POLICE COMMUNITY STATIONS: THE HOUSTON FIELD TEST

TECHNICAL REPORT

by

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With the assistance of
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Final Draft Report
to the National Institute of Justice

The Honorable James K. Stewart, Director

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Police Foundation
Hubert Williams,
President

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PREFACE

This technical report describes the Houston Police Department's Police Community Station Program and the evaluation of it conducted by the Police Foundation. As the report describes, the program was developed by a team of Houston police officers. They worked out of the Department's Research and Planning Division, under the direction of the Division Head and the Chief of Police. Without their creativity and cooperation there would have been no program to evaluate. The following members of the Houston Police Department were actively involved in the planning and execution of the program:

Lee Brown, Chief of Police
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Frank Yorek, Deputy Chief
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Police Community Staff
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Officer Margie Curtis	Donny Martin, Station Coordinator
Officer Norman Henson	Officer Mike Mikeska

Tina Walker, Police Aide

Staff members of the Police Foundation and research consultants were involved in the design and execution of the program evaluation, or gave advice to those who were. They included:

Sampson Annan, Survey Director
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Antony Pate, Newark Project Director
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Wesley G. Skogan
Jerome Skolnick

Bonnie Fisher worked at Northwestern University preparing and analyzing the data. Virginia Burke performed the arduous task of producing the final report.

The project was supported by the National Institute of Justice. The staff of the Institute provided continuous encouragement and advice. Those actively involved in this project included: James K. Stewart, Director; William Saulsbury, the original project monitor; and Larry Bennett and Gil Kerlikowske, who shared the monitor role as the project neared completion.

The entire project, including the evaluation, was conducted under the direction of Lawrence Sherman, then the Vice President for Research of the Police Foundation. Patrick V. Murphy, then the President of the Police Foundation, was active in establishing the Fear Reduction Project and representing it to the policing community.

INTRODUCTION

The Police Community Station evaluated in this report was implemented by the Houston Police Department in 1983 and 1984 so that its effectiveness as a fear reduction technique could be tested. This strategy was one of several designed by the Houston and Newark Police Departments as part of the Fear Reduction Project which was funded by the National Institute of Justice and evaluated by the Police Foundation. That project, the various strategies, and the methods of strategy design and implementation in both cities are described in Appendix A of this report.

The strategies were designed with the particular characteristics of the two cities in mind. Houston police must cover an enormous geographic area (565 square miles), a fact which leave them few alternatives to motorized patrol if they are to respond to calls for service. The consequence, however, is believed to be both a physical and psychological distancing between the Houston police and the people they serve. The community station was seen as one means of bring police and citizens into closer contact. It was hypothesized that this increased contact could help reduce levels of public fear.

This report documents the way in which the strategy was implemented and the impact it appears to have had on levels of fear and perceptions of neighborhood problems among Houston residents in one neighborhood.

HOUSTON'S POLICE COMMUNITY STATION

PROBLEM AND PLAN

The Houston Police Department's Fear Reduction Task Force hypothesized that one source of fear in a sprawling urban area might be a sense of physical, social and psychological distance from the police. In early 1983 Houston was a city of approximately 1.8 million residents and 3357 police officers in an area of 565 square miles. Almost all patrolling is done in cars which citizens may seldom see, and the average person is unlikely to have reason to talk with a police officer. In police systems which are based almost entirely on motorized patrol, police-interaction with residents and business persons is most likely to occur when police are giving tickets, responding to calls for service and dealing with criminal incidents. Indeed, the police officer assigned to a patrol beat may have little understanding of the priorities and concerns of people living or working there. Thus, the officer's free patrol time may be directed by his or her own sense of task priorities rather than by those of the neighborhood. This lack of information about neighborhoods may cause officers to be unresponsive to important neighborhood problems and may, in turn, cause citizens to feel that police neither know nor care about them. This may lead to dissatisfaction with police services, dissatisfaction with the area as one in which to live, and fear of crime and other social problems.

The Task Force believed that the location of a small, storefront police office in a neighborhood might provide one means of overcoming the problems of distance. Staffed by police department personnel, the station would be open at times when it would be convenient for citizens to lodge a complaint, give or receive information, or just stop by to chat with the local police officer. The office would provide a base of operation for the area officers

whose job it would now become to get acquainted with the people living in the area, identify and help solve neighborhood problems, seek ways of delivering better police service to the area, and develop programs to draw the police and the community closer together. The effects of the station and its programs would be reinforced by a monthly police-produced newsletter. The newsletter would contain general departmental news of interest to the community, safety and crime tips, and feature stories which would describe citizens and/or police working to prevent crimes or apprehend criminals. One section of the four page paper would focus on news directly relevant to the neighborhood, including items about the community station.

It was believed that the presence of the community station, the programs which would evolve from it, and the newsletters had the potential to:

1. Reduce residents' fear of personal victimization in the area, related worries about crime and disorder in the area, and the associated tendency to engage in defensive behavior to avoid victimization;

2. Reduce residents' worry about property crime victimization in the area;

3. Reduce their perceived levels of area crime and disorder problems;

4. Increase their level of satisfaction with their neighborhood as a place to live; and

5. Increase residents' satisfaction with the quality of police service they received.

It was expected that the program would have similar positive effects on the area's business community.

That these hypotheses would be tested was the important contribution of the Houston Police Community Station. The concept itself was not new. In 1983, Houston officers observed operating storefront stations in Detroit, Michigan and Santa Ana, California and knew through the literature of others

that did exist or had existed in New York City, Dayton, Ohio; Holyoke, Massachusetts; St. Louis, Missouri; Los Angeles, California; and Louisville, Kentucky (Fink and Sealy, 1974). There have been storefronts in Birmingham, Alabama, Memphis, Tennessee and Austin, Texas (Crime Control Digest, 1973), and in Portsmouth, Virginia (Williams, 1973). A portable version has been used in Chesapeake, Virginia (Bayly, 1974). In all of these cases, there has been abundant praise from observers and from officers who operated the stations but--to our knowledge--there has never been a significant empirical evaluation of the idea. A post-hoc effort was made to evaluate the Detroit stations (Tornatzky, et al., 1978), but the inconclusive findings may be attributable to the limitations of the research methodology. The Houston station would offer the opportunity for a popular and potentially important idea to receive a sound test.

PLANNING CONSTRAINTS

Design of all the Fear Reduction strategies was constrained by several requirements, among them that: the strategy could be evaluated in a sound way; the strategy could be implemented and evaluated within a year; it could be implemented using existing department resources; and the strategy could be easily transferred to other police agencies.

The Evaluation Condition

The evaluation of the stragegy would be based on a quasi-experimental design in which fear, other attitudes, and reports of behavior would be measured with surveys conducted in the program neighborhood prior to the implementation of the strategy and then again one year after the initial survey. Changes in outcome measures in this neighborhood would be compared

with those in a comparable neighborhood in which no new programs were developed during the year. Because many elements of the program would not be developed until after the pre-test survey, some (e.g., a blood pressure program for adults and a fingerprinting program for children) were not specified in the survey questionnaire.

Implementation and Evaluation Within a Year

Among the Fear Reduction strategies designed and tested in Houston, the Community Station required the most complicated preparations. The tasks of locating the space, writing and getting approval for the lease and arranging for all the physical requirements consumed a substantial amount of the alloted time. The fact that the station was unable to open before November, 1983 and was scheduled for evaluation in July, 1984 meant that it would be in operation only eight months before it was evaluated.

Existing Resources

There was no money in the Department's budget for the rent or the utility bills for the storefront or for the salaries of the non- sworn personnel who would constitute part of the staff. The National Institute of Justice did not provide funds for the station, and a grant from the State of Texas was obtained to support the operation. The station also relied on contributions from private sources.

Easy Transferability

Because the programs which would be run out of the station were to evolve as the officers became familiar with the neighborhood and its needs,

the storefront operation could not be precisely defined before it was begun and, fully fledged, it would prove difficult to describe in a few brief paragraphs.

THE PROGRAM AREA

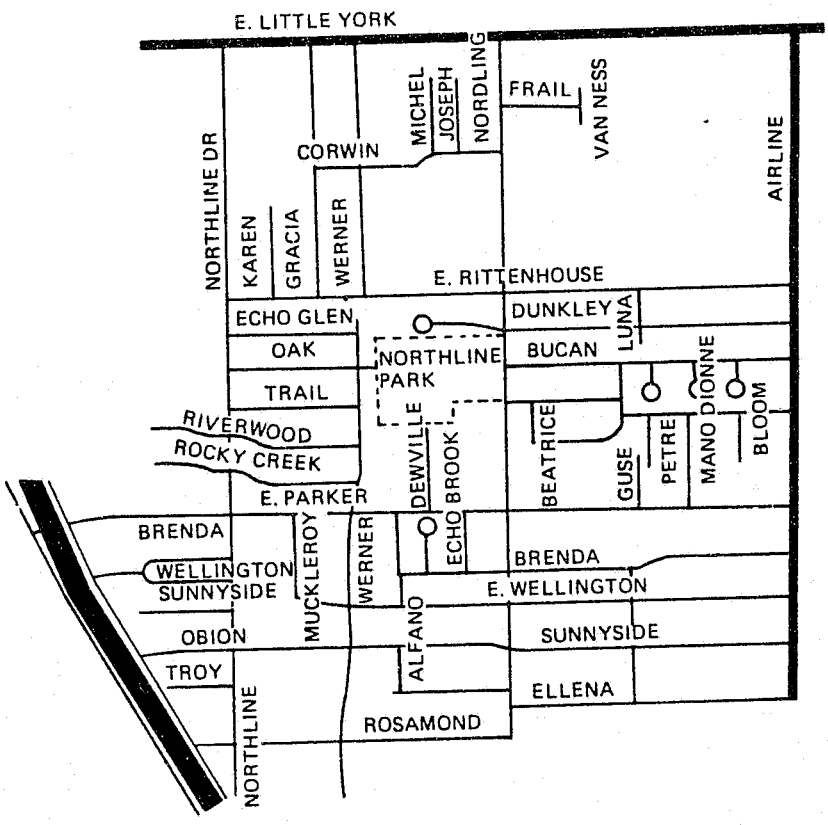
Northline Park is an area of approximately one square mile, (See Figure 1), located in northwest Houston, 7 miles from the city's center. According to the 1980 Census, the area contained 5015 residents who live in 1891 housing units, 50 percent of which were owner occupied. (See Table 6, page 34.) Sixty-nine percent of the residents were white, 16 percent were Hispanic, 13 percent were black and another 2 percent were Asians or Pacific Islanders.

The houses in the area are modest but comfortable, the majority of brick construction. Frame houses tend to be well-painted and the area generally has a well-maintained appearance. Most of the houses appear to have been built between 1940 and 1960. Automobiles tend to sit in open carports, on the street, or in front yards. There were never many garages in the neighborhood and several of these have been converted into extra rooms. It is the writers' impression that approximately 10 percent of the yards are fenced and less than 5 percent of the houses are protected with burglar bars or gates. As is the case in many Houston neighborhoods, there are few sidewalks in the residential parts of Northline.

There is a community park in the center of the neighborhood which is a square block in area and which contains a public swimming pool, children's play equipment and a softball diamond.

FIGURE 1

HOUSTON
NORTHLINE PARK AREA



Despite the ethnic heterogeneity of the area as a whole, most of the blacks and perhaps a majority of the Hispanics live in the few apartment buildings in the neighborhood.

During the evaluation survey in the summer of 1983, 93 non-residential establishments were identified in the area. Among these were 1 elementary school, 5 churches, 1 hospital, and 2 medical clinics. There were 13 automotive sales, service and supply businesses, 7 food stores, including 2 quick shop markets, and 2 small restaurants. Like many other Houston neighborhoods, Northline has no zoning codes which restrict the location of non-residential establishments. However, except for the churches and schools and a few small businesses, most non-residential properties are located on the streets which form the perimeter of the area.

According to the 1983 evaluation pre-test survey, 20 percent of these non-residental establishments had been sites of actual or attempted robberies and 36 percent had been burglarized or been the scenes of attempted burglaries in the six months prior to the survey. Vandalism of some type had been committed at 36 percent of these places.

Twenty-seven percent of the 1983 residential respondents reported themselves to have been the victims of actual or attempted robberies, pursesnatchings or pocketpickings during the previous six months, and 12 percent lived in households which had been burglarized during the same period. All residential respondents were asked to rate a number of problems on a three point scale in which 1 = not a problem, 2 = somewhat a problem, and 3 = a big problem. In Northline, burglary was assigned a 2.2 (slightly more than somewhat of a problem). Auto vandalism and auto theft were rated at 1.9; (slightly less than somewhat of a problem). Public drinking, the sale and use of drugs, and robbery by pursesnatching were all scored at 1.8.

Stranger assault was 1.6; rape was 1.5; the breaking of windows and graffiti was 1.4; and gangs were scored at 1.3. There were no problems in Northline which residents on the average rated as "big" and only burglary was viewed as slightly more than somewhat of a problem.

The extent to which residents reported worrying about various types of crime corresponded closely to their estimate of the crime as a neighborhood problem. In 1983 they reported themselves as more than "somewhat worried" about burglary, "somewhat worried" about robbery and slightly less than "somewhat worried" about the crimes of home invasion and assault. With regard to these indicators of fear, Northline was similar to the other four Houston neighborhoods surveyed for the Fear Reduction studies.

In 1983, thirty-nine percent of the population reported having seen an officer in the area within the previous 24 hours but another 30 percent reported they had not seen an officer within the previous week. Residents had moderately positive attitudes toward their police whose performance they rated between "fair" and "good" on a number of services. As in other Houston areas which were surveyed, Northline residents thought their police were not strict enough with traffic enforcement.

PROGRAM ORGANIZATION

The Northline community station was planned by Officer Robin Kirk of the North Shepherd Patrol District in consultation with the other members of the Fear Reduction Task Force. Representatives of the Task Force had visited police storefront operations in Detroit, Michigan and Santa Ana, California and had invited Dr. David Bayley of the University of Denver and Captain Paul Walters of the Santa Ana Police Department to visit Houston as storefront consultants.

Four aspects of the station strategy required planning: physical arrangements, financing, staffing, and program content. Given serious constraints of time, problems were handled in the order listed with the result that program content was designed largely after the station opened. In retrospect, this was not a disadvantge, since the community station officers found themselves better able to judge the needs of the community after being located in the neighborhood for a few weeks.

Physical Arrangements

These posed the most difficult of the planning problems. Negotiating with private owners for space to be used for police operations was a process with which the Police Department had little familiarity and one with which the Task Force members had no experience. They were to discover they had little clout with property managers and little more with the city officials who would have to approve the arrangements.

Many days were spent seeking space in the neighborhood originally designed as the project area; when nothing suitable could be located, the station strategy was moved to another of the project areas and the search was begun again. In the Northline area, one particularly attractive location was found in a small shopping center which faced a main thoroughfare. The office space was in the midst of businesses, including a restaurant and large grocery store, which could be expected to attract a substantial number of people. Discussions about this space continued for several weeks before it was clear that the City and the landlord would be unable to agree on rent. The search went on and the Task Force ultimately selected an address in a small, modern, brick, one-level complex of five offices and shops. Three of the other spaces were occupied at the time, but

none contained businesses intended to attract large numbers of people. The police office would occupy the fourth unit away from the street and would face onto a parking lot which ran perpendicular to the street.* The complex was located across from an elementary school on a street which bisected the neighborhood. It was hoped that proximity to the school would increase the number of residents who would know about the station, but it was obvious the station would have to overcome low visibility.

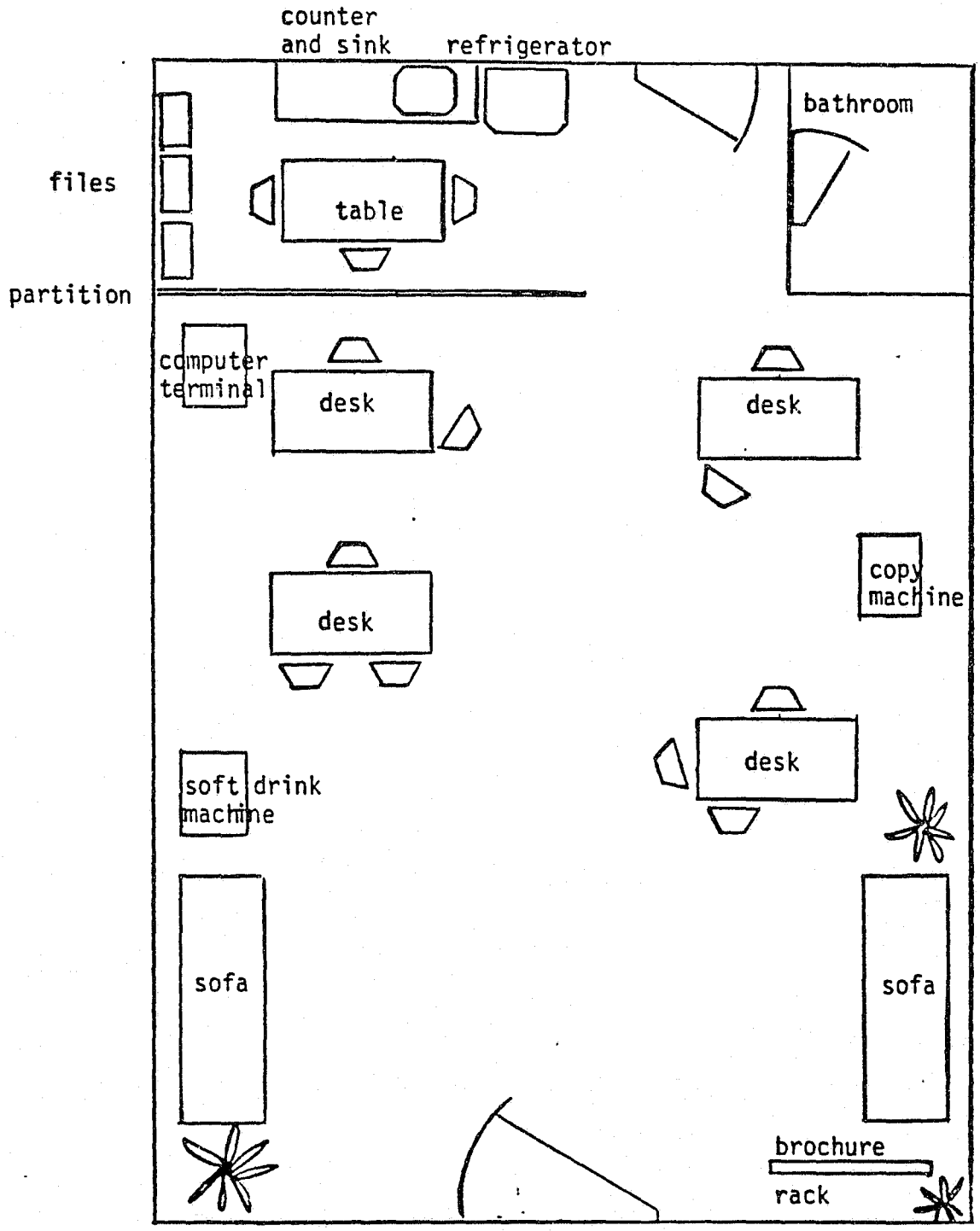
Locating the space was the first task; getting it approved by the city was the next. The three weeks needed to accomplish this further eroded the already short time alloted for the project and the evaluation. The survey schedule allowed for the station to open on the first of September, but the negotiations delayed the opening until the second week of November.

