which it is located that may motivate protection activities. Information exchange with neighbors may be a source of suggestions for what others in the area are doing to protect their homes.

Table 24. Social Cohesion Model

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.0003 (.008)	-.515 (29.36)**	.671 (35.14)**	-.094 (0.45)	-.594 (15.90)**	-.448 (7.96)**	.035 (5.23)*	-.214 (0.27)	.003 (1.36)	.147**	.130
Worry Over Crime Index	-.045 (14.59)**	-1.35 (11.68)**	1.78 (15.06)**	.123 (0.09)	-1.08 (6.56)*	-.603 (1.77)	.178 (17.16)**	.221 (0.04)	.009 (0.01)	.158**	.142
Avoidance Index	.006 (7.89)**	-.492 (39.49)**	.534 (34.78)**	.122 (2.40)	-.091 (1.18)	-.054 (0.36)	.021 (6.25)*	-.016 (0.00)	-.016 (1.02)	.205**	.190
Protection Index	.005 (1.19)	.227 (2.21)	.382 (4.72)*	-.131 (0.72)	.235 (2.04)	.654 (13.82)**	.069 (17.07)**	1.17 (6.73)*	.067 (4.56)*	.170**	.154
People Who Say There is Little or No Crime in Entire Neighborhood	-.0001 (0.02)	.070 (4.69)*	-.077 (4.30)*	-.066 (4.09)*	.020 (0.35)	.074 (3.99)*	-.0007 (0.04)	.025 (0.07)	.004 (0.38)	.055**	.037

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = those who feel that residents have control over what goes on in neighborhood.
V_6 = those who feel neighborhood is real home.
V_7 = information exchange with neighbors.
V_8 = neighborhood source of crime information in ratio to total source of crime information.
V_9 = index of perceived similarities.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation

SOURCE: Household Survey - Combined Neighborhoods.

The perception of little or no crime in the neighborhood was negatively associated with whether the neighborhood was categorized high crime and positively associated with a feeling that the neighborhood is a real home.

The R^2s for the total models indicate that all are significant at the .01 level. The range of variance explained varies from .055 percent for the perceived crime model to .205 percent for the avoidance model.

5. Social control model. The measures of social control included in the model are whether respondents watch for suspicious looking people in the neighborhood, whether respondents say it is easy to tell a stranger in the neighborhood, the number of areas avoided in the neighborhood, the percentage of big neighborhood problems that they took direct action on, and the number of disturbances that they took direct action on. In general, the data presented in table 25 indicate that watching for suspicious people in the neighborhood and avoiding areas in the neighborhood are associated with three or more of the dependent variables. More specifically, fear of crime and worry over crime are positively associated with both watching for suspicious people and the number of areas avoided within the neighborhood. The avoidance index - avoiding the use of public transit, staying in at night, being accompanied when out in the neighborhood - is positively associated with the number of areas avoided in the neighborhood. Protective actions are negatively associated with high crime neighborhoods and positively associated with watching for suspicious people, the number of areas avoided in the entire neighborhood and the percentage of times direct action was taken when neighborhood disturbances (e.g., vandalism, purse-snatching, break-ins, fights among young people) were observed. Finally, the perception of little or no crime in the area was negatively related both to living in a high crime neighborhood and to being black.

The associations found between watching for suspicious people and avoiding areas in the neighborhood and the dependent variables are opposite to the expected direction. As discussed in chapter II, higher levels of social control were expected to result in less, not more, fear of crime. The most plausible explanation for these associations is that social control is a function of the fear of and worry over crime rather the reverse. These findings are contrary to those implied in Suttles' notion of the defended neighborhood (1972).

The R^2s for these models range from a low of .074 for the perception of little or no crime to .286 for both the fear of crime and the worry over crime measures. All are significant at the .01 level.

6. Neighborhood problems model. The measures of neighborhood problems included in the model are whether respondents felt the neighborhood had gotten better in the last year, the number of big problems (e.g., noisy neighbors, people not disposing of garbage properly, poor care of property) and the number of disturbances seen or heard in the neighborhood within the last year

Table 25. Social Control Model

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.004 (0.89)	-.375 (5.21)*	.492 (7.92)**	-.121 (0.56)	.720 (19.29)**	-.358 (2.38)	.157 (22.94)**	-.067 (0.18)	.099 (0.32)	.246**	.223
Worry Over Crime Index	-.041 (11.22)**	-.978 (4.75)*	1.39 (8.72)**	.147 (0.11)	1.83 (16.77)**	-1.15 (3.22)	.494 (30.98)**	.139 (0.10)	-.354 (0.55)	.246**	.223
Avoidance Index	.008 (11.44)**	-.485 (20.52)**	.427 (20.68)**	-.027 (0.10)	.122 (1.89)	.080 (0.40)	.101 (32.31)**	-.034 (0.15)	.007 (0.01)	.286**	.265
Protection Index	.017 (11.16)**	.265 (2.11)	-.197 (1.05)	-.492 (7.31)**	.395 (4.66)*	-.258 (0.98)	.083 (5.04)*	.089 (0.25)	.937 (23.26)**	.159**	.134
People Who Say There is Little or No Crime in Entire Neighborhood	-.0001 (0.01)	.076 (3.64)	-.103 (6.01)*	-.107 (7.37)**	.070 (3.13)	.012 (0.05)	-.011 (1.77)	-.013 (0.12)	-.031 (0.53)	.074**	.046

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = percent who watch for suspicious people in neighborhood.
V_6 = percent who say it is easy to tell a stranger in neighborhood.
V_7 = number of areas avoided in entire neighborhood.
V_8 = percent of big problems for which took some direct action.
V_9 = percent of disturbances for which took some direct action.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey - Combined Neighborhoods.

(e.g., purse-snatching, vandalism, fighting). The data in table 26 indicate that both the number of big problems and the number of disturbances seen or heard are significantly related to a number of the reactions to crime. Both the fear of and worry over crime are positively associated with the number of big problems and the number of disturbances seen or heard. The more problems and disturbances, the greater the fear and worry. Thus, both signs of disorder and the witness of unlawful behavior have an independent effect on fear and worry. The effect of the latter is greater than that of the former, according to the F statistic. Avoidance is positively associated with the number of big problems, while protection is negatively associated with the high crime neighborhoods. Finally, the perception of little or no crime in the neighborhood is negatively associated with both high crime neighborhoods and the number of disturbances seen or heard.

These data suggest that many of the reactions to crime are also affected by the perceptions of neighborhood problems which are not specifically criminal in nature. The perception of other neighborhood problems may create an overall negative image of the area leading to increased levels of fear and worry (Skogan and Maxfield, 1980). The strong associations between the number of disturbances seen or heard and the dependent variables suggests that the direct observation of suspicious or criminal activity plays a strong role in the reaction to crime, as well.

The R^2s of all the models are significant at the .01 level, except that for protection. The significant R^2s range from .081 for the perception of little or no crime in the neighborhood to .260 for avoidance.

7. The best predictor model. The significant variables from each set of regression equations were combined in a best predictor model for each dependent variable. This has the benefit of controlling for the influence of variables across models and should result in the identification of the most important independent variables. Two variables that are significantly related to several dependent variables have been excluded, however, since they appear to be an expression of fear and worry over crime rather than a cause of these reactions. These variables are watching for suspicious looking people in the neighborhood and the number of areas avoided in the neighborhood.

The results of this analysis are presented in table 28.* The models are all significant at the .01 level. The fear of neighborhood crime is best predicted by five variables: sex, race, the number of big neighborhood problems, the number of disturbances seen or heard, and sense of control over neighborhood events. These data indicate that women and blacks are more

*The best predictor models with the two deleted variables included are presented in table 27. However, the discussion will refer to the findings presented in the revised best predictor model in table 28.

Table 26. Neighborhood Problems Model

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.0006 (0.02)	-.446 (7.55)**	.483 (7.49)**	-.174 (1.20)	.294 (1.53)	.072 (4.55)*	.196 (10.27)**	.159**	.141
Worry Over Crime Index	-.039 (9.14)**	-1.40 (8.96)**	1.33 (7.00)**	.038 (.01)	.467 (.46)	.185 (3.90)*	.477 (7.41)**	.166**	.149
Avoidance Index	.011 (20.26)**	- .514 (31.48)**	.414 (17.81)**	.004 (0.00)	.145 (1.11)	.023 (1.55)	.141 (16.67)**	.260**	.245
Protection Index	.005 (0.80)	.216 (1.24)	-.117 (0.32)	-.481 (6.28)*	.261 (0.83)	.041 (1.13)	.033 (0.20)	.032	.012
People Who Say There is Little or No Crime in Entire Neighborhood	-.001 (0.50)	.082 (3.99)*	-.098 (4.97)*	-.101 (6.19)*	.063 (1.08)	-.007 (0.73)	-.034 (4.96)*	.081**	.062

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = people who feel neighborhood has gotten better in last years.
V_6 = number of big problems.
V_7 = number of disturbances seen or heard in neighborhood in last year.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey - Combined Neighborhoods.

Table 27. Best Prediction Models

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	V_{11} β (F)	V_{12} β (F)	V_{13} β (F)	V_{14} β (F)	V_{15} β (F)	V_{16} β (F)	V_{17} β (F)	V_{18} β (F)	V_{19} β (F)	V_{20} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index		−.434 (8.29)**	.369 (5.05)*	.035 (1.17)	.098 (3.02)	.080 (0.26)	1.37 (1.47)	.514 (11.54)**	.102 (12.03)**	−.422 (7.30)**	−.169 (1.11)	−.009 (0.35)										
Worry Over Crime Index	−.027 (4.61)*	−1.11 (6.80)**	.873 (3.37)	.121 (2.04)	.119 (0.55)	.162 (0.14)		1.48 (12.04)**	.489 (36.34)**	−.841 (3.71)		.095 (3.68)	−.005 (0.02)	−.062 (0.20)							.232**	.208
Avoidance Index	.011 (24.51)**	−.524 (46.09)**	.449 (28.21)**		.074 (7.06)**				.098 (42.04)**			.003 (0.19)									.303**	.279
Protection Index	.006 (1.33)	.104 (0.32)						.476 (8.47)**	.093 (8.59)**		.684 (13.59)**	.015 (0.52)	.021 (2.88)		−.144 (0.77)	.356 (14.19)**	.543 (9.59)**	.613 (12.53)**	.789 (2.60)	.002 (0.00)	.305**	.295
People Who Say There is Little or No Crime in Entire Neighborhood	.066 (4.13)*	−.089 (6.34)*		−.021 (3.49)	−.033 (0.95)							.052 (2.26)		−.076 (5.47)*							.067**	.055

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = number of big problems in neighborhood.
V_5 = number of disturbances seen or heard in neighborhood in last year.
V_6 = victim of any crime in last year (respondent or household member).
V_7 = percent of parcels in a block with commercial land use.
V_8 = people who watch for suspicious people in neighborhood.
V_9 = number of areas avoided in entire neighborhood.
V_{10} = those who feel that residents have control over what goes on in neighborhood.
V_{11} = those who feel that neighborhood is real home.
V_{12} = information exchange with neighbors.
V_{13} = frequency of neighboring in entire neighborhood.
V_{14} = variety of neighborhood facilities used.
V_{15} = high crime neighborhood.
V_{16} = number of organizations belonged to.
V_{17} = whether or not a respondent lives in a single-family unattached house.
V_{18} = percent of disturbances for which took some direct action.
V_{19} = neighborhood source of crime information in ratio to total sources of crime information.
V_{20} = index of perceived similarities.

* = p .05
** = p .01

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the prediction of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the dependent variable. With each reduction in degrees of freedom, the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - [1-R^2]\,\frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

Source: Household Survey--Combined Neighborhoods.

Table 28. Revised Best Prediction Models[1/]

Reactions to Crime Model	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	V_{11} β (F)	V_{12} β (F)	V_{13} β (F)	V_{14} β (F)	V_{15} β (F)	V_{16} β (F)	V_{17} β (F)	V_{18} β (F)	R^2	$\bar{R}^2$ [2/]
Fear of Neighborhood Crime Index		−.533 (12.99)**	.410 (6.42)*	.069 (4.86)*	.125 (5.19)*	.029 (0.04)	1.02 (0.80)			−.50 (10.49)**	−.238 (2.23)	.009 (0.34)							.173**	.154
Worry Over Crime Index	−.036 (7.38)**	−1.30 (8.57)**	1.08 (4.66)*	.202 (5.32)*	.300 (3.32)	.272 (0.35)				−1.07 (5.57)*		.171 (10.90)**	−.004 (0.02)	−.210 (2.14)					.188**	.166
Avoidance Index	.009 (18.42)**	−.563 (50.48)**	.458 (27.97)**		.131 (22.22)**							.009 (1.34)							.233**	.224
Protection Index	.004 (0.64)	.192 (1.41)	.247 (1.89)					.880 (3.25)	.022 (0.40)		.583 (9.94)**	.027 (1.70)	.014 (1.26)		−.042 (0.07)	.367 (15.48)**	.490 (7.75)**	.648 (13.51)**	.251**	.227
People Who Say There is Little or No Crime in Entire Neighborhood		.066 (4.13)*	−.089 (6.34)*		−.021 (3.49)	−.033 (0.95)					.052 (2.26)				−.076 (5.47)*				.067**	.055

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = number of big problems in neighborhood.
V_5 = number of disturbances seen or heard in last year.
V_6 = victim of any crime in last year (respondent or household member).
V_7 = percent of parcels with commercial land use.
V_8 = neighborhood source of crime information in ratio to total sources of crime information.
V_9 = index of perceived similarities.
V_{10} = those who feel that residents have control over what goes on in neighborhood.
V_{11} = those who feel that neighborhood is real home.
V_{12} = information exchange with neighbors.
V_{13} = frequency of neighboring in entire neighborhood.
V_{14} = variety of neighborhood facilities used.
V_{15} = high crime neighborhood.
V_{16} = number of organizations belonged to.
V_{17} = whether or not a respondent lives in a single family unattached house.
V_{18} = percent of disturbances for which took some direct action.

* = $p < .05$
** = $p < .01$

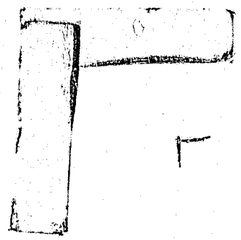
1/ The independent variables "people who watch for suspicious people in the neighborhood" and "the number of areas avoided in entire neighborhood" were deleted from the revised prediction models.

2/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the prediction of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the dependent variable. With each reduction in degrees of freedom, the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - [1 - R^2] \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

Source: Household Survey--Combined Neighborhoods.



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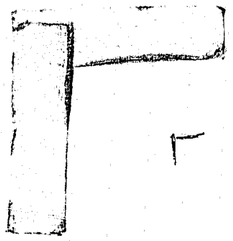

fearful, as are those who perceive a greater number of neighborhood problems and who have seen or heard a large number of disturbances in the neighborhood. Those who have a greater sense of control over events in the neighborhood are less fearful.

Worry over being victimized by neighborhood crime is best predicted by six independent variables: age, sex, race, the number of big problems, sense of control over neighborhood events, and information exchange with neighbors. Younger people are more worried about crime, as are blacks and females. Those who perceive a large number of neighborhood problems and exchange information with others also worry more about crime, while those who feel a sense of control over neighborhood affairs worry less.

Avoidance behavior is best predicted by age, race, sex and the number of disturbances seen or heard. Older people, blacks, females, and those witnessing neighborhood disturbances are the most likely to avoid going out at night, using public transit, and being out alone.

Protective actions are best predicted by feeling the neighborhood is a real home, the number of voluntary associations belonged to, the frequency of taking direct action when neighborhood disturbances were observed, and residence in a single-family unattached house. Those who felt the neighborhood was a real home, belonged to more neighborhood groups, lived in a single-family house and took action after witnessing neighborhood disturbances engaged in more protection actions. Surprisingly, age, race and sex showed no significant relationship to protective actions when other variables were controlled.

Finally, the perception of little or no crime in the area was best predicted by sex, race, and the crime level of the neighborhood. Males, whites and those in low crime neighborhoods are more likely to perceive little or no crime in their area.

A number of findings from the preceeding analysis warrant further discussion. Of particular interest is the lack of significant relationships between the objective measures of crime and fear of crime, worry about crime, avoidance behavior, and protective actions. In the objective crime model, only victimization had a significant effect on fear of and worry over crime. Yet, even these associations did not appear significant in the best predictor model. Avoidance and protection were not significantly related to any of the objective measures of crime. In short, there does not seem to be a strong relationship between objective crime and either individual concern or protective actions.

Several explanations are offered for this finding. First, those living in relatively high crime areas may not be aware of that fact. The data do indicate, however, a significant relationship between the level of neighborhood crime and the perception of crime. A second explanation is that fear of and worry about crime are results of information provided by city-wide or even nationwide sources such as newspapers and television, not a result of local

conditions. A third explanation, and the one receiving the greatest support from the data, is that fear and worry over crime are primarily a function of age, race, sex, awareness of disorder in the neighborhood, sense of control over the neighborhood, and information exchange. These findings suggest that perceived vulnerability and information about crime and other neighborhood problems increases fear, while a sense of control inhibits it.

A second somewhat surprising finding is that young people exhibit more worry over crime than the elderly. This contrasts with the bulk of the literature, which suggests a positive relationship between age and fear. Two explanations for this result are suggested. First, older people are likely to spend less time out in the neighborhood than younger people. In fact, older people were found to engage in more avoidance behavior, including staying in at night, avoiding the use of public transit, and having someone accompany them in their trips in the neighborhood. Given that the measure of worry is comprised of questions about burglary and assault, it is not surprising that they worry less. They may simply be acknowledging the fact that they have chosen to avoid situations where they are vulnerable to these crimes. Younger people, on the other hand, are more likely to be out of their homes and out in the neighborhood. It should also be noted that most measures of fear are much less specific than the items comprising the worry index. They usually express a general fear of being out alone at night (Skogan and Maxfield, 1980) or the degree of safety felt when in the neighborhood or the city (Hartnagel, 1979; Taylor, et al., 1979). A second and related explanation is that younger people are more likely to have young children, and their worry is related to a concern for their children's safety. Two of the five questions comprising the worry index ask about concern for other members of the household. This may be an irrelevant issue for older people who do not have children or who live alone.

A third major finding is that social control - as measured by surveillance activity and avoidance of areas in the neighborhood - appears to be a reaction to fear of and worry over crime rather than a product of social cohesion, as suggested in the conceptual model. This is contrary to the notion of the defended neighborhood, which implies that people who are involved in social control should be less fearful of crime.

A fourth finding is that information exchange with others in the neighborhood is positively related to worry over crime in the best prediction model, while neighboring and the use of neighborhood facilities are positively related to worry in the neighborhood ties model. Again these associations are opposite to the expected direction. In general, it appears that the greater the number of contacts in the neighborhood, the greater the worry over crime. This can be explained in two ways. First, a greater number of contacts with others in the neighborhood may make people more aware of crime in the area. An alternative explanation, however, is that a greater number of contacts in the neighborhood necessitates more frequent trips, particularly walking trips, through the neighborhood. These trips may result in a heightened sense of vulnerability, thereby increasing fear and worry over crime.

A fifth finding is that the adoption of protection strategies is strongly associated with membership in voluntary associations, taking action when neighborhood disturbances are observed, and residence in a single-family dwelling unit. It was not found to be significantly related to any of the objective measures of crime or to victimization. It appears as if the adoption of protection strategies is a function of an action oriented personality, that is, those who become involved in voluntary organizations and otherwise take action on neighborhood problems. Furthermore, those living in single-family dwellings are more likely to feel that their neighborhood is a real home ($r = .35$). Thus, they appear to have a greater stake in the neighborhood and may also have more to protect. An alternative explanation is that those living in single-family dwellings have more control over what alterations can be made and have a greater incentive for making alterations, such as the addition of better locks on doors and windows.

A sixth finding is that fear of crime is higher among those living on blocks with a higher percentage of commercial properties. This increased fear appears to be consistent with objective conditions, since crime rates tend to be higher near commercial areas (Dietrick, 1977). This finding is contrary, however, to the mixed land use perspective advocated by Jane Jacobs (1961) and others. A mix of commercial and residential development is thought to encourage more "eyes on the street" and hence a greater sense of security. This notion is not supported by these data. Instead commercial properties may bring outsiders to the area, which apparently increases fear of crime.

VII. SUMMARY AND CONCLUSIONS

The following summarizes the major findings of this study:

A. Physical Characteristics of High and Low Crime Neighborhoods

1. High crime neighborhoods had a significantly lower proportion of residential properties and a higher proportion of vacant land than demographically similar and physically adjacent low crime neighborhoods. They also had a much lower proportion of single-family residences than low crime neighborhoods.

2. High crime neighborhoods had significantly more blocks with major thoroughfares and fewer blocks with small neighborhood streets.

3. Blocks in low crime neighborhoods tended to be more homogeneously residential, while blocks in high crime neighborhoods had more mixed land use. In only one pair was there a significant difference in the distribution of commercial properties. In this case, the low crime neighborhood had significantly more blocks with little or no commercial activity. There were no significant differences in the other neighborhood pairs.

4. Boundaries of low crime neighborhoods were less likely to be a major thoroughfare, less likely to have commercial land use, and more likely to have a railroad line than boundaries of high crime neighborhoods. Differences in the crime rate between high and low crime neighborhoods were not attributable to crime differences in boundary streets.

5. Areas surrounding high crime neighborhoods were lower in socioeconomic status than were areas surrounding low crime neighborhoods. Crime rates, however, did not differ systematically in areas surrounding high versus low crime neighborhoods.

6. There were few differences between high and low crime neighborhoods in physical obstructions to informal surveillance, as measured by building setbacks, street lighting, and visual obstructions.

7. Low crime neighborhoods had more private types of parking facilities - fewer parking lots and more driveways - than high crime neighborhoods. This was consistent with the pattern of greater privacy and less accessibility to outsiders that was promoted by land use patterns, housing characteristics, and boundary characteristics in these neighborhoods.

B. Informal Territorial Control in High and Low Crime Neighborhoods

8. Measures of spatial identity - percent who stated the neighborhood had a name and percent who gave the official name - did not differ significantly between low and high crime neighborhoods. However, residents of low crime neighborhoods included a larger area in their definition of neighborhood boundaries than residents of high crime neighborhoods.

9. Residents of low crime neighborhoods were more residentially stable and more likely to own their homes than residents of high crime neighborhoods. Some of these differences were due to the younger mean age of residents of high crime neighborhoods. However, even after age and sex were controlled, residents of low crime neighborhoods tended to be more stable.

10. There were no significant differences between high and low crime neighborhoods in household composition, as measured by percent currently married, mean number of adults in the household, percent with children under 18 years old, mean number of children, and ages of children.

11. There was no evidence of more local ties in low crime than in high crime neighborhoods. Local ties were measured by frequency and variety of neighboring activities, local facility use, membership in voluntary associations that meet in the neighborhood, children's membership in local voluntary associations, and number of friends and relatives in the neighborhood.

12. Social cohesion was measured by affective attachment to the neighborhood, perceived similarity with neighbors, and information exchange with neighbors. There were no systematic differences in perceived similarity or information exchange. Residents of low crime neighborhoods had greater affective attachment to the neighborhood, as measured by the proportion planning to move in the near future, liking the neighborhood, and feeling that the neighborhood is a real home, that it is a neighborhood where people help one another, and that residents have some control over what goes on in the neighborhood. Some of these differences were attributable to the older mean age of respondents in low crime neighborhoods. Even after age was controlled, however, residents of low crime neighborhoods had a higher level of affective attachment than did residents of high crime neighborhoods.

13. Informal social control was defined by movement governing rules, expected and direct intervention, and informal surveillance. Movement governing rules - percent avoiding areas in the neighborhood

and number of areas avoided - were more characteristic of residents of high crime areas than of low crime areas. The differences were usually not significant, but were consistently in that direction. Informal surveillance was measured by amount of time spent in and around the house, ability to distinguish between neighbors and strangers, and watching for suspicious looking people and activities while walking around the neighborhood and during other times spent in the neighborhood. There were no significant differences in amount of time spent in and around the house and in the ability to distinguish between neighbors and strangers. Residents of high crime neighborhoods were slightly more likely to watch for suspicious people while walking or doing other activities in the neighborhood. In most cases, the differences were not significant. Intervention was measured by asking respondents whether they expected neighbors to intervene in problematic situations and whether they had taken direct action to deal with neighborhood problems of various types. There were no significant differences between high and low crime neighborhoods in any of the measures of intervention.

C. Reactions to Crime in High and Low Crime Neighborhoods

14. There were no significant differences in the sources of information about neighborhood crime in high and low crime neighborhoods. The mass media was the most important source in all neighborhoods. Respondents accurately assessed the relative amount of crime in their neighborhood; a higher proportion of residents of low crime than of high crime neighborhoods believed there was little or no crime in their neighborhood and felt their neighborhood was safer than the rest of the city. Levels of fear and protection behavior were not consistent with differences in the assessment of the amount of crime. Residents of high crime neighborhoods were not more fearful, were not more worried about being the victim of specific crimes, did not engage in more avoidance behavior (staying in at night, avoiding public transportation in the neighborhood, arranging accompaniment when going out in the neighborhood), and did not protect their home or belongings to a significantly greater extent than residents of low crime areas.

15. Indices of fear of crime and worry over specific crimes showed very strong correlations with each other and moderately strong relationships with the avoidance index. They showed only weak associations, however, with both the adoption of protection strategies and the perception of the amount of crime in the neighborhood.

16. The fear of crime was greatest among women, blacks, those who perceived a greater number of neighborhood problems, those who had seen or heard a large number of disturbances in the neighborhood, and

those who felt little sense of control over events in the neighborhood. Less important but significant predictors of fear were:* victimization during the last year, residing in a block with a high proportion of commercial properties, watching for suspicious people in the neighborhood, avoiding areas in the neighborhood, feeling the neighborhood is a real home.

17. Worry over being the victim of specific crimes was greatest among younger people, blacks, females, those who perceived a large number of neighborhood problems, those who exchanged information with neighbors, and those who felt little sense of control over events in the neighborhood. Less important but significant predictors of worry were: witnessing crime related neighborhood disturbances, victimization, frequency of neighboring, local facility use, watching for suspicious people in the neighborhood, avoiding areas in the neighborhood.

18. Avoidance behavior was more prevalent among older residents, blacks, women and those who had seen or heard a greater number of crime-related disturbances in the neighborhood. A less important but significant predictor of avoidance was information exchange with neighbors.

19. The adoption of protective actions was most prevalent among those who felt their neighborhood was a real home, belonged to a larger number of voluntary associations, lived in a single-family dwelling, and took direct action when neighborhood disturbances were seen. Less important but significant predictors of protection were: being older, being male, watching for suspicious people in the neighborhood, avoiding areas in the neighborhood, exchanging information with neighbors, frequency of neighboring, residence in the low crime member of the neighborhood pairs, obtaining crime information from neighborhood sources, and perception of similarity with other neighborhood residents.

20. The perception of little or no crime in the neighborhood was most frequent among males, whites, and those living in the low crime member of the neighborhood pairs. Less important but significant predictors of the perception of little or no crime in the neighborhood were: those seeing fewer disturbances in the neighborhood, those who had not been victimized in the last year, and those who felt the neighborhood was a real home.

*This refers to variables that were statistically significant in the individual models but not in the model that combined the best (i.e., significant) predictors from the individual models.

21. There were no significant relationships between objective measures of block and neighborhood crime and worry, fear, avoidance and protective actions.

The results suggest that differences in physical characteristics distinguished between low and high crime neighborhoods to a far greater extent than did differences in informal territorial control. Low crime neighborhoods were more insulated from surrounding areas than were socially similar and adjacent high crime neighborhoods. Relative to high crime neighborhoods, the flow of outsiders into and out of low crime neighborhoods appeared to have been limited by more residential and homogeneous land use, fewer major arteries, and the nature of boundary streets. The data also indicate that low crime neighborhoods were surrounded by areas higher in socioeconomic status than were matched and adjacent high crime neighborhoods. This finding, given the research on the social correlates of crime, suggests that high crime neighborhoods are more proximate to areas in which offenders are more likely to live. In addition, they are more easily accessible to outsiders. Offenders wishing to commit crimes outside their own neighborhoods thus have an area that is both proximate and accessible. While more research is required on this issue, the evidence suggests an interplay between the characteristics of border neighborhoods and boundaries in distinguishing between similar and adjacent high and low crime neighborhoods.

The findings suggest that maintaining the residential character of neighborhoods and limiting access to outsiders may effectively inhibit certain kinds of crimes. The types of crime that are expected to be most affected by the relative insularity of neighborhoods are "opportunistic" crimes - burglary, robbery, larceny, and auto theft. Violent crimes, especially murder and assault, would not be expected to respond to changes in the physical environment because they are typically unplanned events that take place between acquaintances. Limiting access by environmental design assumes that most opportunistic crimes are committed by non-residents. We have no evidence to suggest that this is the case. However, to the extent that this is true, the physical environment may affect that portion of neighborhood crime that is committed by outsiders. The findings of the study are consistent with those of an evaluation of a crime control program in one neighborhood in Hartford which found that redesigning and re-routing streets to inhibit the flow of traffic was an important factor in the reduction of burglary, robbery, and fear of crime (Fowler, et al., 1979).

The land use patterns, street types, and boundary characteristics that distinguished between low and high crime neighborhoods may be the neighborhood level equivalents of the block and building level physical characteristics that appear to affect crime and fear. Taylor, et al. (1980) found that blocks with a high proportion of properties having real and symbolic barriers in front, such as fences and curbs, exhibited relatively low crime and fear. These barriers emphasized the semi-private nature of residential streets and inhibited the flow of pedestrians into non-public areas in a way that is

analogous to the neighborhood level barriers examined in the present study. Studies of defensible space features of buildings present yet a finer grained view of crime control in the residential environment. (See Taylor, et al., 1980 for a review of this research.) Further research is required to determine the specific physical design features that affect crime at each spatial level of the residential environment - the building, the property, the block, and the neighborhood.

The model of neighborhood crime prevention implied in Jane Jacobs (1961) work, which has influenced research in this area over the last two decades, is that diverse land use is a key factor in maintaining neighborhood safety. The "basic supply of activity and eyes" that results from a mixture of shops, offices, and residences is believed to be the basis of informal surveillance. The findings of the present study do not support this assumption. Homogeneous residential land use, small streets, and few major thoroughfares characterized low crime neighborhoods. Furthermore, fear of crime was positively associated with the amount of commercial land use on the block. Thus, maintaining neighborhoods as primarily residential areas appears to promote safety. The supply of activity and eyes that results from mixed land use may simply increase the number of potential victims and offenders. This finding is particularly important, given the recent trend in neighborhood planning to encourage mixed land use in order to conserve gasoline. While this is a a worthwhile goal, planners and residents should be aware of the potential increases in crime that could result from this type of plan.

By and large, the dimensions of territoriality were not found to be distinguishing characteristic of low crime neighborhoods. In fact, informal social control, such as movement governing rules and surveillance, appeared to be more characteristic of high crime than of low crime areas. These behaviors appeared to be expressions of fear of existing crime rather than strategies to maintain safety. This is opposite to what is implied in the notion of the defended neighborhood. These findings, however, make intuitive sense. Informal surveillance and avoidance of certain areas are rational adaptations to living in a high crime neighborhood.

This is not to suggest that the concept of informal territorial control should be dismissed outright. It may be that the set of behaviors that are the expression of this concept are not consciously felt. People may not be actively aware that they are engaging in surveillance or other forms of territorial control, and hence, do not report them in household surveys. Thus, the lack of importance of these variables may be a function of measurement technique. A final conclusion will have to be based on evidence collected by a variety of techniques.

In addition, it should be kept in mind that the study neighborhoods were selected on the basis of difference in crime levels and similarity in racial and economic composition. Since race and economic status are likely to influence the formation of local ties, social cohesion, and informal social control,

matching neighborhoods on the basis of social composition may have the effect of minimizing the importance of these dimensions of territoriality. However, this argument is weakened by the fact that there were differences between matched neighborhoods on a number of variables that tend to be related to class and race, such as residential stability and affective attachment to the neighborhood. In addition, these findings suggest the variables that may be important in the prediction of neighborhood crime when differences in class and race are absent. The hypotheses generated in this study on the relative effects of informal territorial control and physical design on crime as well as the causal relationships will, however, require testing in a larger sample of neighborhoods.

The data suggest that there are no, or at best, weak links between physical characteristics and various dimensions of informal territorial control. If these linkages were strong it would be expected that differences between neighborhoods in land use, housing characteristics, and street type would be accompanied by differences in informal social control, social cohesion, and other variables that are believed to be related to physical design by Newman, Jacobs, and others. The fact that a number of physical characteristics differed systematically between high and low crime neighborhoods but most measures of territorial control did not (or differed in opposite to the expected direction) suggests a weak association between the two sets of variables. This is an area in need of further examination.

The findings of this study have several implications for neighborhood crime prevention strategies. The evidence indicates little relationship between the perception of the amount of crime in the neighborhood and protective behavior. While people could fairly accurately assess the amount of crime, this awareness was not necessarily translated into action. However, information exchange with neighbors and frequency of neighboring were positively associated with protection. This suggests that awareness is not a sufficient motivation for crime prevention activities but that local information networks may be a key element. An apparent by-product of frequent contact between neighbors is information about whether and in what ways to protect one's home and belongings. Neighborhood Watch and other community crime prevention programs attempt to formalize local information networks and channel them into addressing local crime problems. Very few of the survey respondents belonged to such programs, but some of the same functions were being performed informally. However, the results seem to validate the operating assumption of crime prevention programs, that local information networks can be used to disseminate information about protection strategies. Being integrated into these networks does not decrease fear of crime, and in fact, may actually increase it. But information exchange between neighbors seems to be an effective means of disseminating information concerning protection against crime.

The results concerning characteristics of boundary streets and bordering neighborhoods should not be taken as a recommendation that urban neighborhoods become fortresses, barricading themselves from outsiders. Relatively subtle

modifications of the residential environment may effectively inhibit crime. Suggestions would include limiting the amount of commercial development at neighborhood boundaries, discouraging the city from widening streets in predominantly residential areas, and minimizing the amount of non-residential land use in residential blocks.

BIBLIOGRAPHY

Ahlbrandt, R.S. and J.V. Cunningham. A New Public Policy for Neighborhood Preservation. New York: Praeger, 1979.

Atlanta Regional Metropolitan Planning Commission. Safer Streets in '72. Atlanta, Georgia, September 1971.

Baumer, Terry L. and Albert Hunter. "Street Traffic, Social Integration, and Fear of Crime." Evanston, Ill.: Center for Urban Affairs, Northwestern University, 1979.

Boggs, Sarah L. "Urban Crime Patterns," American Sociological Review, 30: 899-908, 1965.

Bordua, David J. "Juvenile Delinquency and 'Anomie': An Attempt at Replication," Social Problems, 6: 230-38, 1958-1959.

Chilton, Roland J. "Continuity in Delinquency Research: A Comparison of Studies for Baltimore, Detroit, and Indianapolis," American Sociological Review, 29: 71-83, 1964.

Chromy, James R. "Sequential Sample Selection Methods," 1979 Proceedings of the Section on Survey Research Methods, Washington, D.C.: American Statistical Association, 1979.

Cohn, E.S., L.H. Kidder, J. Harvey. "Crime Prevention vs. Victimization Prevention: The Psychology of Two Different Reactions," Victimology, 3(384): 285-296, 1978.

Coleman, James S. "Community Disorganization and Urban Problems," Contemporary Social Problems. Edited by Robert K. Merton and Robert Nisbet. New York: Harcourt, Brace, Jovanovich, 4th ed., 557-602, 1976.

Conklin, John E. The Impact of Crime. New York: Macmillan Co., 1975.

Craven, P. and B. Wellman. "The Network City." In M.P. Effrat (ed.), The Community: Approaches and Applications. New York: The Free Press, 57-88, 1974.

Dietrick, Barbara. "The Environment and Burglary Victimization in a Metropolitan Suburb," presented at the Annual Meeting of American Society of Criminology, Atlanta, Georgia, November 16-20, 1977.

Erskine, H. "The Polls: Fear of Violence and Crime," Public Opinion Quarterly, 38(1): 131-148, 1974.

Foley, D.L. Neighbors or Urbanites? Rochester, N.Y.: University of Rochester Press, 1952.

Fowler, Floyd J., Jr., Mary Ellen McCalla, Thomas W. Mangione. Reducing Residential Crime and Fear: The Hartford Neighborhood Crime Prevention Program. Washington, D.C.: U.S. Government Printing Office, December 1979.

Fried, Marc. "Grieving for a Lost Home." In L. Duhl (ed.), The Urban Condition. New York: Basic Books, 151-171, 1963.

Fried, Marc and Peggy Gleicher. "Some Sources of Residential Satisfaction in an Urban Slum." Journal of the American Institute of Planners, 27: 305-315, 1961.