When it did open, the community station was spacious (see Figure 2), pleasant, open, well-lighted and attractively furnished. The second-hand furnishings were of good quality and condition. The glass front wall gave visitors full view of a comfortable, inviting interior which was furnished with desks for staff members, sofas and chairs for staff and visitors, and with a copy machine and soft drink machine which were available to the public. There were pictures on the walls and plants on the desks and next to the sofas. The two front desks were used by civilians who were often the first to greet visitors, but the officer (or officers) at the second desks were visible and usually appeared readily available. There was an area map on the wall, and the room contained an information rack for Department

*Ten months after opening, the station moved into the building's front unit, where it was visible from the street, but this occurred after the evaluation period.

FIGURE 2

NORTHLINE COMMUNITY STATION FLOORPLAN



brochures. A local group soon would contribute a large American flag which was hung on the back wall.

Financing

Rent for the station was to be $410 per month. It was planned that one civilian station coordinator, 3 Police Aides and 1 Community Service Officer would spend a combined total of approximately 560 hours a month in the station at a cost of $3,000 a month. Utilities and telephone would add another $300 to the monthly bill.

Financing was handled by police department administrators who applied successfully to the State of Texas for a grant for the Community Oriented Policing Program; this provided money for rent, utilities, equipment and personnel (other than police officers). Furniture (desks, filing cabinets, sofas) was donated by Gulf Oil Company, and the station sign was provided by the Coca-Cola Company.

Staffing

Initially the task force decided the community station would be open five days a week, Monday through Friday from 1:30 p.m. to 9:30 p.m. Two patrol officers would be assigned to the station where they would divide their time between being available to citizens in the station, patrolling in the area, attending community meetings, and visiting institutions such as schools. One civilian coordinator would be in the station whenever it was open. One Community Service Officer (a police recruit awaiting start of the next police academy training session) and three Police Aides (high school students planning careers in law enforcement) would complete the original staff. The Task Force anticipated that after the station was established

and programs were developed, residents of the neighborhood would be recruited to do volunteer work in the station.

In February, 1984, the station hours were expanded to include 10:00 a.m. to 9:30 p.m., Monday through Friday, and 10:00 a.m. to 6:00 p.m. on Saturdays. When the hours were lengthened, two additional officers were assigned to the station.*

The duties assigned to each position were the following:

Patrol Officers

- -- conduct patrol operations and answer calls in the area; ticket and arrest when appropriate,
- -- work with area principals of schools on school problems and activities,
- -- meet with and speak to area civic clubs, church groups, and PTA groups,
- -- meet with area businesspersons to discuss problems at various stores and provide crime prevention information,
- -- supervise the overall operation of the community station,
- -- consult with citizens who come to the station: provide them with information about how to handle their problems or refer them to other agencies for assistance,
- -- provide telephone service on general information calls,
- -- write reports related to walk-in traffic and requests for service,
- -- hold special programs for different groups on burglary and rape prevention,
- -- do follow-up work on burglary and robbery problems,
- -- assume responsibility for various special projects such as crime analysis, finger printing, the park program and the blood pressure program.

Station Coordinator:

- -- perform general office supervision,
- -- maintain supplies and equipment,
- -- schedule and record time for Community Service Officers and Police Aides,
- -- coordinate volunteer help.

*These assignments did not require that personnel be taken away from other duties. At present, a new recruit class graduates in Houston every three months and the number of officers assigned to each district station is increasing. While the Houston department is better off in this respect relative to many other agencies, it should not be assumed that a community station program requires additional organizational resources. Apparently successful storefront programs operate in Detroit, Michigan and Newark, New Jersey--both of which have police departments that have suffered from cutbacks in personnel.

Community Service Officers:

-- conduct crime analyses,
-- prepare daily patrol bulletin,
-- prepare daily activity report for station,
-- fill out Citizen Information Forms,
-- fill out accident reports,
-- answer telephones, provide information and agency referrals,
-- use the computer terminal to obtain information,
-- provide instructions to Police Aides.

Police Aides:

-- assist with crime analysis,
-- answer telephones,
-- maintain logs for walk-in traffic and telephone calls,
-- complete daily and weekly activity reports,
-- assign incident numbers,
-- fill out accident reports and Citizen Information Forms.

Program Content

As indicated previously, the details of most of the community station programs were developed after the station opened in November. One activity planned in advance was the publication of a monthly newsletter which would provide crime prevention tips and information about the police department, the neighborhood station, and local events. The officers who were to work in the station also knew before the office opened that they would work actively with the area schools and would make regular contacts with businesses in the area. They also planned to conduct periodic crime analyses for the neighborhood.

PROGRAM DOCUMENTATION

The Police Foundation intended to document the way in which the community station strategy was carried out, so that (1) it would be possible to determine and describe the extent to which the program had been implemented as designed and (2) the actual operation of the program could be described in detail to any other agency which might wish to adopt the

strategy. The second purpose is self-explanatory. The first is prompted by the need of the evaluators to be prepared to distinguish between the possible failure of an idea and the failure of the implementation of the idea. Should the evaluation of the community station fail to demonstrate a program impact, it would be important to know whether the lack of impact was due to the fact that the program was based on an ineffectual idea, or whether it was due to the failure of the implementing agency to put a potentially good idea into action as it was planned.

The Police Foundation's full-time site observer for Houston, Gretchen Eckman, spent randomly selected blocks of time (1 to 3 hours in length) in the station. Altogether, she spent approximately 60 hours in the station between November 1, 1983 and April 30, 1984. Additionally, she attended the monthly neighborhood meetings held by the station staff. She regularly interviewed the officers and other staff members working in the station, as well as the captain in charge of the district in which the community station is located. The station staff kept daily counts of the number of visitors and phone calls and of each of the activities conducted in, or in connection with, the storefront.

Examination of these various data leads us to conclude that the program was implemented and the nature of it was essentially that which was planned and is described in this report.

PROGRAM IN ACTION

During the first two or three months the station was open, the assigned officers contacted school officials, church groups, civic clubs, and business people in an effort to make the community aware of the station. As indicated in Table 1, the numbers of citizens who walked into the station

Table 1

NUMBERS OF
ACTIVITIES INTERNAL TO THE COMMUNITY STATION

Month	Hours Open	Citizen Walk-ins	Phone Calls	Reports Taken	Children Finger-Printed	Blood Pressures Taken
November	184	135*	3	2	#	#
December	168	49	32	4	#	#
January	168	47	39	11	#	#
February	185**	124	78	6	18	#
March	282	183	112	6	16	#
April	---***	270	238	4	87	73
May	263	200	253	29	108	9
June	224	234	254	20	21	19
July	224	235	225	16	11	23
August	291	210	308	32	9	31

* Includes 125 persons attending grand opening.

** Hours expanded on February 20.

*** Not recorded.

Program not yet operating.

were relatively low in November, December and January. It was during this time that station personnel planned the programs and publicity methods designed to attract more residents to the station and to programs conducted outside the station by the station staff.

In November, 2000 fliers were distributed announcing the station's November 13th grand opening which was attended by 125 people. As documented by Table 1, the amount of business done in the station had increased markedly by February. Table 2 reports the numbers of meetings and visits conducted outside the station by the station officers.

Monthly Meetings

In February, station staff initiated monthly community meetings. It was intended that the first meeting would be held in the station itself, but when 110 residents appeared, a minister in the audience offered his church, located a block away, as an alternative site. Led by the ministers and the officers, the crowd walked to the church where the meetings have since been held. The first night the officers introduced themselves and the station staff explained the purpose of the station and outlined some of the programs they expected to develop. They, in turn, listened to residents discuss concerns about their neighborhood. Beginning with the March meeting, a variety of police department members or outside speakers addressed the meetings, all of which were attended by at least 120 persons. By September, the audience had swelled to 287. Table 3 provides a list of speakers, a summary of their topics, and the number attending each meeting from February through September, 1984.* These meetings and other programs started at the

*Only the meetings held through June could have an impact on the evaluation survey conducted in June and July.

Table 2

NUMBERS OF
ACTIVITIES CONDUCTED
BY STATION OFFICERS OUTSIDE THE COMMUNITY STATION

Month	School Visits	Business Visits	Community Meetings
November	13	22	0
December	1	32	0
January	9	35	2
February	7	40	5
March	7	13	3
April	9	2	8
May	18	6	7
June	0	9	8
July	0	18	6
August	0	6	5

Table 3

COMMUNITY STATION MONTHLY MEETINGS
SPEAKERS, TOPICS, ATTENDANCE

Month	Speaker and Topic	Attendance
February	Community station officers Purpose and operation of station	110
March	Councilman Dale Gorcsynski, Issues of concern to the city and neighborhood	122
April	H.P.D. Assistant Chief John Bales H.P.D. goals and programs	140
May	H.P.D. Officer Herb Armand Sexual abuse	127
June	Bank president Travis Jaggers Investments and estate planning	134
July	Judge Ted Poe Issues in the criminal justice system	157
August	Houston Power and Light representative Steve Gonzales Power costs and conservation	230
September	H.P.D. Chief Lee P. Brown Community oriented policing in Houston	287

*data not collected.

Note: Only the data through June report activities which had a potential impact on the evaluation, the survey for which was conducted in June and July. Later data are provided for informational purposes.

station were actively publicized by the station staff. In February, for example, 1400 fliers announcing the first neighborhood meeting were distributed door-to-door and through schools, local civic clubs, and grocery stores. In addition, the station staff called all the persons who previously had come into the station to tell them about the meeting.

As relationships with area civic clubs were established, the station officers began to rely more heavily on them for publicity of station activities. In April the officers began to award a monthly certificate to the civic club that turned out the most members for the neighborhood meeting. To determine whether their publicity efforts were effectively reaching all areas of the neighborhood, the officer used a pinmap to mark the addresses of the persons who signed the register at the neighborhood meetings. If an area appeared to be under-represented, they would try to direct more of their future publicity efforts at that area.

The School Program

Station officers met regularly with local school administrators to discuss school problems. (See Table 2.) These conversations resulted in the officers giving more attention to truancy as an area issue. Truant students who are picked up are returned to school. Older individuals who are with truant juveniles are taken to the city jail. Parents who are having trouble with truant children are advised to discuss the problem with

the station officers who will either talk with the student and/or with the family or will refer them to a counseling agency.

Fingerprinting program

Station personnel began in February to fingerprint children whose parents brought them to the station for that purpose. Parents are given the fingerprint cards which they can use should they ever need to identify a child as their own. Table 1 reports the number of children who have been printed.

Blood Pressure Program

Starting in April, area residents were invited to have their blood pressure taken at the station on one day each month when a nurse or paramedic would be available to take the readings. (See Table 1.)

Ride-Along Program

Area churches and civic clubs are invited to select one of their members to ride for several hours with one of the officers working in their neighborhood.

Park Program

Prior to the opening of the community station, the local park had been taken over by rowdy or otherwise disruptive people who made many residents reluctant to use the park. The station officers began patrol and surveillance activities around the park where they made some arrests. They urged residents to return to the park and encouraged this by scheduling summer athletic activities in which residents were invited to play with or

against police officers. On one June Saturday there was a softball game; in July it was volleyball and in August, there were football and horseshoe games. These activities served three functions: they (1) encouraged residents to use their parks again, (2) brought citizens and police together, and (3) involved district officers who were not assigned to the community station but who worked in or near the neighborhood. The latter may have helped other officers to feel more a part of the station operation.

The park program was considered successful when, by August, a vending company was again willing to place a soft drink machine at the pool in the park, (another had previously been removed after frequent vandalism), and when residents were observed by the police to be using the park more regularly.

In addition to participating in these programs, the officers assigned to the station continued to conduct regular patrol activities in the neighborhood. Table 4 reports the numbers of arrests made (by type), ordinance violations ticketed, and juveniles picked up by the station officers.

The area was also patrolled by officers who normally would have been assigned to that beat but who were not specifically assigned to the community station. In the first months after the station opened, officers not assigned directly to it tended not to visit it. However, by February they were stopping to discuss area problems with the station officers and to review the crime analyses prepared at the station. Station officers felt that their obvious willingness to do routine patrol work in the neighborhood countered whatever feeling other officers may have had that the neighborhood station was not associated with "real" police work. The station officers

Table 4

ARRESTS, CITATIONS, AND DETENTIONS
MADE BY COMMUNITY STATION OFFICERS

Month	Arrests - Misdemeanor	Arrests - Municipal	Arrests - Felony	Ordinance Violation Citations	Juvenile Detentions
November	0	0	0	0	---*
December	4	0	0	1	---*
January	3	0	0	0	---*
February	5	21	14	0	---*
March	15	4	14	34	34
April	73	0	0	10	21
May	0	21	4	6	---*
June	0	32	4	5	---*
July	0	15	22	10	---*
August	11	16	13	3	---*

*data not collected

Note: Only the data through June report activities which had a potential impact on the evaluation, the survey for which was conducted in June and July. Later data are provided for informational purposes.

also made a point of inviting their other colleagues to use station amenities which included restroom, soft drink and coffee machines, typewriters, computer terminal and copy machine. The station officers believed that by April they had established a good flow of information and were maintaining a desirable working relationship with the other officers in the area.

There also was an information flow developing between station officers and area residents. Although citizens were repeatedly reminded to call the department's main number in case of emergency, they were invited to call the community station if they wished to meet with an officer for a non-emergency reason.* When there was a crime problem in the neighborhood (such as a rash of burglaries which officers believed were being committed primarily by one group), they would provide information about the crimes to residents and ask them to call if they had information or were suspicious of any activities in their area. Station officers were enthusiastic about the assistance they were receiving from the community and believed that if citizens had previously tried to relay such information, it would have been lost in the lengthy communication chain from central headquarters to the district station, to area officers. (See Appendix B for a detailed report by the station officers of community involvement in one area crime problem.)

*They were not advised to call the neighborhood station in case of an emergency because the station officers might be away, attending a meeting, patrolling, or meeting with another resident. Since there was no automatic switching system for emergency calls coming into the storefront, time would be wasted if a second call then had to be placed to the police dispatcher. Despite reminding residents to call the main number, the storefront did occassionally receive emergency requests.

Newsletters

Between November, 1983 and June, 1984 the station staff mailed approximately 450 newsletters each month to randomly selected addresses in the Northline neighborhood. An additional 50-100 newsletters were picked up each month by visitors to the station. A content analysis of the newsletters and a copy of one issue can be found in Appendix K of this report.

Nature of Community Station Activities

During the 23 hours when the site observer kept structured formal records* of the station activities, she observed 22 people visit the officer for the following reasons:

--to have salvage title signed on the car,

--to chat with the officers (four of these visitors came to the station after attending the first neighborhood meeting),

--to obtain a police report for insurance purposes,

--to have children fingerprinted.

All but five of the visitors were believed to have received the service they sought. (An officer was unwilling to sign a salvage title and fingerprinting was not available on one day when two mothers arrived with their children.) In dealing with visitors, station personnel were considered each time to be friendly, informative and interested. Except when they were unable to provide the desired services, station personnel appeared comfortable dealing with the public.

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*She maintained narrative notes during the first 37 hours of observation.

During these same 23 hours, the observer noted 15 incoming calls which appeared to be from citizens.

When station staff members were not talking with citizens, they might be working on the newsletter, preparing and distributing fliers, or preparing the crime analysis and updating pinmaps. Of the approximately 80 person-hours observed, 39 were estimated as being spent on work related to policing generally or the community station specifically. Although the activity level may increase as the station is open longer, as more programs are developed and more people visit the office, it appeared that between February and April, 1984, the station was more heavily staffed than necessary.

The observer used a three point scale to indicate the apparent attitudes of the various staff members toward their work. (See Table 5.) Although none of the personnel ever demonstrated a negative attitude, the Community Service Officers and Police Service Aides--both groups of which are likely to be temporary employees in the community station--were more likely than others to communicate neutral rather than positive attitudes about their work.

Station Management and Supervision

The work to be done in, and from, the station was identified and either done or monitored by the two patrol officers who were originally assigned to the station. Working under their direction was the civilian station coordinator whose responsibility it was to schedule and oversee the other station staff members. The coordinator was also responsible for the maintenance tasks. The station officers did not attend roll call, as they would once have done, at the district station; instead, they started their

Table 5

PERCENTAGE OF OBSERVATION PERIODS IN WHICH WORK ATTITUDES OF STATION PERSONNEL APPEARED TO BE POSITIVE, NEUTRAL, OR NEGATIVE

Staff	Attitude		
	Positive	Neutral	Negative
Day-shift officers	40	60	0
Evening-shift officers	67	33	0
Coordinator	100	0	0
Community Service Officers	17	83	0
Police Service Aides	12	88	0

shift directly from the storefront. They sometimes, although not routinely, stopped at the district station while patrolling, and they occasionally were visited in the station by their sergeant and lieutenant. Neither of the supervisors had been closely involved with the development of the programs and their general support for the idea may have reflected the attitude of the district captain who was very enthusiastic and supportive. The patrol officer who had been assigned from the district to the Fear Reduction Task Force, and who ultimately became the informal manager of the community station, had a close working relationship with the district captain. Problems could be discussed directly with the captain who was quick to provide solutions. The first patrol officer had considerable influence over the choice of the officers to work in the station, and he requested people who apparently were reliable, independent workers and whose personalities and skills were complementary.

Although the traditional chain of command was not entirely circumvented in the management of the community station, it was acknowledged only occasionally. While this arrangement appears to work well given the talents and personalities of the captain and the station's managing officer, it remains to be seen whether this casual arrangement could survive the transfer of key personnel or could be successfully applied in different settings.

SUMMARY

The Northline Police Community Station was a strategy intended to reduce the physical and psychological distance between police and residents in one neighborhood. The station was established in a small office space with a glass front with allowed visitors to view a comfortably furnished

interior where staff could be seen talking with citizens or waiting to receive them. Staffed by a mix of sworn and non-sworn personnel, the station offered general assistance and information to citizens as well as special programs which included:

-- Monthly neighborhood meetings,
-- Fingerprinting of children,
-- Reading of blood pressure,
-- A park program,
-- A ride-along program, and
-- A school truancy program.

In addition, the station distributed approximately 450 copies a month of a newsletter published by the police department specifically for the Northline neighborhood.

As a example of station activity, in May of 1974 the station was open 263 hours. Two hundred visits by citizens were recorded and station staff handled 253 phone calls. They took 29 reports, fingerprinted 108 children, and oversaw the taking of blood pressures for 9 people. They made 18 school visits and 6 business visits, and attended 7 community meetings. They made 21 municipal arrests and 4 felony arrests and issued 6 citations for ordinance violations.

Although officers assigned to this station were freed from routine patrol responsibilities, they did spend some of their time on patrol, especially in connection with neighborhood problems which might have been brought to their attention. Their patrolling had the effect of increasing patrol coverage of the area by approximately 20-30 percent.

Program activities were documented by a Police Foundation observer who spent approximately 60 hours in the station. Examination of her data, as well as data maintained by the station staff, indicates that the station program was implemented as planned.