Furstenberg, Frank F., Jr. "Public Reactions to Crime in the Streets." American Scholar, 49(4): 601-610, 1971.

Gans, Herbert J. The Urban Villagers. New York: Free Press, 1962.

Gardiner, Richard A. Design for Safe Neighborhoods, National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, September 1978.

Gerson, K., C.A. Strieve, and C.S. Fischer. "Attachment to Place." In C.S. Fischer (ed.), Networks and Places. New York: Free Press, 139-162, 1977.

Greenberg, Stephanie W. and Constance Roberson. Analysis of Drug Abuse Correlates. Final Report to Drug Enforcement Administration, Department of Justice, 1978.

Gwaltney, Margaret K. Designing Safe Environments: II. Bibliography. Santa Monica, Cal.: Rand, May 1978.

Gwaltney, Margaret K. and Robert K. Yin. Designing Safe Environments: I. What is a Feature. Santa Monica, Cal.: Rand, May 1978.

Hallman, H.W. The Organization and Operation of Neighborhood Councils: A Practical Guide. New York: Praeger, 1977.

Hartnagel, Timothy F. "The Perception of Fear of Crime: Implications for Neighborhood Cohesion, Social Activity, and Community Affect." Social Forces, 58(1): 176-193, September 1979.

Hindelang, M.J. "Public Opinion Regarding Crime, Criminal Justice, and Related Topics." Journal of Research in Crime and Delinquency, 11(2): 101-116, 1974.

Hunter, Albert A. "Symbols of Incivility: Social Disorder and Fear of Crime in Urban Neighborhoods." Paper presented at the Annual Meeting of the American Society of Criminology, Dallas, Texas, November 1978.

Hunter, Albert. "The Loss of Community: An Empirical Test Through Replication." American Sociological Review, 40(5): 537-52, 1975.

Jacobs, Jane. The Death and Life of Great American Cities. New York: Vintage Books, 1961.

Janowitz, Morris. The Community Press in an Urban Setting: The Social Elements of Urbanism. Chicago: University of Chicago Press, 1967.

Keller, Suzanne. The Urban Neighborhood: A Sociological Perspective. New York: Random House, 1968.

Lander, Bernard. Toward an Understanding of Juvenile Delinquency. New York: Columbia University Press, 1954.

Maccoby, Eleanor E., J.P. Johnson, and R.M. Church. "Community Integration and the Social Control of Juvenile Delinquency." Journal of Social Issues, XIV: 38-51, 1958.

Mawby, R.I. "Defensible Space: A Theoretical and Empirical Appraisal." Urban Studies, 14: 179-196, 1977.

McPherson, M. "Realities and Perceptions of Crime at the Neighborhood Level." Victimology, 3(384): 319-328, 1978.

Minnesota Crime Prevention Center. "An Analysis of the Relationship Between Assaults and Moby Dick's Bar." Minneapolis, Minn.: 1978a.

Minnesota Crime Prevention Center and Division of Planning, Department of Planning and Economic Development of City of St. Paul. "Neighborhood Deterioration and the Location of Adult Entertainment Establishments in St. Paul." Minneapolis, Minn.: 1978b.

Newman, Oscar. Defensible Space. New York: Macmillian Co., 1972.

Newman, Oscar and F. Wayne. The Private Street System in St. Louis. Report to the National Science Foundation (unpublished), New York: Institute for Community Design Analysis, 1974.

Patterson, Arthur H. "Crime and Fear of Crime Among the Elderly: The Role of the Physical and Social Environment." Manuscript, Pennsylvania State University, n.d.

Polk, Kenneth. "Juvenile Delinquency and Social Areas." Social Problems, 5: 214-217, 1957-58.

Report of the National Advisory Committee on Civil Disorders, Washington, D.C.: U.S. Government Printing Office, 1968.

Reppetto, Thomas A. Residential Crime. Cambridge, Massachusetts: Ballinger Publishing Co., 1974.

Savitz, Leonard. "Delinquency and Migration." Philadelphia Commission on Human Relations, January 1960.

Schlenger, William E. and Stephanie W. Greenberg. "Characteristics of Cities and Their Relationship to Heroin Use: An Analysis of Heroin Use Correlates in Metropolitan Areas." International Journal of the Addictions, 15(8): 1141-1168, 1980.

Schmid, Calvin F. "Urban Crime Areas: Part I." American Sociological Review, 25(4): 527-542, 1960a.

Schmid, Calvin F. "Urban Crime Areas: Part II." American Sociological Review, 25(5): 655-678, 1960b.

Shah, B.V. SESUDAAN: Standard Errors Program for Computing of Standardized Rates from Sample Survey Data, Research Triangle Institute Report, RTI/1789/00-01F, 1979.

Shaw, Clifford R. and Henry D. McKay. Junveile Delinquency and Urban Areas. Chicago: University of Chicago Press, 1942.

Skogan, Wesley G. and Michael G. Maxfield. The Reactions to Crime Papers. Volume I. Coping with Crime: Victimization, Fear, and Reactions to Crime in Three American Cities. Evanston, Ill.: Center for Urban Affairs, Northwestern University, June 1980.

Stein, M.A. The Eclipse of Community: An Interpretation of American Studies. Princeton, N.J.: Princeton University Press, 1960.

Sutherland, Edwin H. and Donald Cressey. Principles of Criminology, 7th ed. New York: J.B. Lippincott, 1966.

Suttles, Gerald D. The Social Construction of Communities. Chicago, University of Chicago Press, 1972.

Suttles, Gerald D. The Social Order of the Slum. Chicago: University of Chicago Press, 1968.

Taylor, Ralph B., Stephen D. Gottfredson, Sidney Brower. "The Defensibility of Defensible Space: A Critical Review and a Synthetic Framework for Future Research. In T. Hirshi and M. Gottfredson (eds.), Understanding Crime. Beverly Hills, Cal.: Sage Publications, 1980.

Taylor, Ralph, Stephen Gottfredson, Sidney Brower, Whit Drain, Kathleen Dockett. Informal Control in the Urban Residential Environment (Draft Report to the National Institute of Justice). Baltimore, Md.: Center for Metropolitan Planning and Research, Johns Hopkins University, 1980.

Warren, Donald I. "Neighborhood Structure and Riot Behavior in Detroit." Social Problems, XVI: 464-484, 1969.

Webber, M.M. "Order in Diversity: Community Without Propinquity." In R. Gutman and D. Popenoe (eds.), Neighborhood, City, and Metropolis: An Integrated Reader in Urban Sociology. New York: Random House, 1970.

Wilson, L.A., II. Private and Collective Choice Behavior in the Provision of Personal Security from Criminal Victimization. Ph.D. Dissertation, Department of Political Science, University of Oregon, 1976.

Wirth, L. "Urbanism as a Way of Life." In R. Gutman and D. Popenoe (eds.), Neighborhood, City and Metropolis: An Integrated Reader in Urban Sociology. New York: Random House, 1970.

Wright, Robert, Martin Heilweil, Paula Pelletier, Karen Dickenson. The Impact of Street Lighting on Street Crime. Ann Arbor, Michigan: Institute for Social Research, May 1974.

Yancey, William L. "Architecture Interaction, and Social Control." Environment and Behavior, 3(1): 3-21, March 1971.

Young, Michael and Peter Willmont. Family and Kinship in East London. London, Routledge and Kegan Paul, 1957.

APPENDIX C

Survey Instrument

SAFE AND SECURE NEIGHBORHOODS

Household Screening Form

Card 0 1 1-2/

A. INTERVIEWER NAME_____

INTERVIEWER ID #_____

B.

AFFIX LABEL HERE

3-6/

7-34/

35-43/

C. RECORD OF CONTACTS

Date	Time	Results	Contact For:	
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I
	a.m. p.m.		S	I

D. INTRODUCTION

Hello, my name is _____. I'm with the Research Triangle Institute, a research firm located in North Carolina. We are working on a study about what people do to help prevent crime in their neighborhood. We are also interested in how people feel about their neighborhood. We sent you a letter that described the study and mentioned how important your participation is to the study. Did you receive that letter? (IF NO, GIVE RESPONDENT A COPY OF LETTER AND ALLOW TIME FOR READING.) Participation in this study is completely voluntary. All of your answers will be held in strict confidence and our study will in no way identify you or your household. Your address was picked at random.

E. SAMPLE SELECTION

1. As you recall from the letter, only one of the adult members of this household will be asked to answer questions about neighborhood crime and attitudes toward the neighborhood. In order to select that person, I need to know the first name of all of the adults who are 18 years old or older who live at this address year round. Let's list them by age, beginning with the oldest first. (LIST NAMES BELOW.)

Person Number	First Name	Sex	
		M	F
1		1	2
2		1	2
3		1	2
4		1	2
5		1	2
6		1	2
7		1	2
8		1	2
9		1	2

Number of Adults in HH ☐ *44/*

Sex of Selected Respondent ☐ *45/*

INSTRUCTIONS:

SELECT THE INTERVIEW RESPONDENT BY USING THE RANDOM DIGIT LIST AT RIGHT. STARTING IN THE FIRST ROW, GOING FROM LEFT TO RIGHT, SELECT THE FIRST NUMBER WHICH FALLS WITHIN THE RANGE OF THE NUMBER OF ELIGIBLES IN THE HOUSEHOLD. THE FIRST NUMBER WHICH FALLS IN THIS RANGE IDENTIFIES THE PERSON TO BE INTERVIEWED. CIRCLE THE NAME AND NUMBER OF THE PERSON SELECTED. THEN CROSS OUT ALL OTHER NAMES ON THE LIST.

Random Digit List

2. (NAME/YOU) has/have been selected. Is/Are (NAME/YOU) available to be interviewed now? (IF YES, CONTINUE WITH INTERVIEW ON NEXT PAGE. IF NO, SCHEDULE APPOINTMENT. RECORD APPOINTMENT DATE AND TIME IN SECTION C.

START TIME: _____ a.m. p.m.

1. In what year did you move to this address?

RECORD YEAR . . . . . 19 ☐☐ *46-47/*
Lived here all my life 85

2. Do you own or rent this house (apartment)?

Own. 1 *48/*
Rent 2
Don't know 8

3. Does this neighborhood have a name?

Yes. . . . . (ASK A) 1 *49/*
No . . . . . (SKIP TO Q.4) . . . 2
Don't know . . (SKIP TO Q.4) . . . 8

A. What is it called? _____ ☐☐ *50-51/*

4. A. Here's a map of the part of the city where you live. (SHOW MAP 1.) Here's your street and here are some of the nearby main roads. (POINT OUT.) On this map, would you please draw a line around the area you think of as your neighborhood?

☐☐☐☐ *52-55/*

B. Some people have called your neighborhood Pittsburgh. We'd like to use this name occasionally during the interview. (SHOW MAP 2.) We will be referring to the area from Stewart Avenue on the west to the railroad tracks on the east, and from Glenn Street on the north to the railroad tracks on the south.

Now I would like to ask you some questions about how often you do things with people who live around here. For each question I ask, please tell me if you do it almost every day, about once a week, about once a month, less than once a month, or never. (SHOW CARD 1.)

5. A. How often do you and others living within two blocks of here help each other with repairs or other jobs in or around the house?

Almost every day 1 *56/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

B. How often do you and others who live more than two blocks from here but in the neighborhood help each other with repairs or other jobs in or around the house?

Almost every day 1 *57/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

6. A. How often do you and others living within two blocks of here eat dinner or some other meal together?

Almost every day 1 *58/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

B. How often do you and others who live more than two blocks from here but in the neighborhood eat dinner or some other meal together?

Almost every day 1 *59/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

7. A. How often do you borrow or exchange things such as tools, recipes, or the like with the people who live within two blocks of here?

Almost every day 1 *60/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

B. How often do you borrow or exchange things such as tools, recipes, or the like with people who live more than two blocks from here but in the neighborhood?

Almost every day 1 *61/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

8. A. How often do you visit with people living within two blocks of your home?

Almost every day 1 *62/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

B. How often do you visit with people living more than two blocks from here but in the neighborhood?

Almost every day 1 *63/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

9. A. If you have young children living at home with you, how often do you ask someone living within two blocks of here to watch your children when you are not at home?

Almost every day 1 *64/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5
Do not have children . . (SKIP TO Q.10). 6

B. How often do you ask someone who lives more than two blocks from here but in the neighborhood to watch your children when you are not at home?

Almost every day 1 *65/*
About once a week. 2
About once a month 3
Less than once a month 4
Never. 5

Now I'd like to ask about some things which may be in your neighborhood.

10. Are there grocery stores or supermarkets in this neighborhood?

Yes. 1 *66/*
No . . . . . (SKIP TO Q.11). . . 2
Don't know . . (SKIP TO Q.11). . . 8

A. When you do your grocery shopping, do you usually do this in the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *67/*
Usually outside. 2

11. Do you ever go out to eat in restaurants, including diners or fast-food places?

Yes. 1 *68/*
No . . . . . (SKIP TO Q.12). . . 2

A. Are there restaurants in this neighborhood?

Yes. 1 *69/*
No . . . . . (SKIP TO Q.12). . . 2
Don't know . . (SKIP TO Q.12). . . 8

B. When you go out to eat, do you usually go to restaurants inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *70/*
Usually outside. 2

12. Do you ever go to religious services?

Yes. 1 *71/*
No . . . . . (SKIP TO Q.13). . . 2

A. Are there any churches or synagogues of your religion in this neighborhood?

Yes. 1 *72/*
No . . . . . (SKIP TO Q.13). . . 2
Don't know . . (SKIP TO Q.13). . . 8

B. When you go to religious services, do you usually go inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *73/*
Usually outside. 2

13. Do you ever go to a doctor or other medical facility?

Yes. 1 *74/*
No . . . . . (SKIP TO Q.14). . . 2

A. Are there doctors or other medical facilities in this neighborhood?

Yes. 1 *75/*
No . . . . . (SKIP TO Q.14). . . 2
Don't know . . (SKIP TO Q.14). . . 8

B. When you need medical treatment, do you usually go inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *76/*
Usually outside. 2

---

14. Are there any clothing stores in this neighborhood?

Yes. 1 *77/*
No . . . . . (SKIP TO Q.15). . . 2
Don't know . . (SKIP TO Q.15). . . 8

A. When you go clothes shopping, do you usually do this inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *78/*
Usually outside. 2

Card 0 2 *1-2/*
ID # _____ *3-6/*

15. Do you have a car?

Yes. 1 *7/*
No . . . . . (SKIP TO Q.16). . . 2

A. Are there any car repair shops in this neighborhood?

Yes. 1 *8/*
No . . . . . (SKIP TO Q.16). . . 2
Don't know . . (SKIP TO Q.16). . . 8

B. When you take your car for repairs, do you usually do this inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *9/*
Usually outside. 2

---

16. Do you ever go to parks or playgrounds?

Yes. 1 *10/*
No . . . . . (SKIP TO Q.17). . . 2

A. Are there any parks or playgrounds in this neighborhood?

Yes. 1 *11/*
No . . . . . (SKIP TO Q.17). . . 2
Don't know . . (SKIP TO Q.17). . . 8

B. When you go to parks or playgrounds, do you usually do this inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *12/*
Usually outside. 2

---

17. Do you ever go to recreational centers?

Yes. 1 *13/*
No . . . . . (SKIP TO Q.18). . . 2

A. Are there any recreational centers in this neighborhood?

Yes. 1 *14/*
No . . . . . (SKIP TO Q.18). . . 2
Don't know . . (SKIP TO Q.18). . . 8

B. When you go to recreational centers, do you usually do this inside the neighborhood or outside of the neighborhood?

Usually in neighborhood. 1 *15/*
Usually outside. 2

---

18. Are there any other facilities in the neighborhood that you use, things such as laundromats, banks, libraries, or the like?

Yes. 1 *16/*
No . . . . . (SKIP TO Q.19). . . 2
Don't know . . (SKIP TO Q.19). . . 8

A. IF YES: What are they?

_____ ☐☐ *17-18/*
_____ ☐☐ *19-20/*
_____ ☐☐ *21-22/*

---

19. We're interested in the groups and organizations that individuals belong to. Please tell me whether or not you are a member of . . . READ EACH ITEM. IF YES TO A, ASK B AND C.

	A. Belong?		IF YES TO A, ASK: B. How often do you attend meetings or activities of this group? Would you say . . .					IF YES TO A, ASK: C. Does it ever meet in your neighborhood?	
	Yes	No	Once a week or more	Two or three times a month	Once a month	A few times a year	Never	Yes	No
1. A church or church-related group	1	2 *23/*	1	2	3	4	5 *24/*	1	2 *25/*
2. PTA or other school association	1	2 *26/*	1	2	3	4	5 *27/*	1	2 *28/*
3. A trade union, business club or professional association	1	2 *29/*	1	2	3	4	5 *30/*	1	2 *31/*
4. A political organization	1	2 *32/*	1	2	3	4	5 *33/*	1	2 *34/*
5. A block or neighborhood association	1	2 *35/*	1	2	3	4	5 *36/*	1	2 *37/*
6. A social or recreational group	1	2 *38/*	1	2	3	4	5 *39/*	1	2 *40/*

20. A. Do you have any children under age eighteen living at home with you? This includes adopted children, foster children, and children from a previous marriage.

Yes 1 *41/*

No . . . . (SKIP TO Q.23) 2

B. How many?

RECORD NUMBER: _____ ☐☐ *42-43/*

21. I'm interested in the ages of your children and where they go to school. First, how old is the oldest child living at home with you? RECORD AGE UNDER A. IF 5 YEARS OLD OR OLDER, ASK B. CONTINUE FOR REMAINING CHILDREN.

Child	A. What is his/her age?		IF 5 YEARS OLD OR OLDER, ASK: B. Does he/she attend school in this neighborhood? Yes	No	
How about. . .					
(the oldest)	_____	*44-45/*	1	2	*46/*
(second oldest)	_____	*47-48/*	1	2	*49/*
(third oldest)	_____	*50-51/*	1	2	*52/*
(fourth oldest)	_____	*53-54/*	1	2	*55/*
(fifth oldest)	_____	*56-57/*	1	2	*58/*
(sixth oldest)	_____	*59-60/*	1	2	*61/*
(seventh oldest)	_____	*62-63/*	1	2	*64/*
(eighth oldest)	_____	*65-66/*	1	2	*67/*

Card 0 3 *1-2*
ID # _____ *3-6*

22. We're also interested in the groups and organizations that children belong to. Please tell me whether or not any of your children is a member of . . . READ EACH ITEM. IF YES TO A, ASK B.

	A. Belong?		IF YES TO A, ASK: B. Does it ever meet in your neighborhood?		
	Yes	No	Yes	No	
1. A church or church-related group	1	2 *7/*	1	2	*8/*
2. A school club	1	2 *9/*	1	2	*10/*
3. Little League or other sports club	1	2 *11/*	1	2	*12/*
4. A scout group, such as Boy Scouts, Girl Scouts, Cub Scouts, or Brownies	1	2 *13/*	1	2	*14/*
5. A fraternity or sorority	1	2 *15/*	1	2	*16/*
6. YMCA or YWCA	1	2 *17/*	1	2	*18/*
7. Some other social or recreational group	1	2 *19/*	1	2	*20/*

23. How many of your good friends live within two blocks of your home?

RECORD NUMBER: _____ ☐☐ *21-22/*

24. How many of your good friends live more than two blocks away, but within the neighborhood?

RECORD NUMBER: _____ ☐☐ *23-24/*

25. Considering all your good friends, how many of them live in this neighborhood? Would you say that . . .

All of them. 1 *25/*
Most of them 2
About half of them 3
Only a few of them, or 4
None of them 5

. . . live in this neighborhood?

26. How many of your relatives live within two blocks of your home?

RECORD NUMBER: _____ ☐☐ *26-27/*

27. How many of your relatives live more than two blocks away but within the neighborhood?

RECORD NUMBER: _____ ☐☐ *28-29/*

28. Considering all your relatives, how many of them live in this neighborhood? Would you say that . . .

All of them. 1 *30/*
Most of them 2
About half of them 3
Only a few of them, or 4
None of them 5

. . . live in this neighborhood?

29. Would you say that most of the other adults in your neighborhood are similar in age to you, say within 10 years of your age, or different in age?

Similar. 1 *31/*
Different. 2
Fifty-fifty. 3
Don't know 8

30. Would you say that most of the other adults in your neighborhood have a similar amount of education as you or a different amount of education?

Similar. 1 *32/*
Different. 2
Fifty-fifty. 3
Don't know 8

31. Would you say that most of the households in this neighborhood make a similar amount of money as yours or a different amount of money?

Similar. 1 *33/*
Different. 2
Fifty-fifty. 3
Don't know 8

32. Would you say that most of the other people in this neighborhood raise children in a way that is similar to the way you would or different from the way you would?

Similar. 1 *34/*
Different. 2
Fifty-fifty. 3
Don't know 8

33. Would you say that most of the people in this neighborhood keep up their houses and yards in a way that is similar to the way you do or different?

Similar. 1 *35/*
Different. 2
Fifty-fifty. 3
Don't know 8

34. In general, considering the kinds of things I just mentioned, would you say that most of the adults in this neighborhood are similar to you or different from you?

Similar. 1 *36/*
Different. 2
Fifty-fifty. 3
Don't know 8

---

35. Are there any local newsletters in this neighborhood? I mean newsletters that people read to learn about what's happening in their neighborhood.

Yes. 1 *37/*
No . . . . . (SKIP TO Q.36). . . 2
Don't know . . (SKIP TO Q.36). . . 8

A. Do you ever read this newsletter?

Yes. 1 *38/*
No . . . . . (SKIP TO Q.36). . . 2

B. About how often do you read it? Would you say nearly every week, once every few weeks, or less often than that?

Nearly every week. 1 *39/*
Every few weeks. 2
Less often 3

---

36. Now we would like to know to what extent you and your neighbors find out about certain things by talking to each other. First, how often do you and your neighbors find out about where to look for a house or apartment by talking to each other? Would you say often, sometimes, rarely, or never? (REPEAT FOR b THROUGH g.)

	Often	Sometimes	Rarely	Never	
a. Where to look for a house or apartment	1	2	3	4	*40/*
b. Where the shopping sales are	1	2	3	4	*41/*
c. Where to find a job	1	2	3	4	*42/*
d. Where services such as health care and day care are available	1	2	3	4	*43/*
e. Information about neighborhood activities such as meetings and block parties	1	2	3	4	*44/*
f. Where unsafe areas in the neighborhood are	1	2	3	4	*45/*
g. Who the local troublemakers are	1	2	3	4	*46/*

37. I'm going to read a list of things that are sometimes problems in neighborhoods. For each thing, please tell me if it is a big problem, somewhat of a problem, or not a problem at all in your neighborhood.

	Big Problem	Somewhat Problem	Not a Problem	
a. Noisy neighbors; people who play loud music, have late parties, or have noisy quarrels	1	2	3	47/
b. Dogs barking loudly or being a nuisance	1	2	3	56/
c. People not disposing of garbage properly or leaving litter around the area	1	2	3	65/
d. Poor care of property and lawns	1	2	3	Card 0 4 1-2/ ID # 3-7/ 7/
e. People who say insulting things or bother people as they walk down the street	1	2	3	16/
f. Landlords who don't care about what happens to the neighborhood	1	2	3	25/
g. Purse snatching and other street crimes	1	2	3	34/
h. Presence of drugs and drug users	1	2	3	43/
i. Abandoned houses or other empty buildings	1	2	3	52/
j. Vacant lots with trash and junk	1	2	3	61/
k. People damaging the cars or property of others	1	2	3	70/
l. People drunk in public places like streets or playgrounds	1	2	3	Card 0 5 1-2/ ID # 3-7/ 7/
m. Teenagers hanging out on corners or near stores	1	2	3	16/
n. Prostitutes walking the streets or standing on corners	1	2	3	25/
o. Adult movie theaters or adult book-stores	1	2	3	34
p. Is there any other big problem in your neighborhood I haven't mentioned? (SPECIFY) ______				43-44/

NOTE: IF NO BIG PROBLEMS MENTIONED IN Q.37, SKIP TO Q.39.

38. For the big problems in your neighborhood, I'd like to ask you what kind of action you took. First, you said that (READ FIRST ITEM THAT RESPONDENT SAID WAS A BIG PROBLEM IN Q.37) was a big problem in your neighborhood. Have you ever taken any action to try to solve the problem? IF YES, READ ACROSS OTHER HEADINGS IN ROW. CIRCLE ONE CODE FOR EACH. IF NO, GO ON TO NEXT BIG PROBLEM.

Have you:

	(1) Taken any action to try to solve this problem? Yes	No	(2) Dealt directly with the person or persons responsible? Yes	No	(3) Gotten together with other neighbors to try to solve the problem? Yes	No	(4) Called the police? Yes	No	(5) Called your city councilman or a city agency? Yes	No	(6) Taken some other action? What was it?* Yes	No	
a.	1	2 48/	1	2 49/	1	2 50/	1	2 51/	1	2 52/	1	2 53/	
	*Other (SPECIFY) ______												54-55/
b.	1	2 57/	1	2 58/	1	2 59/	1	2 60/	1	2 61/	1	2 62/	
	*Other (SPECIFY) ______												63-64/
c.	1	2 66/	1	2 67/	1	2 68/	1	2 69/	1	2 70/	1	2 71/	
	*Other (SPECIFY) ______												72-73/
d.	1	2 8/	1	2 9/	1	2 10/	1	2 11/	1	2 12/	1	2 13/	
	*Other (SPECIFY) ______												14-15/
e.	1	2 17/	1	2 18/	1	2 19/	1	2 20/	1	2 21/	1	2 22/	
	*Other (SPECIFY) ______												23-24/
f.	1	2 26/	1	2 27/	1	2 28/	1	2 29/	1	2 30/	1	2 31/	
	*Other (SPECIFY) ______												32-33/
g.	1	2 35/	1	2 36/	1	2 37/	1	2 38/	1	2 39/	1	2 40/	
	*Other (SPECIFY) ______												41-42/
h.	1	2 44/	1	2 45/	1	2 46/	1	2 47/	1	2 48/	1	2 49/	
	*Other (SPECIFY) ______												50-51/
i.	1	2 53/	1	2 54/	1	2 55/	1	2 56/	1	2 57/	1	2 58	
	*Other (SPECIFY) ______												59-60/
j.	1	2 62/	1	2 63/	1	2 64/	1	2 65/	1	2 66/	1	2 67/	
	*Other (SPECIFY) ______												68-69
k.	1	2 71/	1	2 72/	1	2 73/	1	2 74/	1	2 75/	1	2 76/	
	*Other (SPECIFY) ______												77-78/
l.	1	2 8/	1	2 9/	1	2 10/	1	2 11/	1	2 12/	1	2 13/	
	*Other (SPECIFY) ______												14-15
m.	1	2 17/	1	2 18/	1	2 19/	1	2 20/	1	2 21/	1	2 22/	
	*Other (SPECIFY) ______												23-24/
n.	1	2 26/	1	2 27/	1	2 28/	1	2 29/	1	2 30/	1	2 31/	
	*Other (SPECIFY) ______												32-33/
o.	1	2 35/	1	2 36/	1	2 37/	1	2 38/	1	2 39/	1	2 40/	
	*Other (SPECIFY) ______												41-42
p.	1	2 [illegible]	1	2 [illegible]	1	2 [illegible]	1	2 [illegible]	1	2 [illegible]	1	2 [illegible]	
	*Other (SPECIFY) ______												51-52/

39. A. Of the problems that we just talked about, which do you feel is the biggest problem in the neighborhood?

_____ ☐☐ *53-54/*

B. Which is the second biggest problem?

_____ ☐☐ *55-56/*

---

40. Do you plan on moving from this neighborhood sometime soon, say within the next two years?

Yes. 1 *57/*
No . . . . . (SKIP TO Q.41). . . 2
Don't know . . (SKIP TO Q.41). . . 8

A. What is your reason for the planned move?

_____ ☐☐ *58-59/*

_____ ☐☐ *60-61/*

_____ ☐☐ *62-63/*

---

41. A. Suppose that for some reason you had to move away from this neighborhood? Would you be . . .

Happy. 1 *64/*
Sorry, or. 2
Indifferent. 3

B. What would you miss the most if you had to leave?

_____ ☐☐ *65-66/*

_____ ☐☐ *67-68/*

_____ ☐☐ *69-70/*

---

42. Overall, in the past two years, would you say your neighborhood has become a better place to live, has gotten worse, or is it about the same as it used to be?

Better 1 *71/*
Worse. 2
About the same 3
Haven't lived here two years . . . 4
Don't know 8

---

43. All things considered, what do you think your neighborhood will be like two years from now? Will it be a better place to live, will it have gotten worse, or will it be about the same as it is now?

Better 1 *72/*
Worse. 2
About the same 3
Don't know 8

---

44. Some people feel their neighborhood is a real home to them, a place where they have roots. Other people think of their neighborhood as just a place where they happen to be living. Which one of those comes closest to the way you consider your neighborhood? Do you feel it is a . . .

Real home, or. 1 *73/*
Just a place to live?. 2

---

45. In some neighborhoods, people do things together and help each other--in other neighborhoods, people mostly go their own way. In general, what kind of neighborhood would you say this is, mostly one where people help each other or one where people go their own way?

Help each other. 1 *74/*
Go their own way 2

---

46. On the whole, how do you feel about living in this neighborhood? Would you say that you . . .

Like living here . . (ASK A) . . . 1 *75/*

Dislike living here, or are . . . (ASK B) 2

Indifferent about living here . . (SKIP TO Q.47). . . 3

A. Would you say that you . . .

Like living here very much . . (SKIP TO Q.47) . . . 1 *76/*

Like living here somewhat. . (SKIP TO Q.47). 2

B. Would you say that you . . .

Dislike living here very much. . . 1 *77/*

Dislike living here somewhat . . . 2

Card 0 6 *1-2/*
ID # ____ *3-6/*

47. A. Are there certain areas within two blocks of your home that you avoid because you feel they are dangerous?

Yes. 1 *7/*

No . . . . . (SKIP TO Q.48). . . 2

Don't know . . (SKIP TO Q.48). . . 8

B. Do you avoid . . .

	Yes	No	
a. the sidewalk in front of your home	1	2	*8/*
b. a nearby street corner	1	2	*9/*
c. a nearby park or recreation area	1	2	*10/*
d. a nearby shopping area	1	2	*11/*
e. a public housing project	1	2	*12/*
f. an apartment complex	1	2	*13/*
g. some other location	1	2	*14/*
(SPECIFY) _____			*15-16/*

C. Do you avoid these areas . . .

Just during the day. 1 *17/*

Just at night, or. 2

At all times 3

D. What is it about these areas that makes you feel unsafe?

_____ *18-19/*

_____ *20-21/*

_____ *22-23/*

IF RESPONDENT STATES ANYTHING OTHER THAN A DIRECT THREAT TO PERSON OR PROPERTY, ASK: Why does that make you feel unsafe?

_____ *24-25/*

_____ *26-27/*

_____ *28-29/*

48. A. Are there certain areas more than two blocks away but within the neighborhood that you avoid because you feel they are dangerous?

Yes 1 *30/*
No . . . . . (SKIP TO Q.49) . . . 2
Don't know . . (SKIP TO Q.49) . . . 8

B. Do you avoid . . .

	Yes	No	
a. a nearby street corner	1	2	*31/*
b. a nearby park or recreation area	1	2	*32/*
c. a nearby shopping area	1	2	*33/*
d. a public housing project	1	2	*34/*
e. an apartment complex	1	2	*35/*
f. some other location	1	2	*36/*
(SPECIFY) _____	[ ][ ]		*37-38/*

C. Do you avoid these areas . . .

Just during the day. 1 *39/*
Just at night, or. 2
At all times 3

D. What is it about these areas that makes you feel unsafe?

_____ [ ][ ] *40-41/*
_____ [ ][ ] *42-43/*
_____ [ ][ ] *44-45/*

IF RESPONDENT STATES ANYTHING OTHER THAN A DIRECT THREAT TO PERSON OR PROPERTY, ASK: Why does that make you feel unsafe?

_____ [ ][ ] *46-47/*
_____ [ ][ ] *48-49/*
_____ [ ][ ] *50-51/*

49. In some neighborhoods, the people who live there have a lot to say about what goes on in that neighborhood. In other neighborhoods, people don't have much control over what happens there. Would you say that you and your neighbors have a lot to say about what goes on in your neighborhood, or that you don't have much control?

Have a lot to say about what goes on 1 *52/*
Don't have much control. 2

50. I'm going to read you a list of what some people expect their neighbors to do. Would you tell me whether you agree or disagree with these statements?

A. Neighbors should scold neighborhood children for fighting.

Agree. 1 *53/*
Disagree 2
Don't know 8

B. Neighbors should keep an eye out for suspicious people or events.

Agree. 1 *54/*
Disagree 2
Don't know 8

C. Neighbors should call the police if a neighbor's property or home is being vandalized.

Agree. 1 *55/*
Disagree 2
Don't know 8

D. Neighbors should use physical force to assist a neighbor being mugged.

Agree. 1 *56/*
Disagree 2
Don't know 8

51. I'd like to ask you about any trouble you may have witnessed in your neighborhood in the last year. Have you seen or heard:

a. Young people using foul language in the streets?
Yes . . . 1 *57/*
No . . . 2
Don't know . . . 8

b. Young people destroying property?
Yes . . . 1 *68/*
No . . . 2
Don't know . . . 8

Card 0 7 *1-2/*
ID # ____ *3-6/*

c. Young people fighting?
Yes . . . 1 *7/*
No . . . 2
Don't know . . . 8

d. Suspicious people hanging around?
Yes . . . 1 *18/*
No . . . 2
Don't know . . . 8

e. Someone trying to break into a house or car?
Yes . . . 1 *29/*
No . . . 2
Don't know . . . 8

f. A mugging or purse snatching?
Yes . . . 1 *40/*
No . . . 2
Don't know . . . 8

g. Is there any other kind of trouble that you have seen or heard in your neighborhood in the last year? (SPECIFY)

_____ ☐☐ *51-52/*

(ASK THE FOLLOWING FOR EACH "YES" RESPONSE TO QUESTION 51. IF NO "YES" RESPONSES, SKIP TO QUESTION 53).

52. When you saw (READ FIRST TROUBLE), which of the following did you do? READ ACROSS HEADINGS IN ROW. CIRCLE ONE CODE FOR EACH. THEN, GO ON TO NEXT TROUBLE.

Did you:

	(1) Keep an eye on it		(2) Call a neighbor		(3) Call police		(4) Take some other direct action? * What was it?		(5) Do something else? What was it? **		(6) Decide it was none of your business	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
		58/		*59/*		*60/*		*61/*		*62/*		*63/*
a.	1	2	1	2	1	2	1	2	1	2	1	2
												64-65/
												66-67/
		69/		*70/*		*71/*		*72/*		*73/*		*74/*
b.	1	2	1	2	1	2	1	2	1	2	1	2
												75-76/
												77-78/
		8/		*9/*		*10/*		*11/*		*12/*		*13/*
c.	1	2	1	2	1	2	1	2	1	2	1	2
												14-15/
												16-17/
		19/		*20/*		*21/*		*22/*		*23/*		*24/*
d.	1	2	1	2	1	2	1	2	1	2	1	2
												25-26/
												27-28/
		30/		*31/*		*32/*		*33/*		*34/*		*35/*
e.	1	2	1	2	1	2	1	2	1	2	1	2
												36-37/
												38-39/
		41/		*42/*		*43/*		*44/*		*45/*		*46/*
f.	1	2	1	2	1	2	1	2	1	2	1	2
												47-48/
												49-50/
		53/		*54/*		*55/*		*56/*		*57/*		*58/*
g.	1	2	1	2	1	2	1	2	1	2	1	2
												59-60/
												61-62/

* Other Direct (SPECIFY) _____

** Something Else (SPECIFY) _____

53. A. How often do you walk around in your neighborhood? Is it . . .

Every day. 1 *63/*
Several times a week 2
Once a week. 3
Less than once a week, or. 4
Never . . . (SKIP TO Q.54) 5

B. About what area do you usually cover on these walks? Do you . . .

Stay on your block 1 *64/*
Go about two blocks from your home, or. 2
Go more than two blocks from your home 3

C. Do you usually take these walks . . .

During the day 1 *65/*
During the evening, or 2
Both 3

D. On these walks do you make a point of looking out for suspicious people or activities?

Yes. 1 *66/*
No 2
Don't know 8

---

54. For the purposes of this study, would you mind telling me how often there is anyone at home on weekdays, say between 8 in the morning and 6 in the evening? Would you say usually, sometimes, or never?

Usually. 1 *67/*
Sometimes. 2
Never. 3

---

55. For the purposes of this study, would you mind telling me how often there is anyone at home on weeknights, say between 6 and 11? Would you say usually, sometimes, or never?