EVALUATION DESIGN AND METHODOLOGY*

THE DESIGN

As mentioned in the introduction to this report, the evaluation of the Community Station strategy was based on a quasi-experimental design in which citizen attitudes and reported experiences, and behaviors were measured using face-to-face interviews in two Houston neighborhoods in the summer of 1983 (pre-intervention) and again in the summer of 1984 (post-intervention). The community station was opened in Northline Park (the program area) approximately three months after the completion of the Wave 1 (pre-intervention) survey and had been in operation eight months when the Wave 2 (post-intervention) survey was begun. Shady Acres, the comparison area, was located approximately five miles from Northline Park and was designated as the survey area in which no new police programs were to be implemented between the Wave 1 and Wave 2 surveys.

The following sections describe the groups which were surveyed, the levels of analysis and tests of program effects, the program and comparison areas, the survey procedures, and the variables used to determine program effect.

THE SURVEYED GROUPS

The evaluation survey was administered to two groups: residents and people working in non-residential establishments. It was the attitudes of the approximately 5000 Northline residents that were considered critical to

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*The design and methodology are discussed in the methodology report of the Fear Reduction Project. See Annan, et al., 1985.

the future stability of the neighborhood, and it was residents to whom most of the community station programs would be directed.

However, businesses and other non-residential establishments are also important to the viability of a community, and the abandonment of commercial property is often an early indicator of a declining neighborhood. There were 93 non-residential establishments in Northline, and it was decided to survey a sample of them in an effort to gain some sense of whether the business community and local organizations were responding to the program. It was expected that visits to businesses would be included in the regular activities of the community station officers.

PROGRAM AND COMPARISON AREAS

The Houston Police Department and the Police Foundation together identified five areas of the city, closely matched in terms of their size, demographic characteristics, land use, level of disorder and other characteristics to participate in the Houston Fear Reduction Program. To accomplish this, the Department began by obtaining from City Planning a list of 51 areas of the city which previously had been identified as neighborhooods and for which demographic data had been compiled. Foundation and Department personnel agreed that the areas should be racially mixed, and of similar racial patterns, so that programs would not be tested among only one racial group--a condition which would be unrepresentative of the city's population. Using this criterion, Foundation staff analyzed the neighborhoods data and narrowed the list to approximately 20 which met the racial mix criterion and were similar in terms of other major demographic features. Department personnel then provided crime data for these areas.

Foundation staff visited each of the substations in Houston to ask the station captains and the crime analysts to describe the neighborhoods on the list which were in their district and also to identify any other areas which might be suitable for the study. They were asked to think of areas which were experiencing social disorder problems which might be reduced if addressed for a year with a special program. Officers from the districts took Foundation staff for tours of the neighborhoods and provided extensive information from their own patrol experience in the areas. Through this process, some neighborhoods were eliminated from the original list and others were added. Demographic and crime data were collected for the latter, and all of the areas were again studied for comparability.

A final conference of district captains, district crime analysts, Police Department Research and Planning staff, and Police Foundation staff produced a list of nine areas which were considered sufficiently similar in terms of problems and demographic characteristics to serve as "matched" areas for the program. The selection of five areas in four districts was based on considerations of distance among the areas and other programs being conducted within some of the districts.

From among the five areas, Northline was selected as the area to receive the Police Community Station program. Shady Acres was designated the comparison area in which no new police programs would be introduced. Any changes in this area, then, could be taken to be generally representative of prevailing trends in the city during the time of the study.

1980 Census data for these two areas are presented in Table 6. Northline, the program area, had a 1980 population that was larger than the one in Shady Acres, the comparison area. The Northline population had 17

Table 6

Demographic Data for Police Community Stations Program and Comparison Areas

Area	Population							Housing Units			Occupied Units		
		Ethnicity				Age							
	Total	% Black	% Asian Pacific Islander	% White	% Spanish Origin	% Below 18	% 65 and above	Total	% Single Family	% Occupied	Persons Per Unit	Total	% Owner Occupied
Program Area (Northline)	5015	13	2	69	16	27	5	2090	52	90	2.7	1891	50
Comparison Area (Shady Acres)	3690	22	-	52	26	26	15	1626	62	90	2.7	1460	39

Source: 1980 Census

percent more whites than did the Shady Acres population and the Northline population contained 10 percent fewer senior citizens. The Northline area had 10 percent fewer single family housing units than did the comparison area but it had 11 percent more owner occupied units than the Census reported for Shady Acres. Although more similar to each other than to many other Houston neighborhoods, these two areas were not as closely matched in terms of the Census data as were some of the other five project areas. They did, however, share the critical characteristics of a racially mixed population, and they were quite similar in terms of physical features of the neighborhood and in terms of crime and order problems identified by the police.

Table 7 compares the two areas in terms of variables which were measured in the 1983 evaluation survey. According to these data, the racial differences were not as great as in 1980, indicating an increase in the percentage of the Northline (program area) population which was black. However, the disparity in terms of owner occupied residences had increased; by 1983, 21 percent more people in Northline than in Shady Acres reported owning their homes. Northline (program area) residents reported higher education and higher incomes than did Shady Acres (comparison area) respondents. Northline residents were more likely to work full time and more likely to be married than were people in Shady Acres.

SURVEY PROCEDURES

Area Listing and Household Selection. Once the program and comparison areas were selected, Police Foundation staff used updated 1980 Census block maps to compile sample frames for both the residential and non-residential

Table 7

DEMOGRAPHIC CHARACTERISTICS OF PROGRAM AND COMPARISON RESPONDENTS
1983 RESIDENTIAL SURVEY

Chacteristic	Program Area Northline		Comparison Area Shady Acres	
	Percentage	Number	Percentage	Number
Totals:	(100)	(406)	(100)	(389)
Sex				
Males	49	249	48	204
Females	51	294	48	185
Race				
Black	24	97	20	76
White	61	248	55	212
Hispanic	14	57	24	95
Other	1	4	1	5
Housing				
Own	61	259	40	155
Rent	39	145	60	234
Education				
Not high school	31	125	46	176
High school graduate	69	279	54	209
Income				
Under $15,000	36	134	46	165
Over $15,000	64	239	54	190
Age				
15-24	12	65	16	62
25-49	57	227	50	193
50-98	31	114	34	130
Marital Status				
Single	36	129	47	185
Married*	64	274	53	204
Employment				
Work full or part time	71	288	66	134
Other	29	274	34	255
Length of Residence				
0-2 years	45	182	47	184
3-5 years	12	49	16	64
6-9 years	8	32	7	26
10+ years	35	141	30	115

*Includes "living with someone as partner."

Source: Wave 1 Area Surveys.

samples. Area survey supervisors conducted an area listing, walking the streets and recording on Listing Sheets all addresses within the defined boundaries. After being put on computer-readable tape, these listings were divided into two sub-lists, one for residences and one for non-residential establishments such as businesses, churches, offices and other such places. Each address on both lists was assigned an identification number. Selection of sample addresses was accomplished by dividing the universe (the number of addresses listed) by the desired sample size to arrive at a sampling interval. Starting with a random number and selecting every Nth case (where N was equal to the sampling interval), this procedure was used to produce a random sample of addresses in the program and comparison areas.

There were many advantages to this procedure, among them that sample households were separated physically by the number of addresses in the sampling interval, a condition which should help in reducing diffusion effects attributable to household visits.

Respondent Selection Within The Household. Once the sample of addresses was selected, the next step was the selection of a respondent within the household. This selection was accomplished by listing all household members who were 19 years old or older and assigning them numbers, starting with the oldest male and listing through the youngest female. The interviewer then used a random selection table assigned to that household to determine who should be the respondent. No substitution was permitted for the selected respondent. (This is a standard "Kish-table" selection procedure.)

The plan for Wave 2 was to contact all sample addresses (including those at which no interview was conducted at Wave 1), and interview the respondents from Wave 1 when possible, thus creating a panel sample. A

replacement respondent was selected at sample addresses where the Wave 1 respondent was no longer a resident of the household. For an address at which no interview was completed during Wave 1, a respondent was selected on the initial contact, using the same selection table that was assigned to that address for Wave 1. Thus, for this evaluation, the completed panel sample is a subset of the Wave 1 and Wave 2 area samples, and is included with them when area-level analyses are reported.

Respondent Selection Within an Establishment. In each non-residential establishment, the goal was to inteview the owner or the manager of the establishment. In 14 percent of the cases, because the owner or manager was unavailable, the most knowledgeable staff member was selected as the actual respondent.

Supervisor/Interviewer Training. The interview operations for Wave 1 began with the recruitment of supervisors, who were given a two-day training session, followed by the recruitment and hiring process for interviewers. After general advertising for interviewers, several orientation sessions were held for screening and selection purposes. The selected interviewers were then invited to a three day training session, after passing a police record check to which they had agreed as part of the hiring process. The final hiring decisions were made after the training session by the Police Foundation's Survey Director and the Foundation's Houston field supervisor.

The interviewers' training was conducted by the Survey Director with the assistance of the Project Director, a trainer and the site supervisor. Prior to attending the training sessions, an Interviewer Training Manual was sent to each interviewer. This manual was designed as a programmed learning text with questions which interviewers were to answer as they reviewed each section. The training agenda consisted of general introductory remarks (including background on the study and the Foundation role), general and specific instructions on procedures for respondent selection, a complete review of the questionnaire with special attention to the victimization series, a practice review session, and role-playing sessions.

Contacting Sampled Households and Non-Residential Establishments. About one week before interviewing began, an advance letter from the Mayor of Houston was mailed to the selected addresses. The letter, addressed to "resident" or "owner," informed the recipient of the main objectives of the research in an effort to give credibility to the study and encourage cooperation with it.

Wave 1 interviewing began on May 29, 1983 and was completed for all project areas on September 8, 1984, after which the police department started the implementation of the programs. The post implementation survey (Wave 2) began on May 18, 1984 and continued in various project areas until July 20, 1984.

All interviewing was conducted in person. Following the initial face-to-face contact, telephone contacts were used occasionally to schedule an in-person interview with the selected respondent.

Call Back Procedures. Interviewers made a minimum of five attempts to complete an in-person interview. Each attempt was recorded on a Call Record

Sheet. The attempts were made at different times of the day and different days of the week to maximize the chances of finding the respondent at home. About 40 percent of the interviews were completed on the first and second visits.

A Non-Interview Report (NIR) was completed for each selected address at which an interview could not be completed. The supervisor reviewed each NIR to decide whether or not the case should be reassigned to another interviewer. Most refusal cases were reassigned and interviewers were successful in converting nearly 40 percent of the initial refusals to completed interviews.

In-Field Editing. Completed questionnaires were returned to the supervisor on a daily basis. The supervisor and her clerical staff were then responsible for the field editing of all completed questionnaires. This process enabled the supervisor to provide the interviewers with feed back concerning their performance and insure that they did not repeat the errors they previously had committed. It also permitted the identification of missing information which could be completed, before interview schedules were sent to the home office.

Validation. About thirty percent of the respondents were recontacted to verify that the interview was indeed completed with the selected respondent. The validation process also helped to provide feedback about the interviewers. Thirty percent of each interviewer's questionnaires were randomly chosen for validation. Validations were completed either by telephone or in-person.

If one of an interviewer's completed questionnaires could not be validated, the supervisor conducted a 100 percent validation of that

interviewer's work. Cases that failed validation were either reassigned or dropped from the data base.

Towards the end of the field work period for Wave 1, when the interviewers' mode of payment was changed from an hourly basis to "per completed" basis, a 100 percent validation was conducted on all completed interviews. The validations were carried out from the home office by telephone. Cases in which the telephone number was no longer working and cases without telephone numbers were sent back to the field for in-person validation. The "per completed" mode of payment for interviewers was continued for the Wave 2 survey; after the supervisor had successfully validated the initial five completed interviews for each interviewer, he or she continued to check 33 percent of the interviewer's work.

Response Rates. The final residential survey results are presented in Table 8. As it indicates, Wave 1 survey response rates of 76.6 percent and 74.7 percent were achieved in the program and comparison areas, respectively. Response rates of 81.4 percent and 78.1 percent, were achieved during Wave 2. Such high response rates indicate that the residential samples should be generally representative of the populations living in the two areas.

For the panel survey, 59 percent of the Wave 1 respondents were reinterviewed in the program area and 47 percent were reinterviewed in the

TABLE 8

WAVE 1 RESIDENT SURVEY RESULTS
(Numbers in Parentheses are Percentages of Sample Size)

Area	Total Units	Sample Size[1]	Completed	Refusals	Vacant	Bad Address	Maximum Calls	Ineligible, Duplicates	Other[2]	Area Response Rate[3]
Program Area (Northline Park)	2017	611	406 (66.4%)	53 (8.7%)	69 (11.3%)	6 (1.0%)	43 (7.0%)	6 (1.0%)	28 (4.6%)	76.6%
Comparison Area (Shady Acres)	1486	613	389 (63.5%)	64 (10.4%)	58 (9.5%)	0 (0.0%)	46 (7.5%)	34 (5.5%)	22 (3.6%)	74.7%

WAVE 2 RESIDENT SURVEY RESULTS
(Numbers in Parentheses are Percentages of Sample Size)

Area	Total Units	Sample Size[1]	Completed	Refusals	Vacant	Bad Address	Maximum Calls	Ineligible, Duplicates	Other[2]	Area Response Rate[3]
Program Area (Northline Park)	2017	611	460 (75.3%)	20 (3.3%)	33 (5.4%)	13 (2.1%)	26 (4.3%)	0 (0.0%)	59 (9.0%)	81.4%
Comparison Area (Shady Acres)	486	613	403 (65.7%)	30 (4.9%)	79 (12.9%)	4 (0.7%)	42 (6.9%)	14 (2.3%)	41 (6.7%)	78.1%

PANEL RESIDENT SURVEY RESULTS
(Numbers in Parentheses are Percentages of Sample Size)

Area	Sample Size[1]	Completed, Same Address, Same Respondent	Completed, Same Address, Different Respondent	Refusals	Vacant	Bad Address	Maximum Calls	Ineligible, Duplicates	Other[2]	Panel Response Rate[4]
Program Area (Northline Park)	406	239 (58.9%)	92 (22.7%)	4 (1.0%)	18 (4.4%)	4 (1.5%)	19 (4.7%)	0 (0.0%)	30 (7.4%)	62.2%
Comparison Area (Shady Acres)	389	183 (47.0%)	102 (26.2%)	21 (5.4%)	39 (10.0%)	2 (0.5%)	18 (4.6%)	3 (0.8%)	21 (5.4%)	53.0%

1. The sample size was based on the assumption that the survey operations would produce completion rates of 66 percent for the panel sample and 55 percent for the post-test only sample.

2. "Other" includes the number of respondents who were in hospital, ill, on vacation, or had a language problem, plus completed interviews which were invalidated during quality control checks and those cases in which the pre-test and post-test interviews could not be matched.

3. "Area Response Rate" equals Number Completed ÷ (Sample Size - (Number Vacant + Number Bad Address + Number Ineligible)).

4. "Panel Response Rate" equals Number Completed at same address with same Respondent ÷ (Sample Size - (Number Vacant + Number Bad Address + Number Ineligible)).

comparison area. The panel response rate was 62 percent in the program area and 53 percent in the comparison area.

For the non-residential surveys, (Table 9), rates of 88.2 percent and 81.2 percent were obtained in the program and comparison areas, respectively at Wave 1. The comparable Wave 2 response rates were 82.0 percent in the program area and 88.0 percent in the comparison area.

MEASUREMENT

Survey questionnaires were designed to collect information about exposure to the program as well as to measure the effects on each of the dimensions on which the program was hypothesized to have some impact. One version was created for residents; another shorter version was created for use with owners and managers of non-residential establishments. Copies of both instruments are included in a separate methodology report. Appendix C describes in detail the measures used in the residential survey and how they were created. Appendix D presents the same information about the measures used in the non-residential survey. A brief summary of the measures used is presented below.

o Recalled Program Exposure. Both before and after the program, respondents were asked whether they were aware of a small police station in their neighborhood and, if so, whether they had called or visited the station. They also were asked when they had last seen an officer in their area, whether they had attended a meeting at which an officer was present, and whether they were aware of the newsletter and police brochures.

TABLE 9

WAVE 1 NON-RESIDENTIAL SURVEY RESULTS
(Numbers in Parentheses are Percentages of Sample Size)

Area	Total Establishments	Desired Sample Size	Completed	Refusals	Vacant	Maximum Calls	Ineligible, Duplicates	Other 1	Area Response Rate 2
Program Area (Northline Park)	93	54	45 (83.3%)	4 (7.4%)	3 (5.6%)	0 (0.0%)	0 (0.0%)	2 (3.7%)	88.2%
Comparison Area (Shady Acres)	127	63	39 (61.9%)	4 (6.3%)	12 (19.0%)	4 (6.3%)	3 (4.8%)	1 (1.6%)	81.2%

WAVE 2 NON-RESIDENTIAL SURVEY RESULTS
(Numbers in Parentheses are Percentages of Sample Size)

Area	Total Establishments	Desired Sample Size	Completed	Refusals	Vacant	Maximum Calls	Ineligible, Duplicates	Other 1	Area Response Rate 2
Program Area (Northline Park)	92	54	41 (75.9%)	5 (9.3%)	4 (7.4%)	3 (5.6%)	0 (0.0%)	1 (1.9%)	82.0%
Comparison Area (Shady Acres)	127	60	44 (73.3%)	3 (5.0%)	10 (16.7%)	3 (5.0%)	0 (0.0%)	0 (0.0%)	88.0%

1. "Other" includes language problem and establishment temporarily closed.

2. "Area Response Rate" equals number completed ÷ (Sample Size - (Number Vacant + Number Bad Address + Number Ineligible))

o Perceived Area Social Disorder Problems. To measure perceived social disorder problems, residential respondents were asked a series of questions about how much of a problem each of the following activities were:

- Groups hanging around on corners,
- People saying insulting things,
- Public drinking,
- People breaking windows,
- Writing or painting on walls,
- Gangs, and
- Sale or use of drugs in public.

The responses to each of these questions were combined to form one composite scale. A similar set of items was used among non-residential respondents.

o Perceived Area Physical Deterioration Problems. Perceived physical deterioration was measured among residential respondents by combining the responses to questions about how much of a problem each of the following were in the area:

- Dirty streets and sidewalks,
- Abandoned houses and buildings, and
- Vacant lots filled with trash and junk.

A similar set of items was utilized among non-residential respondents.

o Fear of Personal Victimization in Area. A composite scale was created combining the responses of residential respondents to four questions which asked about:

- Perceived safety while in area alone,
- Whether there was a place in the area where the respondent was afraid to go,
- Worry about being robbed in the area,

- Worry about being assaulted in the area.

Similar items were combined among non-residential respondents.

o Perceived Concern About Crime Among Employees and Patrons. Responses to two questions were combined to form a measure of the concern expressed by the employees and patrons of the establishment:

- Frequency of hearing employees express concern about their personal security in the area, and
- Frequency of hearing patrons express concern about their personal safety in the area.

o Worry About Property Crime Victimization in Area. A scale combined responses of residential respondents to two items asking about the extent of worry about:

- Burglary, and
- Auto theft.