Usually. 1 *68/*
Sometimes. 2
Never. 3

---

56. How often do you spend time outside your house or apartment for more than just a few minutes--sitting on the porch or step, working in the yard, or something like that? Would you say . . .

Every day. 1 *69/*
Several times a week 2
Once a week. 3
Less than once a week, or. 4
Never. 5

---

57. A. When you are in the <u>two block area around your home</u>, do you make a habit of watching out for suspicious looking people?

Yes. 1 *70/*
No 2
Don't know 8

B. When you are in the <u>rest of the neighborhood</u>, do you make a habit of watching out for suspicious looking people?

Yes. 1 *71/*
No 2
Don't know 8

---

58. In general, how easy would you say it is to tell a stranger from someone who lives in the <u>two block area around your home</u>? Is it easy or difficult?

Easy 1 *72/*
Difficult. 2
Don't know 8

B. How easy would you say it is to tell a stranger from someone who lives in the <u>rest of the neighborhood</u>? Is it easy or difficult?

Easy 1 *73/*
Difficult. 2
Don't know 8

Now I would like to ask you some questions about crime.

59. How much crime would you say there is in the two block area around your home? Would you say there is a lot, some, only a little, or none?

A lot. 1 *74/*
Some 2
Only a little. 3
None . . . . (SKIP TO Q.60). . . . 4
Don't know . (SKIP TO Q.60). . . . 8

What kinds of crime are in the two block area around your home? (PROBE FOR EXACT TYPES OF CRIME IF NECESSARY.)

_____ ☐☐ *75-76/*

_____ ☐☐ *77-78/*

_____ ☐☐ *79-80/*

Card ☐0 8☐ *1-2/*
ID # ____ *3-6/*

60. How much crime would you say there is in the rest of this neighborhood? Would you say there is a lot, some, only a little, or none?

A lot. 1 *7/*
Some 2
Only a little. 3
None . . . . (SKIP TO Q.61). . . . 4
Don't know . (SKIP TO Q.61). . . . 8

What kinds of crime? (PROBE FOR EXACT TYPES OF CRIME IF NECESSARY.)

_____ ☐☐ *8-9/*

_____ ☐☐ *10-11/*

_____ ☐☐ *12-13/*

---

61. How safe do you feel your neighborhood is compared to the rest of Atlanta? Would you say it is . . .

More safe. 1 *14/*
Less safe, or. 2
About the same 3

---

62. Within the past two years, do you think crime in your neighborhood has increased, decreased, or remained the same?

Increased. 1 *15/*
Decreased. 2
Remained the same. (SKIP TO Q.64). 3
Haven't lived here two years (SKIP TO Q.64). 4
Don't know . . . .(SKIP TO Q.64) . 8

---

63. Were you thinking about particular kinds of crimes when you said that crime has (increased/decreased)?

Yes. 1 *16/*
No . . . . (SKIP TO Q.64). 2

A. What kinds of crimes? (PROBE FOR EXACT TYPES OF CRIME IF NECESSARY.)

_____ ☐☐ *17-18/*

_____ ☐☐ *19-20/*

_____ ☐☐ *21-22/*

64.. Would you say that the crimes occurring in your neighborhood are committed mostly by the people who live in this neighborhood or mostly by people who live outside the neighborhood?

No crime in neighborhood 1 *23/*
People living here 2
People living outside. 3
Equally by both. 4
Don't know 8

---

65. I'm going to read statements people have made about crime. For each one please tell me if it's mostly true in your case or mostly false.

		Mostly True	Mostly False	
a.	I'm often a little worried about being the victim of a crime in my neighborhood.	1	2	*24/*
b.	I would probably be afraid if a stranger stopped me at night in my neighborhood to ask for directions.	1	2	*25/*
c.	I'm not as afraid for my own safety as I am for my family and friends in this neighborhood.	1	2	*26/*
d.	When I have to be away from home for a long time, I worry that someone might try to break in.	1	2	*27/*
e.	When I hear footsteps behind me at night in my neighborhood, it makes me feel uneasy.	1	2	*28/*

66. Now I'd like you to think about the neighborhoods that border on this neighborhood.

A. Would you say that any of them are less safe than this neighborhood?

Yes 1 *29/*
No 2
Don't know 8

B. Do you feel that the people who live there are basically similar to or different from you?

Similar. . . . (SKIP TO Q.67). . . 1 *30/*
Different. 2
Don't know . . (SKIP TO Q.67). . . 8

C. What makes these people different?

_____ ☐☐ *31-32/*
_____ ☐☐ *33-34/*
_____ ☐☐ *35-36/*

67. How worried are you about your home being broken into or entered illegally when no one is home? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

Very worried 1 *37/*
Somewhat worried 2
Just a little worried. 3
Not at all worried 4

68. How worried are you about being held up on the street, threatened, beaten up, or anything of that sort within two blocks of your home? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

Very worried 1 *38/*
Somewhat worried 2
Just a little worried. 3
Not at all worried 4

69. How worried are you about being held up on the street, threatened, beaten up, or anything of that sort within the rest of the neighborhood? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

Very worried 1 *39/*
Somewhat worried 2
Just a little worried. 3
Not at all worried 4

70. How worried are you about other members of your household being held up on the street, threatened, beaten up, or anything of that sort within two blocks of your home? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

Very worried 1 *40/*
Somewhat worried 2
Just a little worried. 3
Not at all worried 4
No other household members (SKIP TO Q.72). 5

71. How worried are you about other members of your household being held up on the street, threatened, beaten up, or anything of that sort within the rest of the neighborhood? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

Very worried 1 *41/*
Somewhat worried 2
Just a little worried. 3
Not at all worried 4

---

72. During the last year, have you done any of the following to avoid crime in this neighborhood? Have you . . .

A. avoided using local public transportation in this neighborhood?

Yes. 1 *42/*
No 2
Haven't lived here a year. 3

B. stayed in at night?

Yes. 1 *43/*
No 2
Haven't lived here a year. 3

C. arranged to have someone go with you when going somewhere in the neighborhood?

Yes. 1 *44/*
No 2
Haven't lived here a year. 3

---

73. In order to protect you and your belongings, have you done any of the following things while living in your present residence? Have you . . .

		Yes	No	
a.	had a neighbor pick up your mail and newspapers while you were away?	1	2	*45/*
b.	had a neighbor keep a watch on your home while you were away?	1	2	*46/*
c.	engraved identification on valuables?	1	2	*47/*
d.	installed a burglar alarm in your home?	1	2	*48/*
e.	taken other security measures, such as using timers on your lights, putting bars on your windows, or adding new locks?	1	2	*49/*
f.	kept a watch dog?	1	2	*50/*
g.	kept a gun or other weapon at home?	1	2	*51/*
h.	taken a course in self-defense?	1	2	*52/*
i.	joined a program going on in the neighborhood to prevent or reduce crime, such as Neighborhood Watch, Citizen Alert, Block Parent, Business Watch, or a Citizen Patrol?	1	2 (SKIP TO Q. 74)	*53/*

A. What program or programs did you join?

_____ ☐☐ *54-55/*
_____ ☐☐ *56-57/*
_____ ☐☐ *58-59/*

---

74. Can you think of any other things that you have done in the last year to avoid or protect yourself against crime in this neighborhood?

Yes. 1 *60/*
No . . . (SKIP TO Q.75). 2
Haven't lived here a year. . (SKIP TO Q.75). 3

A. What were these things?

_____ ☐☐ *61-62/*
_____ ☐☐ *63-64/*
_____ ☐☐ *65-66/*

---

75. How much of the information that you get about crime in <u>your neighborhood</u> comes from each of the following sources? First, do you get a great deal of information, some information, or no information at all about crime in your neighborhood from local neighborhood newsletters? REPEAT FOR b THROUGH d. CIRCLE ONE CODE ON EACH LINE.

	Great Deal	Some	None	
a. Local neighborhood newsletters	1	2	3	67/
b. Conversations with neighbors	1	2	3	68/
c. Just keeping eyes and ears open	1	2	3	69/
d. City newspapers, radio or T.V.	1	2	3	70/

76. Do you think anything could be done to reduce crime in this neighborhood?

Yes. 1 71/
No . . . . . (SKIP TO Q.77). . . . 2
Don't know . (SKIP TO Q.77). . . . 8

A. What kinds of things?

_____ ☐☐ 72-73/
_____ ☐☐ 74-75/
_____ ☐☐ 76-77/

Card ☐0☐9 1-2/
ID # _____ 3-6/

Now I'd like to ask you about some things that might have happened to you or to members of your household since the summer of 1979. I'd like you to think back to August 1979, about 12 months ago.

77. A. Since August 1979, has anyone damaged or defaced the building you live in, for example, by writing on the walls, breaking windows, setting fires, or anything like that?

Yes. 1 7/
No . . . . (SKIP TO Q.78). 2

B. How many times did this happen?

RECORD NUMBER: _____ ☐☐ 8-9/

IF ONLY ONE INCIDENT MENTIONED, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT <u>THREE MOST RECENT</u> INCIDENTS ONLY.

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	10/	13/	16/
a. Did you know the person who damaged the building?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
b. Did it happen . . .	11/	14/	17/
1. In your present residence?	Present. . . 1	Present. . . 1	Present. . . 1
2. When you lived elsewhere in the neighborhood?	Elsewhere in Neighborhood. . . 2	Elsewhere in Neighborhood. . . 2	Elsewhere in Neighborhood. . . 2
3. When you lived outside the neighborhood?	Outside. . . 3	Outside. . . 3	Outside. . . 3
	12/	15/	18/
c. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

78. A. Since August 1979, have you or other household members had a car stolen?

Yes 1 *19/*

No . . . . (SKIP TO Q.79) 2

B. How many times did this happen?

RECORD NUMBER: _____ ☐☐ *20-21/*

IF ONLY ONE INCIDENT MENTIONED, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT THREE MOST RECENT INCIDENTS ONLY.

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	22/	*26/*	*30/*
a. Did this happen to you or to someone else in your household?	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2
	23/	*27/*	*31/*
b. Did you/they know the person who stole it?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
	24/	*28/*	*32/*
c. Did it happen in the neighborhood or elsewhere?	In . . . . . 1 Out. 2	In . . . . . 1 Out. 2	In . . . . . 1 Out. 2
	25/	*29/*	*33/*
d. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

79. A. Since August 1979, did anyone break into or somehow illegally get into your home, garage, or another building on your property?

Yes 1 *34/*

No . . . . (SKIP TO Q.80) 2

B. How many times did this happen?

RECORD NUMBER: _____ ☐☐ *35-36/*

IF ONLY ONE INCIDENT MENTIONED, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT THREE MOST RECENT INCIDENTS ONLY.

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	37/	*40/*	*43/*
a. Did you/they know the person who broke in?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
	38/	*41/*	*44/*
b. Did this happen . . .			
1. In your present residence?	Present. . . 1	Present. . . 1	Present. . . 1
2. When you lived elsewhere in the neighborhood?	Elsewhere in Neighborhood. . . 2	Elsewhere in Neighborhood. . . 2	Elsewhere in Neighborhood. . . 2
3. When you lived outside the neighborhood?	Outside. . . 3	Outside. . . 3	Outside. . . 3
	39/	*42/*	*45/*
c. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

80. A. Other than what has been mentioned, has anyone stolen anything else from you or someone in your household since August 1979? Something like a bicycle, clothing, tools, money, a purse or wallet?

Yes. 1 *46/*

No . . . . (SKIP TO Q.81). 2

B. How many times did this happen?

RECORD NUMBER: _____ ☐☐ *47-48/*

IF ONLY ONE INCIDENT MENTIONED, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT THREE MOST RECENT INCIDENTS ONLY.

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	49/	*55/*	*61/*
a. Did this happen to you or to someone else in your household?	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2
	50/	*56/*	*62/*
b. Did it happen . . .			
1. Within 2 blocks of your home?	Within 2 blocks . . . 1	Within 2 blocks . . . 1	Within 2 blocks . . . 1
2. Elsewhere in the neighborhood?	Elsewhere in neighborhood. . . 2	Elsewhere in neighborhood. . . 2	Elsewhere in neighborhood. . . 2
3. Outside the neighborhood?	Outside. . . 3	Outside. . . 3	Outside. . . 3
	51-52/	*57-58/*	*63-64/*
c. Did it happen . . .			
1. on the street?	Street . . .01	Street . . .01	Street . . .01
2. in a park?	Park 02	Park 02	Park 02
3. at school?	School . . .03	School . . .03	School . . .03
4. at work?	Work 04	Work 04	Work 04
5. at home?	Home 05	Home 05	Home 05
6. in a store?	Store. . . .06	Store. . . .06	Store. . . .06
7. or some other place?	Other (SPECIFY). . . .07 _____ ☐☐	Other (SPECIFY). . . .07 _____ ☐☐	Other (SPECIFY). . . .07 _____ ☐☐
	53/	*59/*	*65/*
d. Did you/they know the person who stole these things?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
	54/	*60/*	*66/*
e. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

Card ☐☐ *1-2/*
ID # ____ *3-4/*

81. A. Since August 1979, did anyone take money or other belongings from you or from other members of your household by force? For example, did someone use a gun or knife, or in any other way force one of you to give them something that did not belong to them?

Yes. 1 *7/*

No . . . . (SKIP TO Q.82). 2

B. How many times did this happen?

RECORD NUMBER: _____ ☐☐ *8-9/*

IF ONLY ONE INCIDENT MENTIONED, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT THREE MOST RECENT INCIDENTS ONLY.

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	10/	*18/*	*26/*
a. Did this happen to you or to someone else in your household?	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2
	11/	*19/*	*27/*
b. Did it happen . . .			
1. Within 2 blocks of your home?	Within 2 blocks . . . 1	Within 2 blocks . . . 1	Within 2 blocks . . . 1
2. Elsewhere in the neighborhood?	Elsewhere in neighborhood. . . 2	Elsewhere in neighborhood. . . 2	Elsewhere in neighborhood. . . 2
3. Outside the neighborhood?	Outside. . . 3	Outside. . . 3	Outside. . . 3
	12-13/	*20-21/*	*28-29/*
c. Did it happen . . .			
1. on the street?	Street . . .01	Street . . .01	Street . . .01
2. in a park?	Park 02	Park 02	Park 02
3. at school?	School . . .03	School . . .03	School . . .03
4. at work?	Work 04	Work 04	Work 04
5. at home?	Home 05	Home 05	Home 05
6. in a store?	Store. . . .06	Store. . . .06	Store. . . .06
7. or some other place?	Other (SPECIFY). . . .07 _____ ☐☐	Other (SPECIFY). . . .07 _____ ☐☐	Other (SPECIFY). . . .07 _____ ☐☐
	14/	*22/*	*30/*
d. Did you/they know the person who robbed you/them?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
	15/	*23/*	*31/*
e. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8
	16/	*24/*	*32/*
f. Were there any witnesses to the crime?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8
	17/	*25/*	*33/*
g. IF YES: Did anyone come to your/their aid during the crime?	Yes. . . . . 1 No . . . . . 2 Dont' know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

82. A. Since August 1979, has anyone used violence against you or members of your household in an argument or quarrel, or in any other way attacked or assaulted one of you?

Yes. 1 *34/*

No . . . . (SKIP TO Q.83). 2

B. How many times did this happen?

RECORD NUMBER: _____ ☐☐ *35-36/*

IF ONLY ONE INCIDENT MENTIONED, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT THREE MOST RECENT INCIDENTS ONLY.

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	37/	*45/*	*53/*
a. Did this happen to you or to someone else in your household?	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2
	38/	*46/*	*54/*
b. Did it happen . . .			
1. Within 2 blocks of your home?	Within 2 blocks . . . 1	Within 2 blocks . . . 1	Within 2 blocks . . . 1
2. Elsewhere in the neighborhood?	Elsewhere in neighborhood. . . 2	Elsewhere in neighborhood. . . 2	Elsewhere in neighborhood. . . 2
3. Outside the neighborhood?	Outside. . . 3	Outside. . . 3	Outside. . . 3
	39-40/	*47-48/*	*55-56/*
c. Did it happen . . .			
1. on the street?	Street . . .01	Street . . .01	Street . . .01
2. in a park?	Park 02	Park 02	Park 02
3. at school?	School . . .03	School . . .03	School . . .03
4. at work?	Work 04	Work 04	Work 04
5. at home?	Home 05	Home 05	Home 05
6. in a store?	Store. . . .06	Store. . . .06	Store. . . .06
7. or some other place?	Other (SPECIFY). . . .07 _____ ☐☐	Other (SPECIFY). . . .07 _____ ☐☐	Other (SPECIFY). . . .07 _____ ☐☐
	41/	*49/*	*57/*
d. Did you/they know the person who attacked you/them?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
	42/	*50/*	*58/*
e. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8
	43/	*51/*	*59/*
f. Were there any witnesses to the crime?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8
	44/	*52/*	*60/*
g. IF YES: Did anyone come to your/their aid during the crime?	Yes. . . . . 1 No . . . . . 2 Dont' know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

83. Since August 1979, have you or other household members been the victim of any crimes that we haven't talked about?

Yes. 1 *61/*

No . . . . (SKIP TO Q.84). 2

A. What are they? FOR EACH CRIME MENTIONED, ASK B.

B. How many times did this happen? RECORD NUMBER.

A.		B.	
_____	☐☐ *62-63/*	_____	☐☐ *68-69/*
_____	☐☐ *64-65/*	_____	☐☐ *70-71/*
_____	☐☐ *66-67/*	_____	☐☐ *72-73/*

Card ☐1☐ *1-2/*

ID # _____ *3-6/*

FOR EACH CRIME, IF ONLY ONE INCIDENT MENTIONED IN B, COMPLETE "MOST RECENT INCIDENT" COLUMN. IF MORE THAN ONE INCIDENT MENTIONED, SAY: "What about the last time this happened?" COMPLETE "MOST RECENT INCIDENT" COLUMN. THEN ASK ABOUT THE SECOND MOST RECENT INCIDENT, ETC. IF MORE THAN THREE INCIDENTS MENTIONED, ASK ABOUT THREE MOST RECENT INCIDENTS ONLY.

FOR FIRST CRIME MENTIONED IN A, ASK:

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
	7/	*11/*	*15/*
1. Did this happen to you or to someone else in your household?	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2	Respondent . 1 Other. . . . 2
	8/	*12/*	*16/*
2. Did you/they know the person who did it?	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2	Yes. . . . . 1 No 2
	9/	*13/*	*17/*
3. Did it happen in the neighborhood or elsewhere?	In . . . . . 1 Out. 2	In . . . . . 1 Out. 2	In . . . . . 1 Out. 2
	10/	*14/*	*18/*
4. Was the crime reported to the police?	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8	Yes. . . . . 1 No . . . . . 2 Don't know . 8

QUESTION 83 CONTINUED.