Among non-residential respondents the responses to items concerning worry about burglary and vandalism were combined.

o Perceived Area Personal Crime Problems. This scale combined responses to three questions which asked about the extent to which each of the following were perceived as problems in the area:

- People being attacked or beaten up by strangers in the area,
- People being robbed or having their money, purses or wallets taken, and
- Rape or other sexual attacks.

o Perceived Area Property Crime Problems. This scale combined responses to three questions which asked about the extent to which each of the following were perceived in the area:

- Burglary,
- Auto vandalism, and
- Auto theft.

o Victimization. Residents were asked whether they had beenvictims of various types of attempted and successful crimes during the six-month

period prior to being interviewed. Because many individual types of victimization were relatively infrequent, respondents have been categorized for this analysis as to whether they were victims of:

--personal crimes, including actual and attempted robbery, pursesnatching and pocketpicking, actual and attempted or threatened assault, threats, and sexual assault;

--property crimes, including actual and attempted burglary, theft, mailbox and bicycle theft, as well as motor vehicle theft, vandalism of home and automobile.

Representatives of non-residential establishments were asked whether their establishment had been victimized by each of the following crimes during the six months prior to being interviewed:

- Robbery or attempted robbery,
- Burglary or attempted burglary, and
- Vandalism.

o Evaluations of Police Service and Aggressiveness. Two scales were created to measure respondents' evaluations of the police. The first scale, designed to indicate general attitudes toward police service, was composed of the responses to the following individual items:

- How good a job do the police in the area do at preventing crime,
- How good a job do the police in the area do in helping victims,
- How good a job do the police in the area do in keeping order on the street,
- How polite are police in the area in dealing with people,
- How helpful are police in the area in dealing with people, and
- How fair are police in the area in dealing with people.

The second measure, to serve as an indicator of perceived police aggressiveness, was created by combining the responses to questions concerning the extent to which each of the following were thought to be problems in the area.

- Police stopping too many people on the streets without good reason, and
- Police being too tough on people they stop.

o Defensive Behaviors to Avoid Personal Crime. To measure the extent to which respondents take restrictive, defensive precautions to protect themselves against crime, the answers to the following questions were combined:

- Whether the respondent goes out with someone else after dark in order to avoid crime,
- Whether the respondent avoids certain areas,
- Whether the respondent avoids certain types of people,
- Whether the respondent avoids going out after dark.

These are used in this evaluation as behavioral measures of fear of crime.

o Household Crime Prevention Efforts. To measure the extent to which respondents had made efforts to prevent household crime, the responses to the following questions concerning whether the following household crime prevention efforts had been made:

- Install special locks,
- Install outdoor lights,
- Install timers,
- Install special windows or bars, and
- Is a neighbor asked to watch home when respondent is away for a day or two.

These are used in this evaluation as indicators of positive effects upon purposive crime prevention.

o Change in Business Environment. To measure the extent to which business conditions had changed in the recent past, the responses of non-residential representatives to the following two questions were combined:

- Change in the number of people who came in the establishment during the past year, and
- Change in the amount of business at the establishment during the past year.

o Satisfaction with Area. To ascertain the extent to which residential respondents were satisfied with the area, responses were combined for two items which explored:

- Their perception of the extent to which the area had become a better or worse place in the past year, and
- The extent to which they were satisfied with the area as a place to live.

The answers to the following two questions asked of non-residential respondents were combined:

- The extent to which the respondent was satisfied with the area as a place for the establishment, and
- The extent to which the area had become better or worse in the past year.

SUMMARY

The basic evaluation design compared measures of attitudes and reported behaviors collected before and ten months after the introduction of the program. These measures were obtained by conducting inteviews with random samples of residents and representatives of non-residential establishments in both a program area and in a comparison area, similar to the program area in size and demographic characteristics, in which no new fear reduction activities were undertaken.

The surveys produced area response rates ranging from 75 to 81 percent, high enough for the results to be considered representative of the persons living in these neighborhoods. Attempts to conduct interviews with a set of respondents both before and after the program began produced panel response rates of approximately 62 and 53 percent, in the program and comparison areas respectively. Interviews were also conducted with owners, managers or employees of non-residential establishments. The response rates were were consistently higher than 81 percent.

Survey questionnaires were designed to collect information about each of the following:

- Recalled Program Exposure

- Perceived Area Social Disorder Problems
- Perceived Area Physical Deterioration Problems
- Fear of Personal Victimization in Area
- Worry About Property Crime Victimization in Area
- Perceived Area Personal Crime Problems
- Perceived Area Property Crime Problems
- Victimization
- Evaluations of Police Service and Aggressiveness
- Defensive Behaviors to Avoid Personal Crime
- Household Crime Prevention Efforts
- Satisfaction with Area.

ANALYSES AND RESULTS FOR RESIDENTIAL RESPONDENTS

THE RESIDENTIAL DATA

To determine program consequences for residents, the Wave 1 and Wave 2 survey data have been analyzed in two different ways. The first is a pooled cross-sectional analysis which utilizes all respondents in the pre- and post-intervention surveys. Because the respondents involved in the cross-sectional analysis were selected at both Wave 1 and Wave 2 by a statistically randomizing process, these data can be analyzed to provide our best estimate of the effects of the program on the neighborhood as a whole. In Northline, the program area, the Wave 1 survey sample contained 406 respondents; the Wave 2 sample included 460 people. In Shady Acres, the comparison area, the Wave 1 sample was 389; the Wave 2 sample was 403.

The second analysis is of a panel subset which includes all of the respondents in the Wave 1 survey who could be located and reinterviewed at Wave 2. Respondent attrition between the Wave 1 and Wave 2 surveys (see Table 5) would have diminished the likelihood that the panel respondents would be representative of area residents as a whole. Representativeness is more nearly achieved in the cross-sectional analysis. Analysis of the panel data, however, provides our best estimate of the effects of the program on

individuals.* In the program area, there were 239 panel respondents; in the comparison area there were 183.

For the cross-sectional and the panel data sets, three types of analyses have been conducted:

1. comparisons of means with t-tests to measure the size and significance of Wave 1-Wave 2 differences in levels of program awareness within the program and comparison areas,

2. calculations, for descriptive purposes, of Wave 1-Wave 2 mean scores on outcome measures in the program and comparison areas, and

3. tests of program effects based on regression models. For both the cross-sectional and panel data sets, the data from both survey waves and both areas have been merged and analyzed as one set.

For the panel data only, two additional types of analysis have been conducted:

1. regression analysis to explore the possible impact of the program on people in the program area who report being aware of the program, and

2. regression analysis to explore possible program impact for demographic subgroups in the program and comparison areas.

The regression models used for the pooled cross-sectional analysis and for the various panel analyses will be discussed in subsequent sections of this chapter.

CROSS-SECTIONAL ANALYSES

Cross-Sectional Respondents: Characteristics

Table 10 provides information about the characteristics of the area level sample in the program and comparison areas for both pre- and post-intervention surveys. In the comparison area, there was a significant

* It should be noted that while the panel data are analyzed completely independently of the cross-sectional data, the panel constitutes 54 percent of the cross-sectional data set.

TABLE 10

DEMOGRPAHIC CHARACTERISTICS OF WAVE 1 - WAVE 2 AREA SURVEY SAMPLES, PROGRAM AND COMPARISON AREAS

(All Respondents)

	Program Area (Northline)		Comparison Area (Shady Acres)	
	Wave 1	Wave 2	Wave 1	Wave 2
Sex				
Males	49	52	52	50
Females	51	48	48	50
	(406)	(460)	(389)	(402)
	$p < .30$		$p < .70$	
Race				
Black	24	27	20	20
White	61	57	55	48
Hispanic	14	15	24	27
Other	1	2	1	6
	(406)	(445)	(388)	(403)
	$p < .50$		$p < .01$*	
Housing				
Own	61	54	40	35
Rent	39	46	60	65
	(404)	(460)	(388)	(399)
	$p < .05$		$p < .20$	
Education				
Not High School	31	32	46	50
High School Graduate	69	68	54	50
	(404)	(460)	(385)	(395)
	$p < .80$		$p < .30$	
Income				
Under $15,000	36	33	46	54
Over $15,000	64	67	54	46
	(373)	(448)	(355)	(360)
	$p < .50$		$p < .10$	
Age Category				
15-24	12	17	16	14
25-49	57	59	50	48
50-98	31	24	34	34
	(406)	(459)	(385)	(400)
	$p < .09$		$p < .90$	

-continued-

*Statistically significant at $p \leq .01$.
**Incudes "Living with someone as partners."

TABLE 10
(continued)

DEMOGRPAHIC CHARACTERISTICS OF WAVE 1 - WAVE 2 AREA SURVEY SAMPLES
PROGRAM AND COMPARISON AREAS

(All Respondents)

	Program Area (Northline)		Comparison Area (Shady Acres)	
	Wave 1	Wave 2	Wave 1	Wave 2
Children at Home				
None	55	47	58	55
One	19	26	18	22
Two +	25	28	24	23
	(403)	(460)	(389)	(399)
	$p < .02$		$p < .05$	
Number of adults in household				
One	22	2	31	28
Two	65	65	49	50
Three +	13	10	20	21
	(406)	(460)	(389)	(402)
	$p < .30$		$p < .70$	
Marital Status				
Single	36	33	47	46
Married**	64	67	53	54
	(403)	(460)	(386)	(402)
	$p < .50$		$p < .95$	
Employment				
Work full-part	71	75	66	67
Other	29	25	34	33
	(406)	(460)	(387)	(402)
	$p < .20$		$p < .80$	
Length of Residence				
0--2 years	45	47	47	47
3-5 years	12	16	16	13
6-9 years	8	8	7	8
10 years +	35	29	30	31
	(404)	(460)	(389)	(401)
	$p < .20$		$p < .50$	

*Statistically significant at $p \leq .01$.
**Includes "Living with someone as partners."

($p \leq .01$)* decrease in the percentage of white respondents.

Cross-Sectional Respondents: Program Awareness

Two question were asked about respondents' level of awareness of the station. The first was whether they knew of "... any place in this area where you can go to get information from the police and talk to them about neighborhood problems." Table 11 reports a statistically significant 51 percentage point increase from Wave 1 to Wave 2 in the number of respondents in the program area (Northline) who indicated knowledge of such a place. The increase in the comparison area (Shady Acres) was also significant but, at 13 percentage points, was much smaller than the increase reported in the program area.

A later question asked whether residents knew of "... a small community police office located (in this area)." Sixty-three percent more people in the program area knew about such an office at Wave 2 than at Wave 1. In the comparison area there was an 8 percentage point increase in respondents reporting such awareness. The Wave 1 - Wave 2 differences are statistically signficant in both areas, but the size of the difference is dramatically larger in the program area.

The fact that there is a significant increase in awareness of the station in both the program and comparison areas probably is due to media coverage. A community newspaper distributed in the northwest quadrant of Houston that contained both areas carried three major stories on the station--complete with pictures--between the time it opened and the beginning of the Wave 2 survey.

*In this report, we use a one-tailed test of statistical significance of $p \leq .01$ for simple t-tests. For the regression analysis, where it is possible to control for covariates, the significance level employed is .05 in both pooled and panel analyses.

TABLE 11

PERCENTAGE OF RESIDENTIAL RESPONDENTS RECALLING
ASPECTS OF THE PROGRAM, PROGRAM AND COMPARISON AREAS

(All Respondents)

		Program Area (Northline)				Comparison Area (Shady Acres)			
Type of Exposure		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Knew a place to talk with police	[N]	3 [378]	54 [423]	+ 51	.001*	7 [310]	20 [341]	+ 13	.001*
Were aware of community station	[N]	2 [423]	65	+ 63	.001*	3 [310]	11 [352]	+ 8	.001*
Had called or visited station									
Called		----	9			----	3		
Visited		----	14			----	2		
	[N]		[428]				[349]		
Had attended a meeting with police present	[N]	0 [406]	8 [460]	+ 8	.001*	2 [389]	2 [403]	0	.95

-continued-

*Statistically significant at $p \leq .01$.
Note: Chi-square tests of significance

TABLE 11
continued

PERCENTAGE OF RESIDENTIAL RESPONDENTS RECALLING
ASPECTS OF THE PROGRAM, PROGRAM AND COMPARISON AREAS

(All Respondents)

		Program Area (Northline)				Comparison Area (Shady Acres)			
Type of Exposure		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Knew a police officer in area	[N]	8 [404]	12 [459]	+ 4	.20	7 [381]	8 [401]	+ 1	.90
Knew of monthly police newsletter	[N]	----	13 [459]			----	4 [400]		
Believed that number of police working in the area in the past six months had:									
decreased		----	9			----	7		
remained the same		----	59			----	70		
increased		----	32			----	22		
	[N]		[428]				[346]		
Had seen police officer									
more than 1 week ago		30	23	- 7		32	25	- 7	
within past week		32	38	+ 6	.05	38	34	- 4	.01*
within past 24 hours		39	39	0		30	41	+ 11	

*Statistically significant at $p \leq .01$.
Note: Chi-square tests of significance.

Within the program area, awareness of the station differed significantly among demographic subgroups (Table 12). Whites and Hispanics were more likely to know about it than were blacks. Higher income respondents were more likely to know of it than were lower income persons. Owners were more likely to know than renters. Older persons and those who had lived in the area a longer time are more likely to know of the station than are younger respondents and those who have lived in the area for a shorter time.

Use of the Community Station. Questions asked only during the Wave 2 survey inquired whether persons who reported knowing about the station had either called or visited it. As Table 11 indicates, more residents in the program area than in the comparison area had called the station and, by a wider margin, more people in the program than the comparison area had actually been to the station.

Among demographic subgroups in the program area, whites are significantly more likely to recall visiting or calling the station than are blacks and Hispanics (Table 13). Persons with higher incomes are more likely to recall contact than are persons with lower incomes. Persons with higher educations, who are home owners, who are older, and who have lived in the area for a longer period of time are more likely to recall contact than are persons in other categories of the demographic subgroups.

Attendance at Meetings with Officers Present. In both survey waves respondents were asked whether they had attended any community meetings at which police officers were present. There was a positive and significant 8 percentage point increase in affirmative answers from program area residents and no Wave 1 - Wave 2 difference in comparison area responses.

TABLE 12

PERCENTAGE OF DEMOGRAPHIC SUBGROUP RESPONDENTS
WHO WERE AWARE OF COMMUNITY STATION AND
SIGNIFICANCE OF SUBGROUP DIFFERENCE

(All Respondents, Program Area Only)

Sex			Housing		
Males	61	(232)	Own	80	(235)
Females	69	(196)	Rent	46	(193)
	p < .12			p < .001*	
Race			Age Category		
Black	43	(112)	15-24	53	(70)
White	77	(248)	25-49	61	(256)
Hispanic	57	(60)	50 plus	81	(101)
other	p < .001*)			p < .001*	
Income			Number of Adults in Household		
Under $15,000	47	(133)	One	55	(101)
Over $15,000	72	(285)	Two	68	(282)
	p < .001*		Three +	64	(45)
				p < .07	
Education					
Not high school	59	(130)	Length of Residence		
HS graduate	67	(298)	0-2 years	46	(199)
	p < .14		3-5 years	71	(66)
			6-9 years	83	(36)
			10 years +	86	(127)
				p < .001*	

*Statistically significant at $p \leq .01$.
Note: Chi-square tests of significance.

TABLE 13

PERCENTAGE OF DEMOGRAPHIC SUBGROUP RESPONDENTS
WHO RECALLED CALLING OR VISITING COMMUNITY STATION AND
SIGNIFICANCE OF SUBGROUP DIFFERENCE

(All Respondents, Program Area Only)

Sex			Housing		
Males	17	(242)	Own	26	(247)
Females	21	(218)	Rent	12	(213)
	p < .37			p < .001*	
Race			Age Category		
Black	2	(123)	15-24	14	(76)
White	12	(261)	25-49	16	(272)
Hispanic	3	(68)	50 plus	30	(111)
	p < .002*			p < .005*	
Income			Number of Adults in Household		
Under $15,000	9	(146)			
Over $15,000	24	(302)	One	11	(115)
	p < .001*		Two	21	(299)
			Three +	24	(46)
				p < .04	
Education					
Not high school	11	(148)	Length of Residence		
HS graduate	23	(312)	0-2 years	10	(218)
	p < .01*		3-5 years	18	(73)
			6-9 years	22	(37)
			10 years +	35	(132)
				p < .001*	

*Statistically significant at $p \leq .01$.
Note: Chi-square tests of significance.

Familiarity with Officers Working the Area. As indicated in Table 11, there was a small, but insignificant, increase in the percentage of people in the program area who said they knew any of the officers working in their area; the increase was even smaller in the comparison area.

Knowledge of Monthly Police Newsletter. Wave 2 respondents were asked whether they had "... heard about a monthly newsletter published by the police specifically for residents in this area." Thirteen percent of the program area residents and 4 percent of the comparison area residents said "yes."

When asked more generally whether they recalled brochures, pamphlets or newsletters, persons in the program area recalled this type of program exposure differently, depending on their membership in particular demographic subgroups (Table 14). Persons who were white, owned their homes, were older, and had lived in the area a longer time were more likely to remember brochures, pamphlets, or newsletters than were respondents in other categories of the demographic subgroups.

Awareness of Police Presence. At Wave 2 only, respondents were asked whether the number of police working in their area had increased, remained about the same or decreased during the previous six months. Table 11 reports that 32 percent of the people in the program area, as compared to 22 percent in the comparison area, believed the number of police had increased in their area.

Residents were also asked at Wave 1 and Wave 2 about the last time they had seen a police officer in their area. Respondents in the program area were no more likely to report having seen an officer in the past 24 hours at Wave 2 than at Wave 1. Increased visibility of police was not a measured consequence of the Community Station program. However, in the

TABLE 14

PERCENTAGE OF DEMOGRAPHIC SUBGROUP RESPONDENTS
WHO RECALLED BROCHURES, PAMPHLETS OR NEWSLETTERS AND
SIGNIFICANCE OF SUBGROUP DIFFERENCE

(All Respondents, Program Area Only)

Sex			Housing		
Males	17	(241)	Own	25	(247)
Females	20	(218)	Rent	10	(212)
	p < .45			p < .001*	
Race			Age Category		
Black	12	(122)	15-24	5	(76)
White	22	(261)	25-49	16	(272)
Hispanic	16	(68)	50 plus	31	(110)
other	p <			p < .001*	
Income			Number of Adults in Household		
Under $15,000	14	(146)	One	13	(114)
Over $15,000	20	(301)	Two	19	(299)
	p < .17		Three +	24	(46)
				p < .21	
Education			Length of Residence		
Not high school	14	(147)	0-2 years	9	(217)
HS graduate	20	(312)	3-5 years	19	(73)
	p < .09		6-9 years	22	(37)
			10 years +	32	(132)
				p <	

*Stsatistically significant at $p \leq .01$
Note: Chi-square tests of significance

comparison area, significantly more respondents at Wave 2 than at Wave 1 report having seen an officer within the previous 24 hours.

Within the program area, there were no significant differences among demographic subgroups in terms of their recall of recent sightings of police officers (Table 15).

Cross-Sectional Respondents: Wave 1 and Wave 2 Mean Outcome Scores

Table 16 reports Wave 1 and Wave 2 mean scores for measures of fear of victimization, perceptions of area crime and disorder problems, citizen satisfaction with the area in which they live, and attitudes toward the police, reported use of defensive behaviors to avoid personal victimization, and reported victimization. The size and statistical significance of differences in Wave 1 and Wave 2 scale scores are reported for respondents in both the program area, Northline, and the comparison area, Shady Acres. The scores are based on data for all residential respondents in both survey waves. Wave 1 and Wave 2 values for individual items within the scales are presented in Appendix E.