FOR SECOND CRIME MENTIONED IN A, ASK:

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
1. Did this happen to you or to someone else in your household?	*19/* Respondent . 1 Other. . . . 2	*23/* Respondent . 1 Other. . . . 2	*27/* Respondent . 1 Other. . . . 2
2. Did you/they know the person who did it?	*20/* Yes. . . . . 1 No 2	*24/* Yes. . . . . 1 No 2	*28/* Yes. . . . . 1 No 2
3. Did it happen in the neighborhood or elsewhere?	*21/* In . . . . . 1 Out. 2	*25/* In . . . . . 1 Out. 2	*29/* In . . . . . 1 Out. 2
4. Was the crime reported to the police?	*22/* Yes. . . . . 1 No . . . . . 2 Don't know . 8	*26/* Yes. . . . . 1 No . . . . . 2 Don't know . 8	*30/* Yes. . . . . 1 No . . . . . 2 Don't know . 8

FOR THIRD CRIME MENTIONED IN A, ASK:

	Most Recent Incident	Second Most Recent Incident	Third Most Recent Incident
1. Did this happen to you or to someone else in your household?	*31/* Respondent . 1 Other. . . . 2	*35/* Respondent . 1 Other. . . . 2	*39/* Respondent . 1 Other. . . . 2
2. Did you/they know the person who did it?	*32/* Yes. . . . . 1 No 2	*36/* Yes. . . . . 1 No 2	*40/* Yes. . . . . 1 No 2
3. Did it happen in the neighborhood or elsewhere?	*33/* In . . . . . 1 Out. 2	*37/* In . . . . . 1 Out. 2	*41/* In . . . . . 1 Out. 2
4. Was the crime reported to the police?	*34/* Yes. . . . . 1 No . . . . . 2 Don't know . 8	*38/* Yes. . . . . 1 No . . . . . 2 Don't know . 8	*42/* Yes. . . . . 1 No . . . . . 2 Don't know . 8

Now I would like to ask some questions about you and your family.

84. First, in what year were you born?

RECORD YEAR . . . . . ☐☐☐ *43-46/*

85. In what year did you move into this neighborhood?

RECORD YEAR . . . . . 19 ☐☐ *47-48/*

Lived here all my life. 85

86. In what year did you move to Atlanta?

RECORD YEAR . . . . . 19 ☐☐ *49-50/*

Lived here all my life. 85

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87. What is the highest regular school certificate, diploma or degree you have gotten? (SHOW CARD 2.)

None ever 01 *51-52/*

Some grade school 02

8th grade or junior high. 03

Some high school. 04

High school diploma or equivalency degree 05

Some college. 06

A.A. or junior college degree . . 07

B.A. degree or B.S. 08

Masters degree. 09

Ph.D. 10

Degree in law or medicine 11

Other (SPECIFY)_____ 12 ☐☐

88. Are you currently working full time, part time, keeping house, or what? CIRCLE ONE CODE ONLY. IF MORE THAN ONE RESPONSE, GIVE PREFERENCE TO SMALLEST CODE NUMBER THAT APPLIES AND RECORD OTHER RESPONSES VERBATIM.

Working full time (35 hours or more) . (SKIP TO Q.89). .	01	*53-54/*
Working part time (1 to 34 hours) . . (SKIP TO Q.89). .	02	
With a job, but not at work because of illness, vacation, or strike. .(ASK A). .	03	
Unemployed, laid off, looking for work . (ASK A)	04	
Retired . . . . (SKIP TO Q.89). .	05	
Keeping house only (SKIP TO Q.90).	06	
In school only. (SKIP TO Q.90). .	07	
Other (SPECIFY)_____	08	☐☐

A. When you do work, is that usually full time or part time?

Full time	1	*55/*
Part time	2	

89. A. What kind of work do (did) you do? That is, what is (was) your job called? IF MORE THAN ONE JOB, ASK ABOUT MAIN JOB HERE.

_____ ☐☐☐☐ *56-60/*

B. What are (were) some of the main duties? What do (did) you actually do in that job?

_____

_____

C. IF NECESSARY, ASK: What kind of business or industry is (was) that in?

_____

D. Where is (was) your main place of work? Is (was) it in this neighborhood, downtown Atlanta, elsewhere in the city, in the suburbs, or where?

Neighborhood.	01	*61-62/*
Downtown Atlanta.	02	
Elsewhere in Atlanta.	03	
Suburbs	04	
Other (SPECIFY)_____	05	☐☐

90. Are you currently . . .

Married.	1	*63/*
Widowed. . . . (SKIP TO Q.95). . .	2	
Divorced . . . (SKIP TO Q.95). . .	3	
Separated. . . (SKIP TO Q.95). . .	4	
Or have you never been married . (SKIP TO Q.95). . .	5	

91. In what year was your husband/wife born?

RECORD YEAR . . . . . ☐☐☐☐ *64-67/*

92. What is the highest regular school certificate, diploma or degree your husband/wife has gotten? (SHOW CARD 2.)

None ever	01	*68-69/*
Some grade school	02	
8th grade or junior high.	03	
Some high school.	04	
High school diploma or equivalency degree	05	
Some college.	06	
A.A. or junior college degree . .	07	
B.A. degree or B.S.	08	
Masters degree.	09	
Ph.D.	10	
Degree in law or medicine	11	
Other (SPECIFY)_____	12	☐☐

93. Is he/she currently working full time, part time, keeping house, or what? CIRCLE ONE CODE ONLY. IF MORE THAN ONE RESPONSE, GIVE PREFERENCE TO SMALLEST CODE NUMBER THAT APPLIES AND RECORD OTHER RESPONSES VERBATIM.

Working full time (35 hours or more) . (SKIP TO Q.94). .	01	70-71/
Working part time (1 to 34 hours) . . (SKIP TO Q.94). .	02	
With a job, but not at work because of illness, vacation, or strike. .(ASK A). .	03	
Unemployed, laid off, looking for work . (ASK A)	04	
Retired . . . . (SKIP TO Q.94). .	05	
Keeping house only (SKIP TO Q.95).	06	
In school only. (SKIP TO Q.95). .	07	
Other (SPECIFY)_____	08	☐☐

A. When he/she does work, is that usually full time or part time?

Full time	1	72/
Part time	2	

94. A. What kind of work does (did) he/she do? That is, what is (was) his/her job called? IF MORE THAN ONE JOB, ASK ABOUT MAIN JOB HERE.

_____ ☐☐☐☐ 73-77/

B. What are (were) some of the main duties? What does (did) he/she actually do in that job?

_____

_____

C. IF NECESSARY, ASK: What kind of business or industry is (was) that in?

_____

D. Where is (was) his/her main place of work? Is (was) it in this neighborhood, downtown Atlanta, elsewhere in the city, in the suburbs, or where?

Neighborhood.	01	78-79/
Downtown Atlanta.	02	
Elsewhere in Atlanta.	03	
Suburbs	04	
Other (SPECIFY)_____	05	☐☐

Card ☐1☐2 1-2/
ID #_____ 3-6/

95. Here is an answer card for the next question (SHOW CARD 3). Would you please tell me the letter on the card which best represents your total family income in 1979 before taxes?

RECORD LETTER . . . _____ ☐☐ 7-8/

96. RECORD BY OBSERVATION. IF NOT OBVIOUS, ASK.

IS RESPONDENT:

White.	1	9/
Black.	2	
Hispanic	3	
Other.	4	

97. RECORD BY OBSERVATION.

A. HOUSING TYPE:

Single family unattached house . .	01	10-11/
Twin or duplex house	02	
Row house or townhouse	03	
Apartment -- 6 or less units . . .	04	
Apartment -- more than 6 units . .	05	
Rooming house.	06	
Mobile home.	07	
Other (SPECIFY)_____	08	

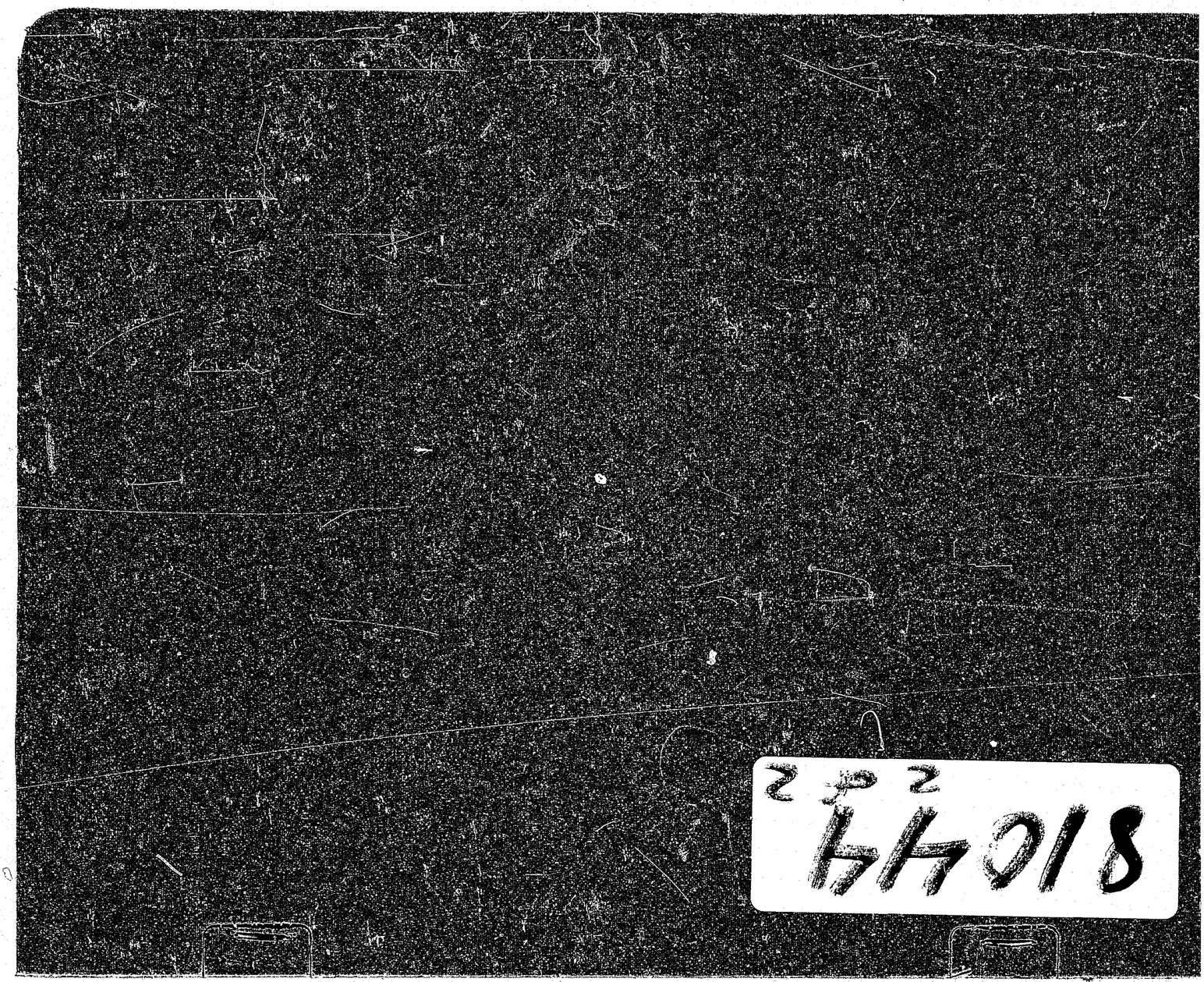
B. NUMBER OF STORIES (FROM GROUND FLOOR UP):

1.	1	12/
2.	2	
3.	3	
4 or more.	4	

FINISH TIME: _____ a.m. p.m.

PHONE NUMBER: _____

*U.S. GOVERNMENT PRINTING OFFICE : 1982 0-361-233/1848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RTI/1888/00-02F

September 24, 1981

FINAL REPORT

Safe and Secure Neighborhoods: Physical Characteristics and Informal Territorial Control in High and Low Crime Neighborhoods

By:

Stephanie W. Greenberg
William M. Rohe
Jay R. Williams

Submitted to:

Community Crime Prevention Division
National Institute of Justice

Prepared Under Grant No. 79-NI-AX-0080

APPENDIX A

Household Survey Estimation Procedures

APPENDIX A

Household Survey Estimation Procedures

A. Estimates of Totals

Unbiased estimates of population totals can be obtained for each neighborhood. The weights assigned to each housing unit were based on the sample design and computed as:

$$w(i) = N(i)/n(i)$$

where

$w(i)$ = weight to be assigned each housing unit in neighborhood i;

$N(i)$ = total housing units in neighborhood i; and

$n(i)$ = sample size (132 housing units) selected from neighborhood i;

Suppose a population total is defined for neighborhood i as

$$T_X(i) = \sum_{k=1}^{N(i)} X(ij)$$

where

$X(ij)$ = variate value for housing unit j of neighborhood i.

An unbiased estimate of $T_X(i)$ based on sample data can be expressed as

$$\hat{T}_X(i) = \sum_{k=1}^{n(i)} w(i)\, X(ij)$$

where summation over k is only over sample members rather than over the entire population.

B. Variance of Estimates of Totals

Variance estimates were based on a collapsed stratum (zone) formula as discussed by Cochran (1977, p. 141) or by Hansen, Hurwitz, and Madow (1953, p. 419). This method provides a generally conservative estimate of variance by considering the sample elements of two adjacent zones as belonging to the same stratum for variance estimation purposes. When the total sample size is an odd number (33), one collapsed stratum must be defined to contain three sampling units.

If the collapsed strata are indexed by j=1,2,..., J(i), the estimation of a neighborhood total may be written as

$$\hat{T}_X(i) = \sum_{j=1}^{J(i)} \sum_{k=1}^{n(ij)} w(i)X(ijk)$$

where

$n(ij)$ = number of housing units assigned to collapsed stratum j; and

$X(ijk)$ = the observed variate value for the kth sample member of collapsed stratum j of neighborhood i.

The variance of this estimator is then estimated by

$$V[\hat{T}_X(\hat{i})] = \sum_{j=1}^{J(i)} [w(i)]^2\, n(ij) s_X^2(ij)$$

where

$$s_X^2(ij) = \sum_{k=1}^{n(ij)} [X(ijk) - \bar{X}(ij)]^2/[n(ij)-1],$$

and

$$\bar{X}(ij) = \sum_{k=1}^{n(ij)} X(ijk)/n(ij).$$

Note that $n(ij)$ is constrained to be either 2 or 3 and that

$$\sum_{j=1}^{J(i)} n(ij) = n(i).$$

Computational formulas for these variance estimates are programmed into standard survey data analysis software available at RTI (Shah, 1979).

C. Nonlinear Estimates

Most statistics of interest based on sample survey data will be expressed as certain nonlinear function of estimated totals. For example, the mean number of friends for persons in neighborhood A could be estimated as the ratio of $\hat{T}_Y$, the estimated total friends reported by persons in neighborhood A to $\hat{T}_X$, the estimated total number of persons in neighborhood A. Algebraically

such an estimator, $\hat{R}_c$, can be written as

$$\hat{R}_c = \hat{T}_Y/\hat{T}_X.$$

Note that since weights were consistent within neighborhood and all reported statistics were based on ratio-type estimates, the weights cancelled in the final calculation of neighborhood-level estimates. Since the weight cancelled in every case, the actual analyses were conducted as unweighted analyses (all weights equal to one); this procedure was equivalent to the weighting procedures discussed above.

Variances of nonlinear estimates can be approximated by several methods; one of these methods is the first-order Taylor-series approximation method. A convenient computational method for Taylor-series variance estimations is suggested by Woodruff (1971) and is incorporated into RTI survey data analysis software (Shah, 1979).

D. Nonresponse Adjustment

Weighting class adjustment procedures to minimize the effects of differential nonresponse rates were considered. Known characteristics for respondents and nonrespondents (defined at the property level) were examined and found to be similar for the two groups within each neighborhood. Since the sampling weights were equal within neighborhood and only means or rates (ratio-type estimates) were reported, any neighborhood level weight adjustments would have cancelled out in the analyses. Consequently, no nonresponse weight adjustments were utilized.

REFERENCES

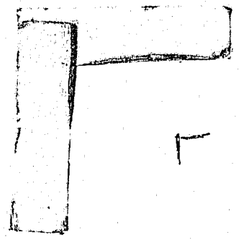
Chromy, James R. "Sequential Sample Selection Methods," 1979 Proceedings of the Section on Survey Research Methods, Washington, D.C. American Statistical Association, 1979.

Cochran, William G. Sampling Techniques, Third Edition, New York: John Wiley and Sons, 1977.

Hansen, Morris H., William N. Hurwitz, and William G. Madow. Sample Survey Methods and Theory, Volume I: Methods and Applications, New York: John Wiley and Sons, Inc., 1979.

Shah, B.V. SESUDDAAN: Standard Errors Program for Computing of Standardized Rates from Sample Survey Data, Research Triangle Institute Report, RTI/1789/00-01F, 1979.

Woodruff, Ralph S. "Simple Method for Approximating Variance of a Complicated Estimate," Journal of the American Statistical Association, 66, 411-414, 1971.



APPENDIX B

Prediction of Subjective Reactions
to Crime - Neighborhood Pairs

Table 1. Objective Crime Model

LOWER VIRGINIA-HIGHLAND AND UPPER VIRGINIA-HIGHLAND

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.007 (0.72)	-.158 (0.44)	-.244 (0.23)	-.014 (0.71)	-.533 (0.97)	.044 (2.80)	-.271 (0.23)	.020 (0.31)	.872 (1.10)	-.046 (0.96)	.039	.030
Worry Over Crime Index	.006 (0.12)	-.540 (1.06)	-1.54 (1.84)	.044 (1.41)	.203 (0.03)	-.006 (0.01)	.301 (0.06)	-.025 (0.10)	1.54 (0.73)	-.011 (0.01)	.066	.003
Avoidance Index	.011 (10.58)**	-.365 (10.36)**	.011 (0.00)	-.0003 (0.00)	-.546 (4.63)*	.020 (2.52)	-.240 (0.83)	.0006 (0.00)	.879 (5.11)*	-.018 (0.65)	.196**	.131
Protection Index	.006 (0.55)	-.074 (0.07)	-.383 (0.40)	.010 (0.24)	.322 (0.26)	-.040 (1.61)	.762 (1.36)	-.035 (0.69)	-.212 (0.05)	.051 (0.86)	.055	.008
People Who Say There is Little or no Crime in Entire Neighborhood	-.0006 (0.10)	.079 (1.44)	-.152 (1.15)	-.004 (0.57)	-.093 (0.40)	-.0009 (0.01)	-.139 (0.82)	.004 (0.17)	.020 (0.01)	-.001 (0.01)	.065	.003

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = total crimes per 100 residential units in respondent's block.
V_5 = high crime neighborhood.
V_6 = interaction between V_4 and V_5.
V_7 = victim of any crime in last year (respondent or household member)
V_8 = interaction between V_4 and V_7.
V_9 = interaction between V_5 and V_7.
V_{10} = interaction between V_4, V_5 and V_7.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey; Crimes in Blocks - Atlanta Bureau of Police Reported Crime Tape.

Table 2. Ecological Model

LOWER VIRGINIA-HIGHLAND AND UPPER VIRGINIA-HIGHLAND

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.006 (0.52)	-.147 (0.38)	-.411 (0.66)	.054 (0.03)	.448 (0.06)	-.457 (2.83)	.519 (0.09)	-.139 (0.21)	-1.04 (2.30)	.265 (0.77)	.054	.014
Worry Over Crime Index	-.003 (0.03)	-.592 (1.26)	-1.93 (2.88)	.831 (1.30)	.80 (0.04)	-1.07 (3.12)	3.24 (0.74)	-.059 (0.01)	-1.27 (0.72)	.417 (0.40)	.064	.001
Avoidance Index	.012 (11.66)**	-.325 (7.78)**	.023 (0.01)	-.026 (0.03)	1.00 (1.30)	.082 (0.37)	-.612 (0.53)	.052 (0.12)	-.038 (0.01)	-.125 (0.73)	.145**	.087
Protection Index	-.006 (0.52)	-.251 (0.89)	-.149 (0.07)	.799 (4.72)*	2.03 (1.01)	.069 (0.05)	2.55 (1.77)	.109 (0.10)	.624 (0.68)	1.43 (19.01)**	.148**	.091
People Who Say There is Little or no Crime in Entire Neighborhood	-.0005 (0.07)	.073 (1.28)	-.132 (0.89)	-.073 (0.66)	-.640 (1.70)	-.05 (0.42)	.364 (0.61)	-.087 (1.11)	-.013 (0.01)	.106 (1.77)	.086	.025

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = percent of parcels in respondent's block with commercial land use.
V_6 = major thoroughfare going through block.
V_7 = percent of parcels within a block with vacant land.
V_8 = whether or not respondent's block is 95 percent or more residential.
V_9 = percent of residential units that are single family dwellings.
V_{10} = whether or not a respondent lives in a single family unattached house.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey. Housing Characteristics of Block - PLAN File; Location of Major Thoroughfares - Atlanta Bureau of Planning, Major Thoroughfare Plan Map.

Table 3. Local Ties Model

LOWER VIRGINIA-HIGHLAND AND UPPER VIRGINIA-HIGHLAND

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	R^2	$\bar{R}^2$ [1/]
Fear of Neighborhood Crime Index	.008 (0.00)	-.243 (0.89)	.013 (0.00)	.398 (2.17)	.009 (0.27)	.042 (3.39)	-.027 (2.23)	-.099 (1.49)	-.069 (0.34)	.521 (1.46)	.085	.011
Worry Over Crime Index	-.023 (0.67)	-.691 (1.47)	-1.28 (1.24)	1.35 (5.35)*	.023 (0.40)	.132 (6.75)*	-.026 (0.42)	-.305 (2.88)	.002 (0.00)	-.011 (0.00)	.10	.032
Avoidance Index	.005 (0.67)	-.258 (4.06)*	.042 (0.03)	.139 (1.09)	.012 (2.22)	.008 (0.45)	-.004 (0.14)	-.017 (0.18)	.029 (0.24)	-.025 (0.01)	.147*	.082
Protection Index	-.010 (0.52)	-.022 (0.01)	-.411 (0.56)	-.143 (0.26)	.029 (2.94)	.030 (1.49)	.041 (4.39)*	.001 (0.00)	.314 (6.29)*	.923 (3.94)*	.234**	.177
People Who Say There is Little or no Crime in Entire Neighborhood	-.004 (1.02)	.080 (1.25)	-.150 (1.07)	-.103 (1.97)	.007 (2.44)	.006 (0.81)	-.002 (0.09)	.007 (0.08)	-.027 (0.64)	.028 (0.05)	.079	.011

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = number of years in neighborhood.
V_6 = number of good friends in neighborhood.
V_7 = frequency of neighboring in entire neighborhood.
V_8 = variety of neighborhood facilities used.
V_9 = number of organizations belonged to.
V_{10} = ratio of neighborhood organization membership to total organizations membership.

* = $p < .05$.
** = $p < .01$.

[1/] In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2) \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 4. Social Cohesion Model

LOWER VIRGINIA-HIGHLAND AND UPPER VIRGINIA-HIGHLAND

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.002 (0.05)	-.157 (0.43)	-.467 (0.84)	.097 (0.15)	-.933 (11.68)**	.074 (0.06)	.016 (0.35)	.060 (0.01)	.054 (2.06)	.108	.049
Worry Over Crime Index	.0001 (0.00)	-.481 (0.78)	-2.19 (3.48)	.761 (1.80)	-1.19 (3.64)	.159 (0.06)	.101 (2.58)	-.623 (0.20)	-.014 (0.03)	.085	.027
Avoidance Index	.010 (7.33)**	-.264 (5.05)*	-.133 (0.27)	.056 (0.20)	-.169 (1.57)	-.068 (0.22)	.017 (1.50)	.463 (2.31)	-.032 (2.98)	.155**	.101
Protection Index	.008 (1.11)	.290 (1.31)	-.336 (0.37)	.338 (1.61)	.024 (0.01)	1.12 (12.83)**	.090 (9.47)**	1.72 (6.81)*	-.014 (0.12)	.287**	.242
People Who Say There is Little or no Crime in Entire Neighborhood	-.0005 (0.07)	.112 (2.70)	-.114 (0.59)	-.096 (1.80)	-.0003 (0.00)	.121 (2.06)	-.0006 (0.01)	.082 (0.22)	-.005 (0.17)	.069	.011

V_1 = age of respondent.
V_2 = sex (male).
V_2 = race (black).
V_3 = high crime neighborhood.
V_4 = those who feel that residents have control over what goes on in neighborhood.
V_5 = those who feel that neighborhood is real home.
V_6 = information exchange with neighbors.
V_7 = neighborhood sources of crime information in ratio to total source of crime information.
V_9 = index of perceived similarities.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 5. Social Control Model

LOWER VIRGINIA-HIGHLAND AND UPPER VIRGINIA-HIGHLAND

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.013 (1.83)	.095 (0.12)	-.693 (1.24)	.146 (0.20)	.899 (9.28)**	.412 (0.59)	.110 (2.05)	-.244 (1.15)	.257 (0.75)	.185*	.109
Worry Over Crime Index	.009 (0.21)	-.419 (0.48)	-1.30 (0.94)	.530 (.060)	1.41 (5.09)*	-.156 (0.02)	.497 (10.17)**	.239 (0.23)	-.152 (0.06)	.231**	.162
Avoidance Index	.012 (9.96)**	-.331 (6.84)*	.109 (0.15)	-.119 (0.68)	.182 (1.92)	.468 (3.63)	.139 (17.92)**	-.045 (0.19)	.036 (0.07)	.316**	.255
Protection Index	.015 (2.59)	-.197 (0.44)	-.546 (0.67)	-.114 (0.11)	-.211 (0.47)	-.927 (2.55)	.106 (1.88)	.031 (0.02)	.666 (4.34)*	.164*	.090
People Who Say There is Little or no Crime in Entire Neighborhood	-.0008 (0.10)	.072 (0.86)	-.159 (0.84)	-.193 (4.78)*	.146 (3.34)	0.04 (0.07)	-.009 (0.19)	-.069 (1.18)	.044 (0.29)	.126	.049

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = people who watch for suspicious people in neighborhood.
V_6 = percent who say it is easy to tell a stranger in neighborhood.
V_7 = number of areas avoided in entire neighborhood.
V_8 = percent of big problems for which took some direct action.
V_9 = percent of disturbances for which took some direct action.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 6. Neighborhood Problems Model

LOWER VIRGINIA-HIGHLAND AND UPPER VIRGINIA-HIGHLAND

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.011 (1.57)	-.215 (0.60)	.336 (0.33)	.186 (0.37)	-.286 (0.25)	-.017 (0.08)	.198 (2.57)	.066	.001
Worry Over Crime Index	.008 (0.18)	-.778 (1.48)	-1.68 (1.48)	.719 (1.04)	1.36 (1.04)	.077 (0.37)	.429 (2.33)	.113	.053
Avoidance Index	.013 (12.89)**	-.546 (16.51)**	.132 (0.20)	-.180 (1.43)	.338 (1.26)	.033 (1.47)	.101 (2.89)	.264**	.215
Protection Index	.005 (0.25)	-.202 (0.37)	-1.09 (2.34)	.222 (0.37)	.933 (1.79)	.049 (0.55)	.005 (0.00)	.055	.007
People Who Say There is Little or no Crime in Entire Neighborhood	-.003 (1.32)	.152 (3.36)	-.260 (2.10)	-.073 (0.64)	.277 (2.50)	-.006 (0.13)	-.091 (6.17)*	.138*	.081

V_1 = age of respondent.
V_2 = sex (male).
V_3 = race (black).
V_4 = high crime neighborhood.
V_5 = people who feel neighborhood has gotten better in last years.
V_6 = number of big problems.
V_7 = number of disturbances seen or heard in neighborhood in last year.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 7. Best Prediction Models, Lower Virginia Highland and Upper Virginia Highland.

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	V_{11} β (F)	V_{12} β (F)	V_{13} β (F)	V_{14} β (F)	V_{15} β (F)	V_{16} β (F)	V_{17} β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index										1.03 (20.84)**	−.761 (12.29)**							.197**	.186
Worry Over Crime Index			−.007 (0.00)							1.34 (6.31)*		.051 (1.51)	.570 (20.92)**					.221**	.199
Avoidance Index	.014 (17.90)**	−.286 (6.81)*	−.232 (2.77)	.317 (4.15)*									.129 (21.93)**					.268**	.242
Protection Index			.324 (1.16)		.019 (1.07)	.176 (1.93)	.594 (1.85)	.985 (10.26)**						.278 (1.01)	.714 (5.59)*	.038 (1.31)	.794 (1.33)	.320**	.271
People Who Say There is Little or No Crime in Entire Neighborhood			−.106 (2.47)						−.063 (6.77)*									.079**	.067

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = interaction between V_3 and victim of any crime in last year (respondent or household member).
V_5 = frequency of neighboring in entire neighborhood.
V_6 = number of organizations belonged to.
V_7 = ratio of neighborhood organization membership to total organization memberships.
V_8 = whether or not a respondent lives in a single-family unattached house.
V_9 = number of disturbances seen or heard in neighborhood in last year.
V_{10} = people who watch for suspicious people in neighborhood.
V_{11} = those who feel residents have control over what goes on in neighborhood.
V_{12} = number of good friends in neighborhood.
V_{13} = number of areas avoided in entire neighborhood.
V_{14} = percent of disturbances for which took some direct action.
V_{15} = those who feel that neighborhood is real home.
V_{16} = information exchange with neighbors.
V_{17} = neighborhood source of crime information in ratio to total sources of crime information.

* = $p < .05$
** = $p < .01$

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the prediction of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the dependent variable. With each reduction in degrees of freedom, the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

Source: Household Survey.

Table 8. Objective Crime Model

GROVE PARK AND DIXIE HILLS

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.015 (4.92)*	-.736 (9.12)**	-.013 (2.40)	-.447 (1.17)	.020 (0.69)	.453 (1.27)	.012 (0.97)	.110 (0.03)	-.020 (0.44)	.133**	.085
Worry Over Crime Index	-.094 (24.61)**	-1.96 (8.02)**	-.023 (0.94)	.118 (0.01)	.022 (0.10)	2.55 (5.02)*	-.010 (0.08)	-2.00 (1.20)	.021 (0.06)	.232**	.190
Avoidance Index	.005 (1.78)	-.573 (16.19)**	-.010 (3.88)*	.266 (1.21)	.006 (0.20)	.624 (7.19)**	.003 (0.11)	-.764 (4.15)*	.022 (1.51)	.201**	.158
Protection Index	-.00009 (0.00)	.327 (1.18)	-.013 (1.49)	-1.22 (4.78)*	.045 (2.31)	-.613 (1.53)	.023 (2.27)	.620 (0.61)	-.060 (2.63)	.068	.016
People Who Say There is Little or no Crime in Entire Neighborhood	.001 (0.47)	.039 (0.57)	-.002 (1.52)	-.267 (9.38)**	.010 (3.61)	-.204 (5.92)*	.002 (0.77)	.390 (8.30)**	-.012 (3.79)*	.081	.031

V_1 = age of respondent.
V_2 = sex (male).
V_3 = total crimes per 100 residential units in respondent's block.
V_4 = high crime neighborhood.
V_5 = interaction between V_3 and V_4.
V_6 = victim of any crime in last year (respondent or household member)
V_7 = interaction between V_3 and V_6.
V_8 = interaction between V_4 and V_6.
V_9 = interaction between V_3, V_4 and V_6.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the prediction of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey; Crimes in Blocks - Atlanta Bureau of Police Reported Crime Tape.

Table 9. Ecological Model

GROVE PARK AND DIXIE HILLS

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.013 (3.37)	-.751 (9.37)**	6.49 (2.77)	.021 (0.00)	-.462 (0.14)	-.051 (0.02)	-.430 (0.67)	-.043 (0.02)	-.371 (2.03)	.140**	.092
Worry Over Crime Index	-.101 (23.73)**	-2.19 (9.49)**	8.34 (0.53)	-.168 (0.04)	-.521 (0.02)	-.034 (0.00)	.131 (0.01)	-.394 (0.18)	-.170 (0.05)	.200**	.156
Avoidance Index	.005 (1.69)	-.488 (11.05)**	.309 (0.02)	-.014 (0.01)	1.44 (3.56)	.079 (0.13)	-.416 (1.72)	-.069 (0.13)	.089 (0.32)	.151**	.105
Protection Index	-.008 (0.80)	.220 (0.55)	2.81 (0.35)	-.277 (0.55)	2.24 (2.17)	.907 (4.18)*	.149 (0.05)	.720 (3.32)	-.578 (3.35)	.110*	.060
People Who Say There is Little or no Crime in Entire Neighborhood	.0005 (0.09)	.042 (0.64)	.026 (0.00)	.087 (1.71)	.135 (0.24)	.155 (3.86)*	-.002 (0.00)	.035 (0.25)	-.076 (1.81)	.055	.004

V_1 = age of respondent.
V_2 = sex (male).
V_3 = percent of parcels in a block with commercial land use.
V_4 = major thoroughfare going through block.
V_5 = percent of parcels in a block with vacant land.
V_6 = whether or not respondent's block is 95 percent or more residential.
V_7 = percent of residential units that are single family dwellings.
V_8 = whether or not a respondent lives in a single family unattached house.
V_9 = high crime neighborhood.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey; Housing Characteristics of Block - PLAN File; Location of Major Thoroughfares - Atlanta Bureau of Planning, Major Thoroughfare Plan Map.

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Table 10. Local Ties Model

GROVE PARK AND DIXIE HILLS

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.008 (0.88)	-.675 (6.63)*	-.117 (0.18)	-.015 (1.70)	-.016 (1.68)	.053 (9.15)**	-.032 (0.12)	-.103 (0.62)	.083 (0.06)	.139**	.085
Worry Over Crime Index	-.080 (12.08)**	-2.08 (7.95)**	-.033 (0.00)	-.051 (2.35)	-.019 (0.34)	.221 (20.49)**	-.353 (1.87)	-.203 (0.31)	1.07 (1.23)	.299**	.255
Avoidance Index	.010 (4.24)*	-.513 (10.82)**	.248 (2.29)	-.015 (4.33)*	-.005 (0.64)	.035 (11.36)**	-.054 (0.96)	-.079 (1.04)	.151 (0.56)	.181**	.131
Protection Index	-.005 (0.24)	.386 (1.73)	-.392 (1.57)	.021 (2.58)	-.009 (0.50)	.055 (7.95)**	.008 (0.01)	.710 (21.35)**	.167 (0.19)	.279**	.234
People Who Say There is Little or no Crime in Entire Neighborhood	.001 (0.42)	.031 (0.29)	.0008 (0.00)	-.0003 (0.02)	.005 (3.44)	-.002 (0.14)	-.021 (1.08)	.024 (0.69)	-.097 (1.66)	.066	.009

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = number of years in neighborhood.
V_5 = number of goods friends in neighborhood.
V_6 = frequency of neighboring in entire neighborhood.
V_7 = variety of neighborhood facilities used.
V_8 = number of organizations belonged to.
V_9 = ratio of neighborhood organization membership to total organization membership.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2) \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 11. Social Cohesion Model

GROVE PARK AND DIXIE HILLS

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.011 (2.55)	-.621 (7.25)**	.322 (1.91)	-.642 (7.02)**	-.173 (0.41)	.119 (22.26)**	-1.30 (3.31)	-.011 (0.04)	.224**	.183
Worry Over Crime Index	-.101 (25.85)**	-2.17 (11.11)**	.301 (0.21)	-.496 (0.52)	.280 (0.13)	.350 (24.12)**	-1.76 (0.75)	.220 (2.39)	.347**	.312
Avoidance Index	.0006 (0.02)	-.490 (11.08)**	.306 (4.17)*	-.122 (0.62)	.165 (0.89)	.058 (12.87)**	-.856 (3.45)	-.002 (0.00)	.168**	.125
Protection Index	.003 (0.09)	.328 (1.31)	-.488 (2.76)	.620 (4.01)*	.330 (0.91)	.080 (6.37)*	.855 (0.89)	.087 (1.80)	.204**	.161
People Who Say There is Little or no Crime in Entire Neighborhood	.0003 (0.04)	.061 (1.34)	-.034 (0.40)	.030 (0.28)	.074 (1.37)	-.011 (3.88)*	.219 (1.76)	.024 (4.27)*	.091	.044

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = those who feel most residents have control over what goes on in neighborhood.
V_5 = those who feel that neighborhood is real home.
V_6 = information exchange with neighbors.
V_7 = neighborhood source of crime information in ratio to total source of crime information.
V_8 = index of perceived similarities.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 12. Social Control Model