Although levels of significance are reported for these data, they do not represent tests of program effect. These data merely give us a picture of what was happening over time within the areas. They also provide a basis for speculating about alternative explanations of findings of program effects to be presented in a later section.

Table 17 reports data for another outcome measure--Prevalence of Victimization. These figures represent the percentage of persons who

TABLE 15

PERCENTAGE OF DEMOGRAPHIC SUBGROUP RESPONDENTS WHO RECALLED SEEING AN OFFICER IN THE AREA IN THE PREVIOUS 24 HOURS AND SIGNIFICANCE OF SUBGROUP DIFFERENCE

(All Respondents, Program Area Only)

Sex			Housing		
Males	41	(242)	Own	44	(247)
Females	37	(218)	Rent	34	(213)
	$p < .41$			$p < .03$	
Race			Age Category		
Black	34	(123)	15-24	37	(76)
White	44	(261)	25-49	42	(272)
Hispanic	31	(68)	50 plus	35	(111)
other	$p < .04$			$p < .45$	
Income			Number of Adults in Household		
Under $15,000	38	(146)			
Over $15,000	41	(302)	One	43	(115)
	$p < .56$		Two	38	(299)
			Three +	39	(46)
				$p < .70$	
Education			Length of Residence		
Not high school	32	(148)	0-2 years	34	(218)
HS graduate	43	(312)	3-5 years	47	(73)
	$p < .03$		6-9 years	43	(37)
			10 years +	42	(132)
				$p < .20$	

Note: Chi-square tests of significance.
*Statistically significant at $p \leq .01$.

TABLE 16

DIFFERENCES IN WAVE 1 - WAVE 2 OUTCOME
SCORES FOR CROSS-SECTIONAL SAMPLE RESPONDENTS, PROGRAM AND COMPARISON AREAS

Outcome Scale		Program Area (Northline) Wave 1	Wave 2	Diff.	Sigf.	Comparison Area (Shady Acres) Wave 1	Wave 2	Diff.	Sigf.
Fear of Personal Victimization in Area	(sd)	1.77 (.55)	1.54 (.58)	-.23	.001*	1.69 (.56)	1.65 (.61)	-.04	.25
	[N]	[406]	[460]			[389]	[403]		
Perceived Area Personal Crime Problems	(sd)	1.61 (.61)	1.28 (.47)	-.33	.001*	1.44 (.57)	1.38 (.55)	-.06	.10
	[N]	[398]	[452]			[372]	[394]		
Worry About Property Crime Victimization in Area	(sd)	2.20 (.65)	2.04 (.68)	-.16	.001*	1.92 (.67)	1.85 (.72)	-.07	.10
	[N]	[406]	[460]			[387]	[401]		
Perceived Area Property Crime Problems	(sd)	1.98 (.66)	1.67 (.63)	-.31	.001*	1.60 (.60)	1.55 (.59)	-.05	.25
	[N]	[402]	[457]			[380]	[397]		
Perceived Area Social Disorder Problems	(sd)	1.56 (.47)	1.45 (.46)	-.11	.001*	1.40 (.46)	1.39 (.47)	-.01	.40
	[N]	[406]	[459]			[387]	[402]		

-continued-

*Statistically significant at $p \leq .01$.
Note: One-tailed t-tests of significance.

TABLE 16
(continued)

DIFFERENCES IN WAVE 1 - WAVE 2 OUTCOME SCORES
FOR CROSS-SECTIONAL SAMPLE RESPONDENTS, PROGRAM AND COMPARISON AREAS

Outcome Scale		Program Area (Northline) Wave 1	Wave 2	Diff.	Sigf.	Comparison Area (Shady Acres) Wave 1	Wave 2	Diff.	Sigf.
Satisfaction with Area	(sd)	2.39	2.54	+.15	.001*	2.51	2.60	+.09	.025
	(sd)	(.65)	(.64)			(.61)	(.60)		
	[N]	[406]	[460]			[389]	[403]		
Evaluation of Police Service		3.22	3.40	+.18	.001*	3.23	3.37	+.14	.005*
	(sd)	(.61)	(.63)			(.63)	(.71)		
	[N]	[402]	[452]			[372]	[388]		
Perceived Police Aggressiveness		1.17	1.16	-.01	.40	1.15	1.11	-.04	.10
	(sd)	(.45)	(.40)			(.40)	(.32)		
	[N]	[386]	[455]			[363]	[403]		
Defensive Behaviors to Avoid Personal Victimization		.58	.42	-.16	.001*	.44	.47	+.03	.25*
	(sd)	(.34)	(.36)			(.34)	(.35)		
	[N]	[405]	[460]			[387]	[403]		

*Statistically significant at $p \leq .01$.
Note: One-tailed t-tests of significance.

recalled being victimized,* in their area, by:

--personal crimes, including: actual and attempted robbery, pursesnatching and pocketpicking, actual and attempted or threatened assault, threats, and sexual assault,

--property crimes, including: actual and attempted burglary, thefts from, in, and around the home, mailbox and bicycle theft, home and auto vandalism and motor vehicle theft.

Table 17 reports the frequency of victimization by these broad categories of crimes and also by selected types of incidents, including burglary, motor vehicle crime, and other types of thefts. Also reported is a test of the statistical significance of differences in victimization between the first and second waves of the surveys in each area. These data indicate no significant differences in victimization over time.

We see across all the outcome measures many more statistically significant Wave 1-Wave 2 differences in the program than in the comparison area. The only significant difference in the comparison area was the increase on Evaluation of Police Services. Because this difference occurred in both areas (and in all the Houston test areas), it is likely that there was something happening all over Houston which contributed to this more positive attitude toward the police in all areas. During the project test period, the Houston Police Department appeared to be receiving more positive

*This measure is different from the "crime rate" or even the "victimization rate." It does not take into account the extent to which persons were multiply victimized during these six-month periods. The survey questionnaire did ask victims "how many times" they were victimized by each type of incident, but those data are prone to recall error. The measures of victimization employed in Table 17 are necessarily insensitive to whether or not fewer people were victimized, but victimized more frequently. However, during a six-month recall period relatively few persons are multiply victimized by the same type of incident, so there will be few differences between the dichotomous measures employed in Table 17 and victimization rate accounts for individuals.

TABLE 17

PERCENTAGE OF CROSS-SECTIONAL RESPONDENTS REPORTING THEMSELVES TO HAVE BEEN VICTIMS, BY TYPE OF CRIME, WAVE 1 - WAVE 2, PROGRAM AND COMPARISON AREAS

	Program Area (Northline)				Comparison Area (Shady Acres)			
Type of Crime	Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Personal Crimes	27	23	- 4	.20	17	18	+ 1	.95
Property Crimes	36	32	- 4	.30	31	29	- 6	.80
Burglary	12	10	- 2	.50	16	10	- 6	.20
Motor vehicle crime	16	16	0	.99	10	13	+ 3	.10
Other theft	19	13	- 6	.05	12	13	+ 1	.80

Note: Statistical significance is $p \leq .01$
One-tailed t-tests of significance.

coverage from the local press than it had in previous years. Some of the stories were related to the Fear Reduction program itself and news of the program also focused national press attention on the Houston Police Department. But Houston's new police chief, Lee Brown, was seen frequently on television during this period discussing various operational aspects of his community-oriented policing philosophy, and there were a number of programs or organizational changes implemented or tested during the program period, both the fact of which and the publicity of which may have contributed to an increasingly positive public image of the Houston police.

Again, while interesting in their own right, these data do not provide good evidence of program-based causality. This type of analysis does not control for many possible population differences between the two areas (and over time within each area), and does not tell us whether the changes in the program area are statistically significantly greater than those in the comparison area.

Cross-Sectional Respondents: Program Effects

The much stronger test of area or neighborhood-level effects is provided by a regression analysis in which potentially important outcome covariates can be controlled. Such an analysis was done on a data set which pooled the Wave 1 and Wave 2 data for both the program and comparison areas. The regression model which provides controls for survey wave, area of residence, and covariates is as follows:

$$Y = a + b*COVARIATES + b*WAVE + b*TREAT + b*INTER$$

Where:

Y = an outcome measure;
a = intercept
WAVE = pretest (coded 0) or posttest (coded 1) wave
TREAT = residence in comparison (coded 0) or program (coded 1) area;
INTER = interaction term coded 1 if respondent lives in the program

area and it is a posttest interview, and a 0 otherwise;
COVARIATES = indicators modeling differences between residents of the program and comparison areas which potentially are related to the outcome measures (see below).

The covariates are critical. One of the major design flaws of an area-level quasi-experiment is that residents are not randomly assigned to treatment or comparison status, but rather opt (or are forced, in one fashion or another) into one of the areas. The factors which lie behind their selection of, or assignment to, the program or comparison areas potentially are confounded with the treatment. Program and comparison areas can never be perfectly matched. The goal of the analysis, therefore, is to model the selection process in order to statistically "control" the factors which led them to one neighborhood or the other and which are related to the outcome measures.

The covariates used in this analysis include many of the known correlates of most of the outcome measures for the evaluation. They reflect the respondent's crime experiences and physical vulnerability, the anonymity of their immediate environment, cultural and ethnic differences in experiences with the police, and social supports. Many factors which affect fear and assessments of the police also are linked to residential choice, including income, education, race, household organization, and employment status. Most of the covariates listed here are "demographic" because it is important that they be conceptually and temporally antecedent to the program, and not be affected by it. This is especially critical in the pooled cross-sectional analysis, for half of the respondents were interviewed after the program took place. If factors were included among the covariates which could have been affected by the program (like recent experiences with the police or victimization), controlling for them would

"take out" variance also associated with the treatment, and could lead to an underestimate of program effect. Note, however, that their exclusion contributes to the specification bias in the structural models of fear and assessments of the police which guided the selection of the covariates, for the examples given above are important determinants of both outcomes. This problem is rectified in the analysis of panel data (reported in a later section of this chapter), where measures of victimization and assessments of the police taken before the onset of the program can be used as covariates.

Covariates Used in Pooled Cross-Sectional Analyses

Race-black	Origin-Hispanic	High school graduate
Age in years	Elderly-over 60	Income (dichotomy)
Gender-female	Married	Length of residence
Own home	Single family home	Work full-part time
Live alone	Household size	Single family head
Poor English	Apartment complex	Number of children

There were scattered missing data for most of the covariates. These were coded at median values or mid-ranges where appropriate. There were more missing data for income (8.5 percent), and those cases were coded midway between the low and high categories. Appendix L reports two analyses which compare results based on "complete cases" data sets and on those excluding missing-data cases. These analyses suggest there is no systematic bias introduced by this procedure.

In addition to identifying the structural model of the selection process, it is important to understand how its components were measured. Unlike the outcome measures, which have known estimated reliabilities, are single factored, and are well distributed, the covariates analyzed here were all measured using single indicators. However, because the interviews were conducted in-person, some covariates (such as sex, observed building type)

probably are usually accurate. Others, like race, are conceptually thorny, but are at least respondent-identified categories, and most of the remainder ("working," "married") should be fairly reliably measured by the questionnaire. Income level doubtless is the worst-measured of the covariates, but there are no reliability estimates for any of them.

Because they are intended to model the selection process and adjust for unmatched differences between the treatment and control areas, in this analysis the covariates were forced in before an assessment was made of the significance of other components of the model.

The WAVE measure controls for the main effects of wave of interview. It identifies interviews conducted before and after the onset of the program, and its inclusion should take out the simple, linear effects of history, maturation, and other general over-time changes in both program and comparison areas. It will not account for differences in the magnitude of general temporal shifts between the two areas, however.

The TREATment measure controls for the main effects of area of residence. This is an interesting factor in the model. If the covariates (which were entered first) adequately accounted for selection differences between the two areas which are related to the outcome measures, the regression coefficient for TREAT should approximate zero ("significance" is not the best criterion in this case); there should be no independent effect of area of residence. If the selection model were less adequate, the inclusion of TREAT will serve to take out further unmodeled (or ill-measured) differences between respondents from the two areas. However, as we shall see shortly, the problem of multicollinearity makes this a less desirable solution to the problem than is modeling differential area selection.

Treatment effect is estimated in this analysis by the size and significance of the unstandardized regression coefficient associated with the INTERaction indicator. INTER identifies interviews with (a) residents of the program area conducted (b) after the onset of the program.

One problem with this analysis model is that there inevitably will be a substantial amount of multicollinearity between the WAVE, TREAT, and INTER indicators. This makes it less likely that any significant program effects will be identified. However, because they perform important analytic functions, it clearly would be incorrect to leave out either of the main effect indicators--unless the coefficient associated with area of residence (TREAT) approximates zero because of adequate modeling of the selection process. Unfortunately, while the coefficients for area of residence frequently were insignificant in the multivariate analyses, they sometimes were significant and rarely were zero; thus, they were included in each analysis.

The before-and-after surveys are designed to draw representative sketches of area residents at two points in time. They may better reflect the community-wide effects of a program. However, the absence of a pretest forces us to rely upon covariates which were measured in the surveys to factor out non-program differences between treatment and control individuals, and important differences between residents of the program and comparison areas may not have been included or may have been badly measured.

Note that, after all of this, INTER will continue to be a biased estimator of program affect due to unaccounted-for treatment-by-history and tratment-by-maturation threats to validity, if present.

The results of the pooled analysis are presented in Table 18.

TABLE 18

PROGRAM EFFECTS FOR CROSS-SECTIONAL SAMPLE RESPONDENTS:
REGRESSON COEFFICIENTS AND LEVELS OF SIGNIFICANCE

Outcome Scale	Regression Coefficient (b)	Level of Significance
Fear of Personal Victimization in Area	-.16	.01*
Perceived Area Personal Crime Problems	-.25	.01*
Worry About Area Property Crime Victimization	-.06	.33
Perceived Area Property Crime Problems	-.26	.01*
Perceived Area Social Disorder Problems	-.10	.03*
Satisfaction with Area	+.06	.29
Evaluations of Police Service	+.06	.38
Perceived Police Aggressiveness	-.03	.11
Defensive Behaviors to Avoid Victimization	-.16	.01*
Property Crime Victimization	-.04	.42
Personal Crime Victimization	-.06	.16
(N)	(1657)	

*Statistically significant at $p \leq .05$.

The first column reports the sign and size of the regression coefficient associated with living in the program area and being interviewed after program implementation. This is the measure of program effect after the other variables in the model have been taken into account. The second column reports the level of statistical significance of the coefficient.

At the area-level, the citizen contact program appears to be negatively and significantly ($p \leq .05$) associated with indicators of:

Fear of Personal Victimization in the Area,
Perceived Area Personal Crime Problems,
Perceived Area Property Crime Problems,
Perceived Area Social Disorder Problems,
Defensive Behaviors to Avoid Victimization.

The community station program appears to have had statistically significant, predicted effects on four of the eight attitude measures of program impact. For the other four attitudes, the effects were in the predicted direction but were not significant.

The program appears to have had no impact, at the area-level, on the two behavioral measures--"Defensive Behaviors" and "Household Crime Prevention."

Alternative Explanations of Program Effects Detected in Pooled Regression Analysis

The two most significant threats to the reliability of these findings (and of those to be presented below for the panel subset) are posed by the possibility of a statistical artifact and by the possibility of differential history in the two areas. The statistical artifact which could be operating in these data is regression toward the mean--a phenomenon that occurs when pre-intervention outcome scores are abnormally high (or low) in the program area and return, over the course of the program period, to their "normal"

state (the mean score) for reasons entirely unrelated to the implementation of the program.

There is some support to be found for this alternative explanation in the Wave 1 outcome scores reported in Table 16. In almost every case, the Wave 1 mean outcome score is higher in the program area than in the comparison area. Furthermore, the Wave 2 scores do not differ dramatically between the two areas. And, except for burglary, the same can be found in respondent reports of victimization summarized in Table 17. It is possible that the apparent program impacts on attitudes and reported victimization were the function of a statistical anamoly.

This is not something for which we can test in these data; it is a possible problem to which we can only point with some consternation, noting that this is a condition not unlikely to plague tests in which there is only one program and one comparison area, and only two data points. We might note, however, that regression toward the mean is most likely to occur in those cases in which the program area has been selected precisely because it is perceived as a problem area and one in which the planned program might be expected or hoped to have an impact. This was not the reason Northline was selected as the site for the community station strategy. So far as the Houston officers or researchers knew, there was no reason to expect marked differences in Wave 1 outcome scores among any of the areas considered as test sites. Rather than being chosen for the community station because it was perceived as an area in need of that particular program, Northline was selected from among the final five matched areas because it was the area that had the right kind of space available for housing the community station. While this was not strictly a random assignment of treatment to area, it was not based on presumptions about area conditions. Table 19

TABLE 19

WAVE 1 OUTCOME SCORES FOR FOUR HOUSTON NEIGHBORHOODS

Outcome Scale	Areas			
	Northline	Golfcrest	Langwood	Shady Acres
Fear of Personal Victimization in Area	1.77	1.80	1.63	1.69
Perceived Area Personal Crime Problems	1.61	1.54	1.35	1.44
Worry About Area Property Crime Victimization	2.20	2.16	2.00	1.93
Perceived Area Property Crime Problems	1.98	1.84	1.57	1.60
Perceived Area Social Disorder Problems	1.56	1.49	1.41	1.40
Satisfaction with Area	2.39	2.42	2.43	2.51
Evaluations of Police Service	3.22	3.24	3.33	3.23
Perceived Police Aggressiveness	1.17	1.22	1.14	1.15
Property Crime Victimization	27	26	24	17
Personal Crime Victimization	36	41	28	31

compares Wave 1 outcome scores in the four areas which were used as test sites and the comparison area for the three area-level programs implemented in Houston. On seven of the ten outcome measures in Table 19 Northline was on the highest (or lowest) end of the area scores. These figures suggest the possibility of regression to the mean; however, that the possibility was not made more probable by the nature of the study design.

All of the findings are subject to the possible effects of differential history in the program and comparison areas. It is possible, for example, that something other than the program occurred in Northline--and not in the comparison area--which had the effect of reducing fear and the prevalence of victimization in one area but not the other. This alternative explanation is one which the evaluation plan anticipated. An evaluation observer made regular contact with police personnel in both the program and comparison areas to make certain there were no new police operations being introduced into either area during the period of the test. In addition, she monitored the media for stories about the area. There is little doubt that any direct effects of the community station probably were enhanced by media coverage of it. A neighborhood paper produced three major articles on the station during the test period and stories on the Northline and other community stations in Houston were reported on television at least twice during this time. But other than the coverage of the station itself, the observer was unable to detect any other event or activity which might be expected to account for the effects measured in the program area.

Finally, alternative explanations may lurk in uncontrolled differences between the program and comparison areas and between the people who live in them. Those are confounded with potential program effects

because there was no random allocation of persons into treatment or control status to equate them on other factors. That is, we cannot be sure that outcome differences between people in the program and control areas, or even changes in the outcomes for two areas over the course of a year, were due to the program, or to those other factors. Regression-based, quasi-experimental analyses attempt to compensate for this by "controlling" statistically for those other differences between people. This is typically done using multiple regression, entering a measure of program exposure along with other control variables to predict outcome scores. The more credible the claim that (a) all relevent differences between people in the two areas other than program exposure have been identified, that (b) those differences have been perfectly measured, and (c) that linear regression (or any other statistical model) perfectly captures their relationship to the outcome measure, the more credible the quasi-experiment.

We make no such claims here. In the absence of firm data on a-c above, the best substitute is a pre-test outcome score. A pretest score for an outcome variable should capture most of the measurable sources of variation in the post-test outcome variable which are not attributable to the program. To make use of these pretest scores, we must now turn to the analysis of the data from the panel samples.

PANEL ANALYSES

Panel Respondents: Characteristics

In the program area there were 315 respondents in the panel sample; there were 183 in the comparison area.

The second and fourth columns of Table 20 provide descriptive data about the characteristics of the panel respondents in both the program and

TABLE 20

COMPARISON OF CROSS-SECTIONAL PANEL SAMPLE CHARACTERISTICS, PROGRAM AND COMPARISON AREAS, WAVE 1

	Program Area (Northline)		Comparison Area (Shady Acres)	
	Cross Section	Panel	Cross Section	Panel
Sex				
Males	49	46	52	47
Females	51	54	48	53
	(406)	(239)	(389)	(181)
	$p < .70$		$p < .30$	
Race				
Black	24	18	20	24
White	61	65	55	55
Hispanic	14	16	24	20
Other	1	1	1	1
	(406)	(238)	(388)	(181)
	$p < .30$		$p < .70$	
Housing				
Own	61	71	40	54
Rent	39	29	60	46
	(404)	(238)	(388)	(181)
	$p < .10$		$p < .01$*	
Education				
Not High School	31	34	46	55
High School Graduate	69	66	54	45
	(404)	(237)	(385)	(179)
	$p < .70$		$p < .05$	
Income				
Under $15,000	36	31	46	47
Over $15,000	64	69	54	52
	(373)	(220)	(355)	(163)
	$p < .30$		$p < .90$	
Age Category				
15-24	12	12	16	8
25-49	57	57	50	45
50-98	31	31	34	47
	(406)	(239)	(385)	(180)
	$p < .90$		$p < .01$*	

-continued-

*Statistically significant at $p \leq .01$.

Note: Chi-square tests of significance.
Both columns for each area are drawn from Wave 1 data.

TABLE 20
(continued)

COMPARISON OF CROSS-SECTIONAL AND PANEL SAMPLE CHARACTERISTICS, PROGRAM AND COMPARISON AREAS, WAVE 1

	Program Area (Northline)		Comparison Area (Shady Acres)	
	Cross Section	Panel	Cross Section	Panel
Children at Home				
None	55	53	58	60
One+	45	46	42	40
	(406)	(239)	(389)	(181)
	$p < .80$		$p < .70$	
Number of adults in household				
One	22	20	31	28
Two	65	68	49	52
Three+	13	12	19	20
	(406)	(239)	(389)	(181)
	$p < .80$		$p < .80$	
Marital Status				
Single	36	31	52	46
Married*	64	69	48	54
	(403)	(237)	(386)	(181)
	$p < .30$		$p < .20$	
Employment				
Work full-part	71	72	66	60
Other	28	28	34	40
	(406)	(239)	(387)	(181)
	$p < .80$		$p < .30$	
Length of Residence				
0--2 years	45	36	47	31
3-5 years	12	13	16	17
6-9 years	8	10	7	8
10 years +	35	40	30	44
	(404)	(239)	(389)	(181)
	$p < .20$		$p < .01$*	

*Statistically significant at $p \leq .01$.
Note: Chi-square tests of significance.

comparison areas. The first and third columns provide the same information for the first wave of the cross-sectional respondents. As tends to be the case in panel studies, the persons who were relocated for Wave 2 were more likely to be home owners, to have lived in the area a longer time, and to be older than the larger sample interviewed at Wave 1.

Panel Respondents: Program Awareness

Table 21 reports the extent to which panel respondents recalled elements of the contact program. In both areas, there was a statistically significant ($p \leq .01$) positive Wave 1-Wave 2 difference in the number of respondents who reported knowing about the community station. However, 61 percent points more respondents knew about it in Northline than in the comparison area, Shady Acres. At Wave 2, twenty percent of the respondents in the program area reported they had called or visited the station; four percent in the comparison area said they had done so.

Panel Respondents: Wave 1 and Wave 2 Mean Outcome Scores

Table 22 presents for the panel respondents in each area the mean outcome scores for both waves of the survey. Within the program area there were significant differences on 8 out of 9 outcome measures over time; there were no significant Wave 1-Wave 2 differences in the comparison area. As with the cross-sectional sample, these data are presented for their descriptive utility and are not to be taken as tests of program effect.

Panel Respondents: Program Effects

The preceding pooled, cross-sectional analysis of consequences for the neighborhood was based on two relatively independent surveys (about a 51 percent overlap of the before and after surveys) of the program and control areas, taken before and after the intervention. Those surveys were

TABLE 21

PERCENTAGE OF PANEL RESPONDENTS RECALLING ASPECTS OF THE PROGRAM, PROGRAM AND COMPARISON AREAS

(All Panel Respondents)

Type of Exposure		Program Area (Northline) Wave 1	Wave 2	Diff.	Sigf.	Comparison Area (Shady Acres) Wave 1	Wave 2	Diff.	Sigf.
Called or visited station									
Called and visited		-----	8	----	----	-----	3	----	----
Called or visited		-----	17	----	----	-----	2	----	----
Did neither		-----	75	----	----	-----	95	----	----
	(sd)								
	[N]	[239]				[181]			
Were aware of station		1	74	+73	.001*	2	14	+12	.001*
	(sd)								
	[N]	[217]				[142]			
Had seen brochures, pamphlets, or newsletters		17	22	+ 5	.08	19	15	- 4	.11
	(sd)								
	[N]	[221]				[176]			
Had seen police officer									
More than 1 week ago		34	23	-11		33	22	-11	
within past week		30	34	+ 4	.10	39	34	- 5	.001*
within past 24 hours		36	44	+ 8		29	44	+15	
	(sd)								
	[N]	[239]				[181]			

*Statistical significance is $p \leq .01$.
Note: T-tests of significance for paired measures.

TABLE 22

DIFFERENCES IN WAVE 1-WAVE 2 OUTCOME SCORES FOR PANEL RESPONDENTS, PROGRAM AND COMPARISON AREAS

		Program Area (Northline)				Comparison Area (Shady Acres)			
		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Outcome Scale									
Fear of Personal Victimization in Area	(sd)	1.80 (.55)	1.56 (.56)	-.24	.001*	1.70 (.56)	1.65 (.58)	-.05	.12
	[N]	[239]				[181]			
Perceived Area Personal Crime Problems		1.61	1.21	-.34	.001*	1.40	1.33	-.07	.07
	(sd)	(.62)	(.44)	-.20	.001*	(.55)	(.51)		
	[N]	[230]				[169]			
Worry About Property Crime Victimization in Area		2.18	2.06	-.12	.01*	1.92	1.87	-.05	.19
	(sd)	(.66)	(.67)			(.66)	(.69)		
	[N]	[239]				[179]			
Perceived Area Property Crime Problems		1.95	1.67	-.28	.001*	1.56	1.50	-.06	.13
	(sd)	(.68)	(.62)			(.56)	(.57)		
	[N]	[238]				[171]			
Perceived Area Social Disorder Problems		1.55	1.41	-.14	.001*	1.38	1.38	.001	.50
	(sd)	(.47)	(.42)			(.47)	(.45)		
	[N]	[239]				[179]			

continued

*Statistically significant at $p \leq .01$.
One-tailed significance t-tests.

TABLE 22
(continued)

DIFFERENCES IN WAVE 1-WAVE 2 OUTCOME SCORES FOR PANEL RESPONDENTS, PROGRAM AND COMPARISON AREAS

		Program Area (Northline)				Comparison Area (Shady Acres)			
		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Outcome Scale									
Satisfaction with Area		2.41	2.56	+.15	.002*	2.48	2.54	+.06	.14
	(sd)	(.65)	(.70)			(.62)	(.58)		
	[N]	[239]				[181]			
Evaluations of Police Service		3.22	3.46	+.24	.001*	3.29	3.40	+.11	.25
	(sd)	(.64)	(.63)			(.69)	(.70)		
	[N]	[233]				[168]			
Perceived Police Aggressiveness		1.13	1.11	-.02	.28	1.15	1.11	-.04	.15
	(sd)	(.45)	(.33)			(.40)	(.33)		
	[N]	[227]				[161]			
Defensive Behaviors to Avoid Personal Victimization		.58	.46	-.12	.001*	.42	.48	+.06	.04
	(sd)	(.33)	(.37)			(.34)	(.35)		
	[N]	[239]				[179]			

*Statistically significant at $p \leq .01$.
One-tailed significance t-tests.

designed to be representative of the residents of the areas at those two points in time, and are our best descripton of the impact of the program on the neighborhood. Stronger tests of program effects can be made using data collected from the same individuals (a panel) at two points in time. These data permit tests of the effects of factors which may not be captured in the covariates used in the cross-sectional analysis but which might be represented by the pre-test scores for the outcome variables. Panel analysis can thus provide a more reliable test of the program impact, at least for the panel of individuals involved in the analysis.

Such data exist in the Fear Reduction surveys, since an effort was made to reinterview at Wave 2 each of the persons who was a respondent in Wave 1. For Northline, the resulting "panel" consists of 59 percent (N = 239) of the individuals who participated in the Wave 1 survey. For Shady Acres 47 percent (N = 183) of the Wave 1 sample were reinterviewed for the panel. The effects of the contact program on these panel members have been examined using a quasi-experimental form of analysis. It involves a regression-based model of analysis of covariance described below.

POSTTEST = a + b*PRETEST + b*TREAT + b*COVARIATES

Where:

POSTTEST = scale scores for an outcome measure;
a = intercept
PRETEST = scale scores for a pretest measure;
TREAT = residence in comparison (coded 0) or program (coded 1) area;
COVARIATES = indicators modeling differences between residents of the program and comparison areas which potentially are related to the outcome measures.

Treatment effect is estimated by the significance levels associated with the b's for TREATment area of residence. The COVARIATES (see page 70) control for a number of known correlates of the outcome measures which also

may be related to area of residence. The PRETEST is a very important control for unmeasured covariates, and is the primary rationale for collecting panel data. The panel design also enables us to include as covariates pre-test measures of direct victimization (total, personal, and burglary) and vicarious victimization (knowing area crime victims), factors which in the cross-sectional analysis had to be excluded because they were potentially confounded with program effects.

The panel data provide important measures repeated over time among the same set of respondents. They present stronger evidence of true individual-level change. That change may or may not be related to the intervention--that is a research design issue. The change also may not be "true," but rather a reflection of measurement instability, a point we soon will discuss in greater detail.

Table 23 presents the results of the panel analysis. In this analysis we find living in the program (treatment) area to be negatively and significantly ($p \leq .05$) associated with:

Fear of Personal Victimization, and
Perceived Area Personal Crime Problems.

Among panel respondents the program appears, then, to have had statistically significant effects on only two out of eight attitudinal measures of impact. The other measures of effect were in the predicted direction but were not statistically significant.

Alternative Explanations of Program Effects Detected in Panel Analysis

Since the analysis for panel effects involved the same respondents at two points in time, the findings of impact are not subject to the question of whether there were differences in the characteristics of the Wave 1 and

TABLE 23

PROGRAM EFFECTS FOR PANEL SAMPLE RESPONDENTS:
REGRESSON COEFFICIENTS AND LEVELS OF SIGNIFICANCE

Outcome Scale	Regression Coefficient (b)	Level of Significance
Fear of Personal Victimization in Area	-.12	.03*
Perceived Area Personal Crime Problems	-.11	.04*
Worry About Area Property Crime Victimization	-.06	.36
Perceived Area Property Crime Problems	-.04	.56
Perceived Area Social Disorder Problems	-.04	.39
Satisfaction with Area	+.07	.32
Evaluations of Police Service	+.12	.08
Perceived Police Aggressiveness	+.00	.92
Defensive Behaviors to Avoid Victimization	-.01	.88
Property Crime Victimization	-.05	.31
Personal Crime Victimization	-.07	.14
(N)	(494)	

*Statistically significant at $p \leq .05$.

Wave 2 samples. There is, however, the possibility that differences may have developed over time within either the Northline or Shady Acres panel (or in both); that is, people in either area may have experienced personal changes which would affect their responses to fear inducing or reducing stimuli. If, for example, more people in the Northline panel married (or divorced) and became employed (or unemployed) during the year than was the case in Shady Acres, the Northline panel might register lower fear levels in the Wave 2 survey for reasons independent of the contact strategy. When we compared two potentially changeable characteristics (i.e. marital status and employment status) of the panel respondents in both areas at Wave 1 and Wave 2, we found no significant changes within either the Northline or Shady Acres panels between Wave 1 and Wave 2.

Another possible explanation is that there were unmeasured personal differences in respondents that varied systematically by area and these differences are related to the tendency to experience or express fear. The pre-intervention, Wave 1 test scores were the principal means of controlling statistically for measurable sources of variation. However, differences between residents of the program areas not captured by the pretest or the other covariates examined here remain threats to the inference that the program "worked."

Additionally, there is a technical issue--that of a differential reliability of measurement--which can affect the otherwise straightforward nature of this type of analysis. Both the pretest and posttest measures of outcomes are fallible indicators of the true levels of fear, etc., of our survey respondents. This has two implications. One is that the statistical tests conducted above using multiple regression probably underestimate the true relationship between the pretest and post-scores which we controlled

for--it would have been stronger, and we would have "taken out" more variation in the posttest score with the pretest score, if the measures were better. Second, if the pretest and posttest scores for an outcome are prone to different levels of error, then using the pretest to "adjust" the posttest for "how people stood before the program began" can produce biased results.

Nothing can be done about the first problem, for all indicators of hypothetical constraints are errorful. Two things can be done to deal with the second problem. The first is to examine whether or not there is differential reliability of measurement in the two waves of measures of outcomes and the second is to statistically adjust estimates of the pretest/posttest relationship for those reliabilities. In practical effect, this latter step only changes the results if the pretest and posttest reliabilities for a measure are substantially different. Appendix C presents a tabulation of the scale reliabilities for each outcome measure, for both the pre- and post-intervention surveys, for each area. It suggests that the reliabilities of the scales were approximately the same for both pretest and posttest measures, alleviating in large part our second concern.

Perhaps the most troublesome alternative explanation of these findings is the possibility of regression toward the mean having occurred in the program area. (This problem was discussed in detail in a previous section dealing with the cross-sectional findings.) Similar to the situation with the cross-sectional respondents, we can see in Table 22 that the panel respondents in the program area had Wave 1 outcome scores which, on 6 out of 9 measures, were markedly higher (or lower) than the scores for respondents in the comparison area.

There is no way to determine whether these variables were subject to regression to the mean when we have data for only two periods from only one program area. The possibility that they were constitutes one of the arguments for replicating the strategy in a number of areas.

Finally, another alternative explanation is that some event or other activity impacted Northline during the year of the contact strategy test in such a way as to lower levels of fear and concern. Apparent program effects might be due, then, to another program or condition rather than due to the contacts. There are no hard data which can be used to test this hypothesis.

However, this possibility was closely monitored by the evaluation observer and, as noted previously, she was able to identify no other event, program or condition, through interviews or through monitoring media coverage, which could have been expected to cause the reported outcomes in Northline.

Generalizability of Panel Findings

The two significant regression coefficients reported in Table 23 provide evidence that the contact program had desirable impacts on the fear of area personal victimization and perceptions of area personal crime problems.

To what extent are these findings generalizable--either to the Northline area as a whole or to areas beyond Northline? The first answer depends on the extent to which the characteristics of the panel sample match those of the larger populations. As we already have seen in Table 20, attrition* caused the panel sample in the comparison area to differ in some

*As a result of attrition, panel surveys inevitably are biased against (a) persons who move out of the area and are lost, (b) recent in-movers who could not have participated in the first wave of the survey, and (c) those who refuse to be reinterviewed.

respects from the area-wide samples. In Shady Acres, the panel respondents were significantly older, more likely to own their own homes and to have lived in the area longer than the cross-sectional respondents. These characteristics of the panel should predict, given the Wave 1 fear scores of these subgroups (See Appendix G), that the Shady Acres panel would tend to be more fearful than the cross-sectional respondents. However, the comparison in Table 24 of the Wave 1 fear scores for both the area (cross-sectional) and the panel samples indicates this was not the case; the differences between them were very small.

Despite the Wave 1 similarities between cross-sectional and panel scores, the pooled and panel analyses do not produce the same results; there were more significant effects for the pooled than for the panel analysis. We cannot determine whether these differences are due to the fact that the two data sets were subjected to different types of analyses, are due to the differential receptivity to the program on the part of respondents in the two types of samples, or are due to the effects of panel respondents having been interviewed twice in a year rather than only once (the case for the cross-sectional respondents).* Further, as we shall see in the next section

*Although it is not the case in this evaluation, (see Tables 18 and 23), it could be possible for an outcome to have the same size regression coefficient in both the pooled and panel analyses but to show different levels of significance as a results of different sample sizes. The same size coefficient would be less likely to be significant in the panel than in the pooled analysis.

TABLE 24

COMPARISON OF AREA (CROSS SECTIONAL) AND PANEL MEAN OUTCOME SCORES
WAVE 1 AND WAVE 2
PROGRAM AND COMPARISON AREAS

		Program Area (Northline)				Comparison Area (Shady Acres)			
Outcome Scale	Sample	Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Fear of Personal Victimization in Area	Area	1.77	1.54	-.23	.001*	1.69	1.65	-.04	.14
	Panel	1.80	1.56	-.24	.001*	1.70	1.65	-.05	.12
Perceived Area Personal Crime Problems	Area	1.61	1.28	-.33	.001	1.44	1.38	-.06	.10
	Panel	1.61	1.27	-.34	.001*	1.40	1.33	-.07	.07
Worry About Property Crime Victimization in Area	Area	2.20	2.04	-.16	.001*	1.92	1.85	-.07	.10
	Panel	2.18	2.06	-.12	.01*	1.92	1.87	-.05	.19
Perceived Area Property Crime Problems	Area	1.98	1.67	-.31	.001*	1.60	1.55	-.05	.25
	Panel	1.95	1.67	-.28	.001*	1.56	1.50	-.06	.13
Perceived Area Social Disorder Problems	Area	1.56	1.45	-.09	.001*	1.40	1.39	-.01	.40
	Panel	1.55	1.41	-.14	.001*	1.38	1.38	-.00	.50

-continued-

*Statistically significant at $p \leq .01$.
Note: One-tailed t-tests of significance.

TABLE 24
(continued)

COMPARISON OF AREA (CROSS SECTIONAL) AND PANEL MEAN OUTCOME SCORES
WAVE 1 AND WAVE 2
PROGRAM AND COMPARISON AREAS

Outcome Scale	Sample	Program Area (Northline) Wave 1	Wave 2	Diff.	Sigf.	Comparison Area (Shady Acres) Wave 1	Wave 2	Diff.	Sigf.
Satisfaction With Area	Area	2.39	2.54	+.15	.001*	2.51	2.60	+.09	.025
	Panel	2.41	2.56	+.15	.002*	2.48	2.54	+.06	.14
Evaluation of Police Service	Area	3.22	3.40	+.18	.001*	3.23	3.37	+.24	.005*
	Panel	3.22	3.46	+.24	.001*	3.29	3.40	+.11	.25
Police Aggressiveness	Area	1.17	1.16	-.01	.40	1.15	1.11	-.04	.10
	Panel	1.13	1.11	-.02	.28	1.15	1.11	-.04	.15
Defensive Behaviors to Avoid Personal Victimization	Area	.58	.42	-.16	.001*	.44	.47	+.03	.25
	Panel	.58	.46	-.12	.001*	.42	.48	-.06	.04

*Statistically significant at $p \leq .01$.
Note: One-tailed t-tests of significance.

on program effects for subgroups, there were different program effects for blacks and whites and these differences may have tended to reduce the likelihood of finding an effect in the panel analysis. Given the inability to distinguish among these possible explanations, it is simply safest to say that two different ways of analyzing the data point to somewhat different results. We do, however, feel greater confidence in results that are duplicated in the two types of analysis.