GROVE PARK AND DIXIE HILLS

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.011 (1.84)	-.675 (4.76)*	-.478 (2.27)	.707 (5.40)*	-.310 (0.41)	.165 (9.53)**	.334 (0.76)	-.025 (0.01)	.274**	.201
Worry Over Crime Index	-.081 (13.52)**	-1.73 (4.28)*	.596 (0.48)	1.51 (3.30)	.007 (0.00)	.616 (18.12)**	.414 (0.16)	-.436 (0.21)	.429**	.371
Avoidance Index	.006 (1.52)	-.474 (5.95)*	.243 (1.48)	.144 (0.57)	.182 (0.36)	.074 (4.82)*	-.110 (0.21)	-.022 (0.01)	.187*	.106
Protection Index	.015 (2.15)	.476 (1.46)	-1.14 (7.86)**	.960 (6.14)*	-.583 (0.91)	.038 (0.31)	.161 (0.11)	1.39 (9.72)**	.220**	.141
People Who Say There is Little or no Crime in Entire Neighborhood	-.00003 (0.00)	.118 (2.41)	-.024 (0.10)	.093 (1.53)	.137 (1.33)	-.024 (3.28)	.007 (0.01)	-.079 (0.83)	.096	.006

V_1 = age of respondent.
V_1 = sex (male).
V_2 = high crime neighborhood.
V_3 = people who watch for suspicious people in neighborhood.
V_4 = people who say it is easy to tell a stranger in neighborhood.
V_5 = number of areas avoided in entire neighborhood.
V_6 = percent of big problems for which took some direct action.
V_7 = percent of disturbances for which took some direct action.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2) \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 13. Neighborhood Problems Model

GROVE PARK AND DIXIE HILLS

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.015 (2.91)	-.679 (5.08)*	-.402 (1.82)	.165 (0.15)	.133 (2.69)	.092 (0.59)	.169**	.119
Worry Over Crime Index	-.089 (11.58)**	-2.41 (7.61)**	-.113 (0.02)	.450 (0.13)	.284 (1.48)	.054 (0.03)	.205**	.159
Avoidance Index	.009 (2.63)	-.368 (4.16)*	.226 (1.58)	-.101 (0.15)	.085 (3.08)	.147 (4.10)*	.162**	.113
Protection Index	.0004 (0.00)	.213 (0.34)	-1.16 (10.32)**	-.469 (0.82)	.103 (1.15)	.071 (0.24)	.108	.055
People Who Say There is Little or no Crime in Entire Neighborhood	-.0007 (0.09)	.041 (0.32)	-.110 (2.36)	-.097 (0.89)	-.014 (0.56)	.003 (0.01)	.053	.002

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = people who feel neighborhood has gotten better in last years.
V_5 = number of big problems.
V_6 = number of disturbances seen or heard in neighborhood in last years.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 14. Best Prediction Models, Grove Park and Dixie Hills.

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	V_{11} β (F)	V_{12} β (F)	V_{13} β (F)	V_{14} β (F)	V_{15} β (F)	V_{16} β (F)	V_{17} β (F)	V_{18} β (F)	R^2	$\bar{R}^2$	1/
Fear of Neighborhood Crime Index	−.005 (0.47)	-.404 (2.68)						−.007 (0.15)	.435 (3.10)	.145 (11.33)**	−.462 (3.55)	.069 (6.33)*							.227**		.187
Worry Over Crime Index	−.067 (16.50)**	−1.45 (6.13)*			.968 (2.57)			−.024 (0.25)		.595 (32.99)**		.290 (18.19)**							.440**		.418
Avoidance Index	.014 (7.12)**	−.338 (4.64)*	.330 (2.94)	−.004 (1.51)	.283 (1.56)	−.386 (1.53)		−.007 (0.27)		.090 (10.65)**		.035 (0.83)	.066 (1.16)			−.006 (3.18)			.258**		.194
Protection Index			−.580 (2.92)					.025 (0.88)	.391 (1.41)		.317 (0.78)	.042 (1.05)		.587 (1.81)	.567 (1.49)		.570 (10.16)**		.272**		.216
People Who Say There is Little or No Crime in Entire Neighborhood			−.127 (4.32)*		−.160 (5.63)*	.263 (5.75)*	−.002 (0.33)					−.006 (1.51)		.113 (3.46)				.020 (3.53)	.108**		.071

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = total crimes per 100 residential units in respondent's block.
V_5 = victim of any crime in last year (respondent or household member).
V_6 = interaction between V_3 and V_4.
V_7 = interaction between V_3, V_4, and V_5.
V_8 = frequency of neighboring in entire neighborhood.
V_9 = people who watch for suspicious people in neighborhood
V_{10} = number of areas avoided in entire neighborhood
V_{11} = those who feel that residents have control over what goes on in neighborhood.
V_{12} = information exchange with neighbors.
V_{13} = number of disturbances seen or heard in neighborhood in last year.
V_{14} = whether or not respondent's block is 95% or more residential.
V_{15} = percent of disturbances for which took some direct action.
V_{16} = number of years in neighborhood.
V_{17} = number of organizations belonged to
V_{18} = index of perceived similarities.

* = p < .05
** = p < .01

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the prediction of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the dependent variable. With each reduction in degrees of freedom, the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

Source: Household Survey.

Table 15. Objective Crime Model

MECHANICSVILLE AND PITTSBURGH

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.003 (0.19)	-.70 (8.57)**	.022 (7.80)**	.377 (0.71)	-.010 (0.37)	1.04 (4.90)*	-.026 (0.90)	-.659 (0.75)	.023 (0.46)	.124**	.077
Worry Over Crime Index	-.072 (14.24)**	-2.06 (7.49)**	.055 (5.05)*	-.669 (0.22)	.014 (0.07)	1.42 (0.91)	-.044 (0.25)	1.62 (0.45)	-.015 (0.02)	.169**	.124
Avoidance Index	.003 (1.05)	-.759 (35.26)**	.007 (3.04)	-.053 (0.05)	-.006 (0.52)	.077 (0.09)	-.014 (0.90)	-.189 (0.22)	.027 (2.24)	.241**	.200
Protection Index	.004 (0.45)	.305 (1.47)	.001 (0.02)	-.922 (3.84)*	.019 (1.17)	-.567 (1.32)	.033 (1.30)	.832 (1.09)	-.038 (1.15)	.055	.003
People Who Say There is Little or no Crime in Entire Neighborhood	.00004 (0.00)	.054 (1.40)	-.0007 (0.22)	.037 (0.19)	-.003 (0.70)	-.121 (1.79)	.011 (4.01)*	.032 (0.05)	-.008 (1.45)	.042	.009

V_1 = age of respondent.
V_2 = sex (male).
V_3 = total crimes per 100 residential units in respondent's block.
V_4 = high crime neighborhood.
V_5 = interaction between V_3 & V_4.
V_6 = victim of any crime in last year (respondent or household member).
V_7 = interaction between V_3 & V_6.
V_8 = interaction between V_4 & V_6.
V_9 = interaction between V_3, V_4 & V_6.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey; Crimes in Blocks - Atlanta Bureau of Police Reported Crime Tape.

Table 16. Ecological Model

MECHANICSVILLE AND PITTSBURGH

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	-.007 (1.48)	-.778 (11.45)**	3.46 (5.01)*	.789 (10.20)**	-1.31 (1.79)	.522 (1.00)	.764 (1.41)	-.297 (1.34)	.153 (0.33)	.167**	.122
Worry Over Crime Index	-.076 (15.07)**	-2.10 (7.74)**	6.01 (1.40)	1.29 (2.53)	-2.97 (0.85)	-1.40 (0.67)	.988 (0.22)	-.401 (0.23)	.440 (0.25)	.147**	.101
Avoidance Index	.002 (0.22)	-.794 (38.77)**	.402 (0.22)	.152 (1.24)	-.018 (0.00)	.363 (1.57)	.212 (0.35)	-.101 (0.50)	-.006 (0.00)	.212**	.169
Protection Index	.003 (0.25)	.259 (1.07)	.175 (0.01)	.242 (0.79)	-1.98 (3.47)	-.453 (0.59)	-.022 (0.00)	.171 (0.38)	-.098 (0.11)	.053	.0003
People Who Say There is Little or no Crime in Entire Neighborhood	.0001 (0.01)	.050 (1.29)	.309 (1.10)	-.090 (3.68)	.070 (0.14)	-.025 (0.06)	.217 (3.16)	-.064 (1.71)	.014 (0.08)	.058	.007

V_1 = age of respondent.
V_2 = sex (male).
V_3 = percent of parcels in a block with commercial land use.
V_4 = major thoroughfare going through block.
V_5 = percent of parcels in a block with vacant land.
V_6 = whether or not respondent's block is 95 percent or more residential.
V_7 = percent of residential units that are single family dwellings.
V_8 = whether or not a respondent lives in a single family unattached house.
V_9 = high crime neighborhood.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey. Housing Characteristics of Block - PLAN File; Location of Major Thoroughfares - Atlanta Bureau of Planning Major Thoroughfares Plan Map.

Table 17. Local Ties Model

MECHANICSVILLE AND PITTSBURGH

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	R^2	$\bar{R}^2$ [1/]
Fear of Neighborhood Crime Index	-.005 (0.42)	-.580 (5.02)*	.106 (0.17)	-.005 (0.36)	-.015 (1.87)	.005 (0.07)	-.091 (0.75)	-.068 (0.12)	.096 (0.11)	.067	.013
Worry Over Crime Index	-.067 (7.40)**	-1.64 (3.94)*	.443 (0.30)	-.003 (0.01)	-.011 (0.10)	.037 (0.38)	-.109 (0.11)	.027 (0.00)	.376 (0.16)	.091	.038
Avoidance Index	.005 (1.77)	-.772 (31.88)**	.021 (0.02)	-.003 (0.37)	-.013 (5.16)*	-.004 (0.16)	.032 (0.34)	.060 (0.33)	.040 (0.07)	.231**	.186
Protection Index	.006 (0.54)	.276 (1.16)	-.048 (0.04)	.008 (0.99)	.002 (0.03)	.023 (1.61)	.007 (0.00)	.532 (7.48)**	-.201 (0.48)	.096	.042
People Who Say There is Little or no Crime in Entire Neighborhood	.002 (1.16)	.029 (0.34)	-.020 (0.17)	-.002 (0.87)	.0004 (0.03)	.009 (7.02)**	-.003 (0.02)	.009 (0.05)	-.032 (0.34)	.061	.007

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhoods.
V_4 = number of years in neighborhood.
V_5 = number of good friends in neighborhood.
V_6 = frequency of neighboring in entire neighborhood.
V_7 = variety of neighborhood facilities used.
V_8 = number of organizations belonged to.
V_9 = ratio of neighborhood organization membership to total organization membership.

* = $p < .05$.
** = $p < .01$.

[1/] In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 18. Social Cohesion Model

MECHANICSVILLE AND PITTSBURGH

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.002 (0.05)	-.670 (7.60)**	-.014 (0.00)	-.248 (0.94)	-.921 (11.89)**	-.019 (0.54)	.595 (0.57)	-.010 (0.02)	.132**	.088
Worry Over Crime Index	-.047 (4.66)*	-1.80 (5.58)*	.081 (0.01)	-.940 (1.37)	-1.27 (2.28)	.098 (1.42)	3.79 (2.33)	-.088 (0.15)	.160**	.117
Avoidance Index	.005 (1.55)	-.736 (31.66)**	.073 (0.30)	.030 (0.05)	-.154 (1.14)	-.003 (0.05)	.530 (1.55)	.038 (0.96)	.187**	.145
Protection Index	.004 (0.31)	.161 (0.43)	-.134 (0.28)	.242 (0.86)	.290 (1.15)	.056 (4.20)*	.677 (0.71)	.121 (2.77)	.101*	.054
People Who Say There is Little or no Crime in Entire Neighborhood	.0003 (0.04)	.047 (0.97)	-.023 (0.23)	.006 (0.01)	.031 (0.35)	.011 (4.20)*	-.264 (2.91)	-.006 (0.19)	.044	.005

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = those who feel most residents have control over what goes on in neighborhood.
V_5 = those who feel that neighborhood is real home.
V_6 = information exchange with neighbors.
V_7 = neighborhood source of crime information in ratio to total source of crime information.
V_8 = index of perceived similarities.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2)\ \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 19. Social Control Model

MECHANICSVILLE AND PITTSBURGH

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.005 (0.59)	-.555 (4.09)*	.074 (0.08)	.540 (4.12)*	-.793 (6.07)*	.168 (10.17)**	-.120 (0.15)	.370 (1.67)	.231**	.172
Worry Over Crime Index	-.056 (6.00)*	-1.21 (1.88)	-.087 (0.01)	2.06 (5.79)*	-2.11 (4.15)*	.404 (5.69)*	-.955 (0.89)	-.111 (0.01)	.201**	.140
Avoidance Index	.006 (2.02)	-.696 (20.14)**	-.139 (0.87)	-.041 (0.08)	-.100 (0.30)	.10 (11.32)**	-.052 (0.08)	.029 (0.03)	.284**	.229
Protection Index	.018 (5.67)*	.680 (5.46)*	-.186 (0.43)	.529 (3.42)	.073 (0.05)	.057 (0.97)	.486 (2.15)	.912 (9.08)**	.253**	.194
People Who Say There is Little or no Crime in Entire Neighborhood	.0006 (0.14)	.069 (1.32)	-.079 (1.86)	-.005 (0.01)	-.029 (0.17)	-.005 (0.22)	.095 (1.92)	-.058 (0.86)	.054	.019

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = people who watch for suspicious people in neighborhood.
V_5 = people who say it is easy to tell a stranger in neighborhood.
V_6 = number of areas avoided in entire neighborhood.
V_7 = percent of big problems for which took some direct action.
V_8 = percent of disturbances for which took some direct action.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2) \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 20. Neighborhood Problems Model

MECHANICSVILLE AND PITTSBURGH

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	R^2	$\bar{R}^2$ 1/
Fear of Neighborhood Crime Index	.003 (0.20)	-.582 (4.11)*	-.125 (0.22)	.667 (2.91)	.032 (0.38)	.279 (8.00)**	.159**	.116
Worry Over Crime Index	-.060 (6.44)*	-1.61 (3.05)	.448 (0.28)	.167 (0.02)	.143 (0.73)	.527 (2.78)	.162**	.119
Avoidance Index	.010 (5.15)*	-.689 (17.59)**	-.037 (0.06)	.180 (0.65)	.005 (0.02)	.139 (6.05)*	.203**	.161
Protection Index	.009 (1.03)	678 (4.38)*	-.525 (3.02)	.411 (0.89)	.041 (0.48)	.012 (0.01)	.078	.028
People Who Say There is Little or no Crime in Entire Neighborhood	.0005 (0.10)	.078 (1.61)	-.083 (2.16)	.145 (3.03)	.001 (0.01)	-.024 (1.36)	.059	.010

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = people who feel neighborhood has gotten better in last years.
V_5 = number of big problems.
V_6 = number of disturbances seen or heard in neighborhood in last year.

* = $p < .05$.
** = $p < .01$.

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the predicion of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the independent variable. With each reduction in degrees of freedom the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - (1-R^2) \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

SOURCE: Household Survey.

Table 21. Best Prediction Models, Mechanicsville and Pittsburgh.

Reactions to Crime	V_1 β (F)	V_2 β (F)	V_3 β (F)	V_4 β (F)	V_5 β (F)	V_6 β (F)	V_7 β (F)	V_8 β (F)	V_9 β (F)	V_{10} β (F)	V_{11} β (F)	V_{12} β (F)	V_{13} β (F)	V_{14} β (F)	V_{15} β (F)	V_{16} β (F)	V_{17} β (F)	V_{18} β (F)	R^2	$\bar{R}^2$	1/
Fear of Neighborhood Crime Index		−.719 (8.47)**		.001 (0.03)	.463 (3.39)		.129 (2.36)	2.53 (1.89)	.343 (2.04)	−.565 (4.10)*	.094 (3.65)	−.188 (0.58)	.350 (2.15)						.262**		.205
Worry Over Crime Index	−.050 (6.68)*	−1.30 (2.88)		.029 (2.17)						−2.21 (5.90)*	.327 (4.36)*		1.92 (6.36)*						.223**		.190
Avoidance Index	.007 (4.88)*	−.736 (31.70)**					.052 (1.41)				.098 (17.13)**			−.019 (14.17)*					.322**		.300
Protection Index	.013 (4.16)*	.361 (2.10)	−.0001 (0.00)												1.05 (15.67)**	.319 (3.42)		032 (1.56)	.198**		.164
People Who Say There is Little or No Crime in Entire Neighborhood						−.0006 (0.19)											.006 (3.09)	.003 (0.27)	.033		.016

V_1 = age of respondent.
V_2 = sex (male).
V_3 = high crime neighborhood.
V_4 = total crimes per 100 residential units in respondent's block.
V_5 = victim of any crime in last year (respondent or household member).
V_6 = interaction between V_4 and V_5.
V_7 = number of disturbances seen or heard in neighborhood in last year.
V_8 = percent of parcels in respondent's block with commercial land use.
V_9 = major thoroughfare going through block.
V_{10} = percent who say it is easy to tell a stranger in neighborhood.
V_{11} = number of areas avoided in entire neighborhood.
V_{12} = those who feel that neighborhood is real home.
V_{13} = people who watch for suspicious people in neighborhood.
V_{14} = number of good friends in neighborhood.
V_{15} = percent of disturbances for which took some direct action.
V_{16} = number of organizations belonged to.
V_{17} = frequency of neighboring in entire neighborhood.
V_{18} = information exchange with neighbors.

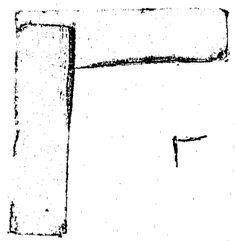
* = $p < .05$
** = $p < .01$

1/ In multiple regression, an adjustment must be made on the squared multiple correlation coefficient in order to correct for the degrees of freedom eliminated in the prediction of the dependent variable. The total number of degrees of freedom equals the number of observations minus the number of constraints placed on the observations. One degree of freedom is eliminated for each independent variable used to predict the dependent variable. With each reduction in degrees of freedom, the R^2 is increased. If there is a large number of independent variables relative to the number of cases, the R^2 will be misleadingly high. Therefore, it is necessary to adjust for the number of predictors used, according to the formula:

$$\bar{R}^2 = 1 - [1-R^2] \frac{N-1}{N-k-1}$$

where N = the sample size and k = the number of independent variables in the equation.

Source: Household Survey.



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