Extending the panel findings to other groups can be done only with caution. Being able to do so would depend on the other groups being similar to the panel and on their living in an area similar to Northline, for that is the context in which effects were found. Similarly, the area-level findings are only generalizable to the extent that other neighborhoods are similar to Northline as it was in 1983 and 1984. This is the reason attention was given in the beginning of this report to the nature of the Northline area. Northline was not an area where either crime or fear were extremely high. It was a neighborhood with only small pockets of physical deterioration but not one which appeared on the edge of imminent decay. It was not an area where police or outsiders had any sense of threat to their own safety. This was the setting in which the program appeared to work. We cannot say how it would fare in areas much better or much worse than Northline. However, the strength of the Northline findings, especially those for the pooled analysis, suggest that this program deserves repeated tests in different kinds of settings, with populations of different types of individuals than were found in Northline.

As a final comment on generalization, the obvious should perhaps be stated: these findings can, at best, be projected to implementations of the strategy which are at least as good as the Houston implementation. The

commitment and enthusiasm of the community station officers clearly was a major factor in the successful implementation of the project. At the same time, however, the opportunity to work in the community station appears to have contributed to their commitment and enthusiasm.

Effects for Panel Members Who Recall Aspects of the Program

While the program was intended to have an area-wide effect on the population, it is interesting to determine what effect the program had on those respondents in the program area (Northline) who reported awareness of some aspect of the program. Exposure is considered to consist of:

--having called or visited the community station

--knowing the community station is in the neighborhood

--having seen brochures, pamphlets or newsletters

--and, to a lesser degree, the recent sighting of a police officer in the area. (Although increased police presence was not a specifically planned component of the program, community station officers estimate that the staffing of the station has increased patrol time on the program area streets by 20-30 percent.)

Table 21 reported the percentage of panel respondents in each of the two neighborhoods who recall having any of the four types of exposure. (See Appendix H for more detailed data.) In Northline, 16 percent more respondents had called or visited a neighborhood station than was the case in Shady Acres. In both areas there was a statistically significant, positive difference in the percentage of respondents who knew about a neighborhood station* and in the percentage who reported having seen a police officer in the last 24 hours. In Northline, there was a Wave 1 - Wave 2, positive difference in the percentage of respondents who had seen

brochures, pamphlets, or newsletters and there was a negative difference in Shady Acres; however, differences in neither area reached statistical significance.

Table 25 reports, for the program area panel respondents, the relationship between the recalled exposure to the program and each of the outcome measures. The coefficient is a partial r, resulting from the control for sixteen factors.*

Effects for those who report calling and visiting the station. The only significant effect for these respondents is the apparent increase in their perceptions of area disorder problems. This is contrary to the desired effects of the program, as are the statistically insignificant increases in their levels of fear of victimization, and perceptions of area personal and property crime problems. Nor would the decrease in satisfacton with the area be predicted by the program.

Do these findings indicate the program is having negative consequences for the persons who have contact with the community station? Probably not. The explanation for the findings may lie in the nature of the respondents who contact the station. As Table 26 suggests, it may be problems rather than mere curiosity which bring respondents into contact with the station. We see that, while respondents who called and visited the station were more likely than those who had done neither to know about various aspects of the program, they were also more likely to have called the police to report a crime in the previous six months and to have, themselves, been a recent victim of a crime. It may have been experiences with crime which motivated

*Including indicators of: age, race, sex, income, education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

TABLE 25

RELATIONSHIP BETWEEN SELF-REPORTED PROGRAM EXPOSURE AND OUTCOME MEASURES
(Panel Respondents in Program Area Only)

	Called and Visited Station 1			Awareness of Station 2			Having seen Brochures, Pamphlets, Newsletters 3			Recent Sighting of Officer 4		
Outcome Scale	r*	Sigf.	(N)	r*	Sigf.	[N]	r*	Sigf.	[N]	r*	Sigf.	[N]
Fear of Personal Victimization in Area	+.06	.38	[237]	-.12	.08	[227]	+.11	.10	[237]	-.24	.001**	[237]
Perceived Area Personal Crime Problems	+.05	.43	[235]	-.11	.11	[220]	+.09	.20	[235]	-.23	.001**	[228]
Worry About Personal Victimization in Area	-.02	.74	[237]	-.07	.30	[227]	-.08	.25	[237]	-.09	.18	[237]
Perceived Area Property Crime Problems	+.12	.07	[236]	-.12	.07	[226]	+.04	.53	[236]	-.04	.58	[236]
Perceived Area Social Disorder Problems	+.17	.01**	[236]	-.08	.27	[227]	+.02	.71	[237]	-.15	.02**	[237]
Satisfaction with Area	-.07	.31	[237]	+.11	.11	[227]	+.04	.53	[237]	+.26	.001**	[237]
Evaluation of Police Service	+.02	.77	[237]	+.21	.01**	[222]	-.05	.43	[231]	+.28	.001**	[231]
Police Aggressiveness	-.02	.72	[225]	+.08	.27	[216]	-.02	.71	[225]	-.02	.82	[225]
Defensive Behaviors to Avoid Personal Victimization	.10	.14	[237]	-.02	.79	[227]	.13	.28	[237]	-.12	.07	[237]

[1]Variable scored as 0 (neither called or visited), 1 (called or visited), 2 (called and visited),
[2]Variable scored as 0 (no), 1 (yes).
[3]Variable scored as 0 (no), 1 (yes).
[4]Variable scored as 0 (not seen in past week), 1 (seen in past week), 2 (seen in past 24 hours).

*r is partial correlation, controlling for indicators of age, race, sex, income, education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pre-test.

**Statistically significant at $p \leq .05$.

TABLE 26

CRIME EXPERIENCES AND PROGRAM AWARENESS OF RESPONDENTS WHO DID AND DID NOT CONTACT THE COMMUNITY STATION

(All Wave 2 Respondents, Program Area Only)

	No Contact	Called or Visited Station	Called and Visited Station	(Sigf.)
Had called police to report a crime in past 6 months				
No	92	72	25	
Yes	8	28	75	(.001)
	(372)	(76)	(12)	
Had been a victim in the past 6 months				
No	56	53	17	
Yes	44	47	83	(.03)
	(372)	(76)	(12)	
Had heard of meetings about crime in the area				
No	86	47	50	
Yes	14	53	50	(.001)
	(350)	(73)	(12)	
Had seen brochures or newsletters about crime prevention				
No	85	68	58	
Yes	15	32	42	(.001)
	(371)	(76)	(12)	
Had seen or heard of monthly police newsletter				
No	92	68	58	
Yes	8	32	42	(.001)
	(371)	(76)	(12)	
Knew an officer who works in the area				
No	91	78	67	
Yes	9	22	33	(.001)
	(371)	(76)	(12)	

many of the respondents to contact the station; these experiences, rather than the contact, may have produced the apparent negative effects.

Effects for those who report awareness of the station. For these respondents, the only statistically significant effect is the apparent increase in their evaluations of police service.

Effects for those who recall brochures, pamphlets, or newsletters. There are no significant relationships between program outcomes and recall of exposure to brochures, pamphlets, or newsletters.

Effects for those who recall seeing a police officer recently. In the program area, there are several significant effects of reported recent sighting of a police officer. Those who report a recent sighting have significantly lower levels of fear of personal victimization and are significantly less likely to perceive area personal crime problems. They are less likely to perceive social disorder in the area, more likely to be satisfied with the area, and more likely to report high evaluation of police service. All of these findings are significant at $p \leq .05$.

These effects of the sighting of police officers are certainly worth noting from a policy perspective. However, as with all of the recalled measures of program exposure, it is impossible to determine whether the respondents who report such recall had different levels of exposure to the various components of the program or whether they differ from other respondents primarily in their ability to recall exposure. Further, in the case of the community station, increased police presence was not an explicit objective of the program and appears to have little effect on the perceptions of panel respondents in the program area (see Table 21).

Program Effects for Panel Members in Subgroups

Preceding analyses have examined the impact of the program for the cross-sectional sample and for the panel samples as a whole. However, it is possible that a program like this could have a special impact upon selected subgroups of the population, while having none--or different--consequences for others in the area. For example, this type of police operation might reduce the fear of people who generally are vulnerable to victimization and fear, or have had past experiences with crime, but not other groups.* These are hypotheses about "treatment-covariate interaction." Such hypotheses imply that program contact (treatment) had special impact (an interaction effect) upon subgroups defined by particular factors (covariates).

The possibility of such special impacts can be tested by including interaction measures in multiple regression analysis. Table 27 presents a summary of such analyses for these subgroups:

- age (the impact of the program upon older people),
- sex (the impact of the program upon females),
- victimization (the impact of the program upon victims identified by the Wave 1 survey)
- single family home (the impact of the program upon persons living in detached, one unit houses),

*There were no program predictions which were specific to any of these subgroups, and there were no plans in the community station strategy to target any of these groups differently; however, the station staff did attempt to determine whether they were reaching all geographic areas of the neighborhoods with their efforts. They asked persons who attended the monthly neighborhood meetings to sign a guest book in which they also listed their addresses and phone numbers. After the meetings, the station staff marked the addresses on maps and notes the areas which were unrepresented. Prior to the next meeting, they attempted to distribute more notices in the unrepresented area.

TABLE 27

REGRESSION ANALYSIS OF INPUT OF PROGRAM AREA OF RESIDENCE UPON SUBGROUPS
PROGRAM AND COMPARISON AREAS

(All Panel Respondents)

Outcome Scale	Blacks		Hispanics		Female		Victims		Age		Live Alone		High School Grads		Renters	
	Sign	Sigf.	Sign	Sigf.	Sign	Sigf.	Sign	Sigf.	Sign	Sigf.	Sign	Sigf.	Sign	Sigf.	Sign	Sigf.
Fear of Area Personal Victimization	+	.08	-	.56	-	.70	-	.04*	+	.10	+	.12	-	.34	-	.83
Perceived Area Personal Crime Problems	+	.01*	-	.07	-	.82	-	.58	-	.53	+	.21	-	.17	+	.09
Worry About Area Property Crime Victimization	+	.01*	-	.42	-	.99	-	.20	-	.06	+	.67	-	.51	+	.05*
Perceived Area Property Crime Problems	+	.001*	-	.06	-	.91	+	.83	-	.16	+	.50	-	.64	+	.18
Perceived Area Social Disorder Problems	+	.001*	-	.03*	+	.48	-	.96	-	.30	+	.05*	+	.44	+	.02*
Satisfaction with Area	-	.001*	+	.37	-	.73	-	.69	+	.06	-	.01*	+	.52	-	.001*
Evaluations of Police Service	-	.01*	+	.64	-	.19	+	.36	-	.75	-	.24	+	.27	-	.17
Police Aggressiveness	+	.01*	-	.05*	+	.43	-	.67	+	.53	+	.07	-	.42	-	.36
Defensive Behaviors to Avoid Personal Crime	-	.65	-	.36	+	.96	-	.51	+	.01	+	.10	+	.19	+	.30
Total Victimization	+	.15	-	.04*	+	.35	-	.18	+	.87	+	.60	-	.58	+	.91
Personal Victimization	+	.71	-	.24	+	.48	-	.13	-	.50	+	.94	-	.29	-	.68
Property Victimization	+	.06	-	.05*	+	.90	+	.15	+	.88	+	.65	-	.57	+	.51

*Statistically significant at $p \leq .05$.

Notes: "N" approximately 420 for all analyses
*Victimization is a dichotomy--victim or non-victim
Regression analysis includes pretest, area of residence, subgroup membership, and an area-subgroup interaction term. This table reports the sign associated with the interaction term and its significance.

- ethnicity (the impact of the program upon Hispanics and Asians),
- race (the impact of the program upon blacks),
- renter (the impact of the program upon persons living in rented housing).

For each subgroup, the table indicates the direction of the effect of being in that group and living in the treatment area; in addition, the statistical significance of each effect is shown. (Complete results are presented in Appendix I.) The measures of effect take into account the pre-test score for each outcome listed at the heads of the columns, residence in the program or comparison area (the measure of the program exposure), and the simple linear effect of being a group member. (Coefficients associated with those factors are not presented here, both to reduce the complexity of the table, and because they have little interpretive value.) People who score high on the interaction meassures described here were (a) in the group, and (b) in the program area. The regression analyses on which Table 27 is based do suggest that the community station program had different effects on various population subgroups in the Northline neighborhood. There were several significant, differential effects among racial groups and between those who owned their homes and those who rented.

Effects for racial groups. Judging from the data in Table 27, the program appears to have had undesired effects on blacks. There was a significant, positive relationship between being a black in the Northline area and Perceived Area Personal Crime Problems, Worry About Property Crime Victimization in Area, Perceived Area Property Crime Problems, Perceived Area Social Disorder Problems, and Police Aggressiveness. There were significant, negative relationships with Satisfaction With Area, and Evaluation of Police Service. None of these relationships reflect the expected effects of the program. However, it is possible that the regression coefficients do not indicate that blacks suffered adverse effects of the program but, rather, that they simply experienced effects that were less positive than those experienced by whites. Table 28 compares Wave 1 - Wave 2 mean scores on outcome variables for blacks, whites, and Hispanics. From this table one can determine whether program effects are in the same direction and of similar magnitude across racial groups. The evidence is mixed. On two of the outcomes which are related to race in the regression analysis (Perceived Area Personal Crime Problems and Perceived Area Property Crime Problems), the direction of the Wave 1 - Wave 2 differences is the same for blacks as for whites and Hispanics. However, the sizes of the differences are smaller for blacks than for the other groups and, in the case of Perceived Area Property Crime Problems, do not achieve statistical significance. In the one case, blacks appear to receive program benefits

TABLE 28

ANALYSIS OF PROGRAM OUTCOMES BY RACE
COMPARISON OF WAVE 1 AND WAVE 2 MEANS, PROGRAM AND COMPARISON AREAS

(Panel Respondents Only)

	Program Area (Northline)					Comparison Area (Shady Acres)				
	Wave 1	Wave 2	Diff.	Sigf.	[N]	Wave 1	Wave 2	Diff.	Sigf.	[N]
Fear of Area Personal Victimization										
Blacks	1.73	1.54	-.19	.05	[42]	1.60	1.45	-.15	.03	[43]
Whites	1.83	1.57	-.26	.001*	[160]	1.73	1.71	-.02	.37	[99]
Hispanics	1.74	1.52	-.22	.02	[34]	1.74	1.70	-.04	.34	[37]
Perceived Area Personal Crime Problems										
Blacks	1.63	1.36	-.27	.01*		1.33	1.13	-.20	.01*	
Whites	1.60	1.26	-.34	.001*		1.42	1.37	-.05	.24	
Hispanics	1.61	1.20	-.41	.01		1.46	1.48	+.02	.44	
Worry About Area Property Crime Victimization										
Blacks	2.21	2.30	+.07	.26		1.88	1.74	-.14	.26	
Whites	2.18	2.03	-.15	.01		1.94	1.90	-.04	.28	
Hispanics	2.13	1.94	-.19	.06		1.89	1.88	-.01	.46	
Perceived Area Property Crime Problems										
Blacks	2.00	1.98	-.02	.44		1.53	1.41	-.12	.14	
Whites	1.97	1.63	-.34	.001		1.62	1.54	-.08	.11	
Hispanics	1.81	1.46	-.35	.01		1.42	1.48	+.04	.31	
Perceived Area Social Disorder Problems										
Blacks	1.64	1.67	+.03	.37		1.34	1.29	-.05	.25	
Whites	1.54	1.36	-.18	.001		1.39	1.38	-.01	.43	
Hispanics	1.48	1.33	-.15	.04		1.37	1.49	+.12	.11	

-continued-

*Statistically significant at $p \leq .01$.
Note: One-tailed paired t-tests of significance.

TABLE 28
(continued)

ANALYSIS OF PROGRAM OUTCOMES BY RACE
COMPARISON OF WAVE 1 AND WAVE 2 MEANS, PROGRAM AND COMPARISON AREAS

(Panel Respondents Only)

	Program Area (Northline)					Comparison Area (Shady Acres)				
	Wave 1	Wave 2	Diff.	Sigf.	[N]	Wave 1	Wave 2	Diff.	Sigf.	[N]
Satisfaction with Area										
Blacks	2.34	2.24	-.10	.22		2.63	2.70	+.07	.28	
Whites	2.39	2.64	+.25	.001*		2.43	2.51	+.09	.13	
Hispanics	2.53	2.62	+.09	.25		2.43	2.43	.00	.99	
Evaluations of Police Service										
Blacks	3.15	3.11	-.04	.36		3.52	3.52	.00	.48	
Whites	3.23	3.59	+.36	.001		3.30	3.42	+.12	.04	
Hispanics	3.29	3.36	+.07	.31		2.97	3.17	+.20	.09	
Police Aggressiveness										
Blacks	1.26	1.26	.00	.50		1.18	1.04	-.14	.07	
Whites	1.07	1.06	-.01	.23		1.15	1.08	-.07	.05	
Hispanics	1.22	1.20	-.02	.42		1.13	1.27	+.14	.07	
Property Crime Victimization										
Blacks	.64	.43	-.21	.02		.16	.19	+.03	.36	
Whites	.28	.29	+.01	.45		.26	.28	+.02	.37	
Hispanics	.32	.18	-.14	.05		.40	.38	-.02	.40	

*Statistically significant at $p \leq .01$.
Note: One-tailed paired t-tests of significance.

which are smaller than those of whites and Hispanics; and in the other case, the program would appear to have no effects on blacks. In either case, the program does not appear to have adverse consequences for blacks.

In the case of four other outcomes (Perceived Area Personal Crime Problems, Perceived Area Social Disorder Problems, Evaluation of Police Service and Police Aggressiveness), the differences of Wave 1 - Wave 2 means for blacks are in the direction which would suggest undesirable program effects, while the differences for whites and Hispanics are in the direction of beneficial effects. None of the differences for blacks are statistically significant, so it is appropriate to say that there are no indications of significant adverse program effects for blacks. However, it is very clear that there are no desirable Wave 1 - Wave 2 differences for blacks which could be attributed to the community station program. The only outcome variable on which blacks register a desirable, statistically significant difference of means over time (Perceived Area Personal Crime Problems) is matched by a similar statistically significant difference for blacks in the comparison area. Whatever caused the apparent positive change on this variable probably was not the program, since a difference of very similar magnitude occurred in both areas. In fact, there are five variables on which blacks in the comparison area appear to fare better (although the Wave 1-Wave 2 differences in either area may not be significant) than do blacks in the program area, either because their differences over time are greater than those of program area blacks or because theirs are in a desirable direction, opposite that for program area blacks.

Effects on those who rent their homes. This was the other group for which there appears to have been statistically significant and substantively

undesirable effects of living in the program area and being in this group. In Northline, renters--as compared to home owners--tend to worry more about property crime victimization in the area, perceive more area social disorder problems and to register lower satisfaction with the neighborhood as a place to live. Table 29 allows us to examine the differences in means for these two groups, over time, on these three outcomes. For Perceived Area Social Disorder Problems, the Wave 1 - Wave 2 differences for either renters or owners are negative; both groups appear to have perceived fewer problems at Wave 2 than at Wave 1. However, the Wave 1 - Wave 2 difference is smaller for renters than owners and does not reach statistical significance. In the cases of Worry About Property Crime Victimization in Area and Satisfaction With Area, the Wave 1 - Wave 2 differences for renters are in different directions than the ones for owners and are indicative of adverse program effects for renters. However, the Wave 1 - Wave 2 differences, on either outcome, are not significant for renters, and it can be said that the program appears to have made no significant differences for renters. What is clear is that the program appears to have no statistically significant beneficial effects on renters.

That this is the case is understandable when one examines the differential exposure to programs among racial groups and between owners and renters (see Table 30). Although they did not differ much from Hispanics, blacks were much less likely than whites to know of the existence of the station; to have called or visited it; or to have reported seeing brochures, pamphlets, or newsletters. Relative to home owners, renters are also much less likely to have reported any of these exposures.

The findings of low exposure and no apparent desirable program effects for blacks and renters are important since blacks constituted 18 percent of

TABLE 29

ANALYSIS OF PROGRAM OUTCOMES BY HOUSING TENURE
COMPARISON OF WAVE 1 AND WAVE 2 MEANS, PROGRAM AND COMPARISON AREAS

(Panel Respondents Only)

	Program Area (Northline)					Comparison Area (Shady Acres)				
	Wave 1	Wave 2	Diff.	Sigf.	[N]	Wave 1	Wave 2	Diff.	Sigf.	[N]
Worry About Area Property Crime Victimization										
Own	2.20	2.00	-.20	.001	[164]	1.98	1.91	-.07	.17	[90]
Rent	2.14	2.19	+.05	.27	[67]	1.84	1.82	-.02	.39	[79]
Perceived Area Social Disorder Problems										
Own	1.50	1.35	-.15	.001		1.36	1.38	+.02	.30	
Rent	1.67	1.58	-.09	.09		1.39	1.38	-.01	.42	
Satisfaction With Area										
Own	2.40	2.66	+.26	.001		2.43	2.48	+.05	.22	
Rent	2.42	2.32	-.10	.19		2.54	2.60	+.06	.24	

*Statistically significant at $p \leq .01$.
Note: One-tailed paired t-tests of significance.

TABLE 30

RELATIONSHIP BETWEEN SELF-REPORTED PROGRAM EXPOSURE
AND MEMBERSHIP IN DEMOGRAPHIC SUBGROUP
(Summary from Tables 11-14)

(All Wave 2 Respondents in Program Area Only)

	Called or Visited Station		Aware of Station		Have Seen Brochures, Pamphlets, or Newsletters		Saw Officer in Past 24 Hours	
Demographic Subgroup	%	[N]	%	[N]	%	[N]	%	[N]
Race								
Black	2	[123]	43	[112]	12	[122]	34	[123]
White	12	[261]	77	[248]	22	[261]	44	[261]
Hispanic	3	[68]	57	[60]	16	[68]	31	[68]
	$p < .002$*		$p < .001$*		$p <$		$p < .04$	
Housing								
Own	26	[247]	80	[235]	25	[247]	44	[247]
Rent	12	[213]	46	[193]	10	[212]	34	[213]
	$p < .001$*		$p < .001$*		$p < .001$*		$p < .03$	

*Statistically significant at $p \leq .01$.
Note: Chi-square tests of significance.

the Wave 2 panel sample in Northline in 1984 while renters were 29 percent of it. Allowing for considerable overlap (71% of blacks are renters) in those two groups, either represents a substantial part of the Northline population which appears not to be deriving benefits from the community station program.*

It is interesting to note that, although Hispanics are little more likely than blacks to report knowing about various elements of the program, they are more likely than blacks to indicate desirable Wave 1-Wave 2 differences in program outcomes (Table 28). These different outcomes may be related to the percentage of persons in either group who are homeowners. Seventy-two percent of Hispanic respondents in Northline were homeowners while only 29 percent of blacks were owners. As we have just seen, homeowners are more likely to experience desirable program effects than are renters. And, of course, the different outcomes may be related to other differences between the two groups.

It is worth considering what effect these differential outcomes for blacks and renters might have on the analysis of program effects for the entire sample. On the whole, blacks and renters in the comparison area were doing better over time relative to blacks and renters in the program area (Tables 28 and 29). On some variables, blacks and renters in the program area registered Wave 1-Wave 2 differences that were in the direction opposite of desired program effects. This condition plus the comparatively

*The community station staff was aware of problems in reaching these groups before being told of these statistical findings in January, 1985, and had already scheduled implentation of a fingerprinting program for children which was to be conducted from a hamburger restaurant run by a black manager and located near apartment complexes where blacks tend to live in Northline. They are hopeful that such programs will raise the visibility of the community station for blacks and renters in the neighborhood.

better condition of blacks and renters in the comparison area would serve to mute the area differences that would be found in either the pooled or the panel regression analyses. It is worth noting that the only two variables for which significant effects were found in the panel data (Fear of Personal Victimization and Perceived Area Personal Crime Problems) are two of the three variables on which blacks in the program area registered significant improvements over time. The price of failing to reach blacks and renters with the program may have been the statistical inability to detect more program effects for the population as a whole. Although we have not done so, it would be useful at a later date to do the regression analyses for whites and owners only, to see whether there were more statistically significant program impacts for these groups.

The possibility that the lack of program effects for blacks and renters may be suppressing findings of overall program impact does not help explain why there were more effects found with the pooled analysis than with the panel analysis. It is possible, of course, that blacks and renters appear to fare better on Wave 1-Wave 2 comparisons in the cross-sectional than in the panel data. This could have happened if discontented blacks and renters were more likely to move out of the program area between Wave 1 and Wave 2 than were contented ones. If they were replaced by other blacks and renters who felt positive about moving into the area, the Wave 1-Wave 2 differences might have suggested (falsely, perhaps) more beneficial program effects for blacks and renters than were detected in

the panel data for respondents who were the same individuals in both waves. We cannot give this argument empirical support from the data we have presented, since we did not analyze Wave 1-Wave 2 differences for subgroups in the cross-sectional sample. Therefore, this is all a digression into

speculation and can only suggest additional analysis at some future time.

SUMMARY

Table 31 summarizes the findings of program effects for both the cross-sectional (area) and the panel samples of residents.

The Cross-Sectional Findings

The area level data suggest desirable impacts of the community station program. For five of nine outcome variables (Fear of Personal Victimization in Area, Perceived Area Personal Crime Problems, Perceived Area Property Crime Problems, Perceived Area Social Disorder Problems, and Defensive Behaviors to Avoid Personal Victimization), residents of the program area were significantly more likely to register desirable program outcomes than were comparison area respondents.

The Panel Findings

The fact of living in the program area appears to be related to significantly lower levels of Fear of Personal Victimization in Area and Perceived Area Personal Crime Problems. Although a comparison of Wave 1 - Wave 2 means for the panel members demonstrates the same patterns found in the area level analysis, the regression analysis of the panel data does not, for any but the above two outcome scales, replicate the cross-sectional findings. The fact that program area blacks and renters in the panel sample did not share most of the program benefits which whites and owners appear to have received may have made it statistically difficult to find program effects for the entire panel sample.

TABLE 31

SUMMARY OF SIGNIFICANT PROGRAM EFFECTS
BY SAMPLE

Outcome Scale	Desirable Program Effect Measured in: Cross-Sectional Sample	Panel Sample
Fear of Personal Victimization in Area	X	X
Perceived Area Personal Crime Problems	X	X
Worry About Area Property Crime Victimization		
Perceived Area Property Crime Problems	X	
Perceived Area Social Disorder Problems	X	
Satisfaction with Area		
Evaluations of Police Service		
Perceived Police Aggressiveness		
Defensive Behaviors to Avoid Victimization	X	

Program Effects for Individuals Who Recall Program Exposure

Correlation analysis was used to examine, for residents in the program area, the relationship between various types of program exposure and the outcome variables.

Recall of brochures, pamphlets, or newsletters was unrelated to any of the outcome measures.

Awareness that the community station was in the neighborhood was significantly and positively related to Evaluation of Police Service.

Recall of visiting and calling the station was significantly and positively related to Perceived Area Social Disorder Problems. That is, persons who recalled this type of exposure were persons who were more likely to perceive social disorder problems in the area than were persons who did not recall such contact. Analysis suggests that persons who call or visit the station may do so precisely because they have and perceive more problems than do persons who do not contact the station.

Recent sighting of an officer in the area is negatively and significantly correlated with Fear of Personal Victimization in Area, Perceived Personal Crime Problems in Area, and Perceived Social Disorder Problems. It is positively and significantly correlated with Satisfaction with Area and with Evaluation of Police Service. Officers in the community station estimate that the station makes it possible for there to be approximately 20-30 percent more patrol activity in the Northline area than was the case prior to the opening of the station.

Program Effects for Individuals in Demographic Subgroups. Respondents in the Northline area who were black and those who were renters experienced the effects of the program differently than did persons in other groups. Only in the case of Property Crime Victimization were the apparent benefits of the program as strong or stronger for blacks as for whites and Hispanics.

On all other outcomes, blacks registered changes between Wave 1 and Wave 2 which were either smaller than the differences for whites and Hispanics or, in two cases, in a direction opposite that of whites and Hispanics and contrary to predicted program benefits. While none of the differences which could be considered indicative of adverse program effects were statistically significant, it is clearly the case that blacks are not receiving program benefits to nearly the same degree as are whites and hispanics.

The same can be said for renters as compared to owners. For two outcomes, renters experienced Wave 1 - Wave 2 differences in an opposite and undesirable direction as compared to owners and, in another case, they simply registered less of a beneficial change than did owners.

Both blacks and renters (among whom there is a substantial overlap) are less aware of different components of the community station program than are demographic subgroups. The station staff has already initiated programs to reach out specifically to these groups.

ANALYSES AND RESULTS FOR NON-RESIDENTIAL RESPONDENTS

It was expected that the community station officers would visit non-residential establishments to inform them of the community station program and that awareness of the station would have similar effects on the non-residential as on the residential respondents. Additionally, it was hypothesized that the presence of the station and its officers would cause Northline business people to believe that their employees and patrons were less concerned about crime and that these people would subsequently report that their business had improved over the project period. If area residents, and especially those who were patrons of the businesses, actually

did feel less concern because of the community station, they then might feel more inclined to shop in the area and business might improve as a result.

In Northline, 93 non-residential establishments were listed on sampling sheets prior to the Wave 1 survey; at the same time, 127 such establishments were listed in Shady Acres, the comparison area. Of these, 45 establishments were selected randomly to be surveyed in Northline at Wave 1, and 41 were surveyed at Wave 2. In Shady Acres, 39 were surveyed at Wave 1 and 44, at Wave 2. Table 32 categorizes the types of establishments surveyed in each area, at each wave. Appendix M provides a detailed listing of the surveyed establishments. Wave 1 and Wave 2 response rates in Northline were 88 and 82 percent, respectively and in Shady Acres were 81 and 88 percent (Table 9). Table 33 reports the differences over time on outcome scales for non-residential respondents in Northline and Shady Acres. The construction of the non-residential scales is described in Appendix D. The scores on the individual items making up each scale are presented in Appendix J. The analysis involves a comparison of mean scores over time within both the program and comparison areas.

Among all of the outcome scales, it was only Fear of Personal Victimization in Area for which the Wave 1 - Wave 2 differences in the program area reached statistical significance. Non-residential respondents in Northline reported significantly less fear of personal victimization at Wave 2 than they did at Wave 1; the difference in Shady Acres was of similar magnitude but was not significant. Given the apparent change in comparison area responses, it might not be appropriate to argue that the change in the program area was due primarily to the impact of the community station. It might, however, be appropriate to suggest that the change in

TABLE 32

TYPES OF NON-RESIDENTIAL ESTABLISHMENTS SURVEYED IN PROGRAM AND COMPARISON AREAS AT WAVES ONE AND TWO*

	Program Area (Northline)		Comparison Area (Shady Acres)	
	Wave 1 (%)	Wave 2 (%)	Wave 1 (%)	Wave 2 (%)
Establishments which are				
Agricultural	0	0	3	0
Construction	2	2	13	14
Financial	4	5	0	2
Governmental	2	2	0	2
Manufacturing	9	5	10	9
Public Organizations	7	7	0	5
Retail	36	37	33	23
Services	31	29	23	30
Transportation	0	0	0	0
Wholesale	9	12	15	16
[N]	[45]	[41]	[39]	[44]

*See Appendix M for a more detailed listing of non-residential establishments in the program and comparison area samples at Wave 2.

TABLE 33

NON-RESIDENTIAL SURVEY RESULTS

DIFFERENCES IN WAVE 1 - WAVE 2 OUTCOME SCORES, PROGRAM AND COMPARISON AREAS

(All Respondents)

		Program Area (Northline)				Comparison Area (Shady Acres)			
Outcome Scale		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Fear of Personal Victimization in Area	(sd)	2.59 (.68)	2.21 (.74)	-.38	.01*	2.45 (.63)	2.12 (.65)	-.33	.025
	[N]	[45]	[41]			[39]	[44]		
Worry About Property Crime Victimization in Area	(sd)	2.01 (.70)	2.05 (.75)	+.04	.50	2.22 (.65)	2.00 (.65)	-.22	.10
	[N]	[45]	[41]			[39]	[44]		
Perceived Area Property Crime Problems	(sd)	2.09 (.92)	1.80 (.87)	-.29	.10	1.95 (.82)	1.75 (.84)	-.20	.25
	[N]	[45]	[41]			[39]	[44]		
Perceived Area Social Disorder Problems	(sd)	1.54 (.50)	1.43 (.43)	-.11	.25	1.33 (.35)	1.42 (.39)	-.09	.25
	[N]	[45]	[41]			[39]	[44]		

-continued-

*Statistically significant at $p \leq .01$.
Note: One-tailed significance t-tests for small samples.

TABLE 33
(Continued)

NON-RESIDENTIAL SURVEY RESULTS

DIFFERENCES IN WAVE 1 - WAVE 2 OUTCOME SCORES, PROGRAM AND COMPARISON AREAS

(All Respondents)

		Program Area (Northline)				Comparison Area (Shady Acres)			
Outcome Scale		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Employee and Patron Concern About Crime	(sd)	2.71 (1.08)	2.21 (1.01)	-.50	.025	2.27 (.90)	1.94 (.85)	-.33	.055
	[N]	[45]	[40]			[39]	[44]		
Business Conditions	(sd)	1.90 (.79)	1.94 (.78)	+.04	.50	2.06 (.64)	2.16 (.62)	+.10	.25
	[N]	[45]	[41]			[39]	[43]		
Satisfaction With Area	(sd)	2.41 (.64)	2.50 (.69)	+.09	.40	2.70 (.57)	2.81 (.57)	+.11	.25
	[N]	[45]	[41]			[39]	[44]		
Police Aggressiveness	(sd)	1.19 (.50)	1.22 (.57)	+.03	.50	1.00 (.00)	1.14 (.52)	+.14	.10
	[N]	[43]	[41]			[35]	[42]		

-continued-

*Statistically significant at $p \leq .01$.
Note: One-tailed significance t-tests for small samples

TABLE 33
(Continued)

NON-RESIDENTIAL SURVEY RESULTS

DIFFERENCES IN WAVE 1 - WAVE 2 OUTCOME SCORES, PROGRAM AND COMPARISON AREAS

(All Respondents)

Outcome Scale		Program Area (Northline) Wave 1	Wave 2	Diff.	Sigf.	Comparison Area (Shady Acres) Wave 1	Wave 2	Diff.	Sigf.
Robbery or Attempted Robbery	[N]	20 [45]	12 [41]	-8	.50	8 [39]	7 [44]	-1	.90
Burglary or Attempted Burglary	[N]	36 [45]	37 [41]	+1	.95	44 [39]	50 [44]	+6	.70
Vandalism	[N]	36 [45]	27 [41]	-9	.70	15 [39]	20 [44]	+5	.70

*Statistically significant at $p \leq .01$.
Note: One-tailed significance t-tests for small samples

both areas could be due to community stations (either in Northline or elsewhere), since awareness of community stations among non-residential respondents increased significantly in both areas (See Table 34). This may have been the result of considerable media attention which was given to at least three community stations in Houston, two of which were within 5 miles of the comparison area.

The two areas responded differently to the question about seeing a police officer recently (Table 34). At Wave 2, program area respondents were more likely than at Wave 1 to say they had seen an officer within the previous week; but at Wave 2, comparison area respondents were more likely than at Wave 1 to say they had seen an officer within the previous 24 hours.

Despite the findings of impact on the Northline area-wide sample of residents, the lack of measured impact on outcome measures for non-residential respondents should, perhaps, not be surprising. There was never any reason to believe fear of crime had reached such levels in any of the Houston research areas that it created problems for area businesses. There was no reason to believe that residents were not going to their local stores because they were afraid to use the streets or because they were afraid a crime might be committed while they were in the business. Indeed, the research areas were not selected because respondents were known to be highly fearful; the areas were matched on demographic characteristics and not because fear of victimization was especially high in any of them. Even so, businesses might have noticed an improvement related to the decreased fear among Northline residents if the businesses were dependent on pedestrian traffic. But in Northline, the businesses are not embedded in the residential neighborhoods as they are in some areas of the city; instead they are on busy perimeter streets which might not appeal to pedestrian

TABLE 34

PROGRAM EXPOSURE:
PERCENTAGE OF NON-RESIDENTIAL RESPONDENTS RECALLING ASPECTS OF THE PROGRAM,
PROGRAM AND COMPARISON AREAS

(All Respondents)

		Program Area (Northline)				Comparison Area (Shady Acres)			
Type of Exposure		Wave 1	Wave 2	Diff.	Sigf.	Wave 1	Wave 2	Diff.	Sigf.
Aware of Community Station	[N]	0 [45]	78 [40]	+78	.001*	0 [39]	22 [40]	+22	.01*
Have Seen Brochures, Pamphlets, Newsletters	[N]	26 [43]	42 [41]	+18	.20	13 [39]	25 [44]	+12	.20
Have Seen Police Officer in the Area:									
more than 1 week ago		22	5	-17		13	23	+10	
within past week		31	46	+15	.10	44	25	-19	.20
within past 24 hours		47	49	+ 2		44	52	+ 7	
	[N]	[45]	[41]			[39]	[44]		

*Statistically significant at $p \leq .01$.
Note: Chi-square significance tests for small samples.

traffic. In any Houston neighborhood, the overwhelming dependency of Houstonians on the automobile for even short trips may make businesses less vulnerable to the fear levels of their patrons.*

Summary

There was one outcome for which non-residential respondents in the program area registered a statistically significant Wave 1 - Wave 2 difference; at Wave 2 program area respondents were significantly less fearful of Area Personal Victimization than at Wave 1.

Since there was no reason prior to the existence of the community station to believe that fear and worry were keeping local residents from patronizing local business, there may have been no justification for expecting the program to have much effect on non-residential respondents.

CONCLUSIONS

This evaluation of the Northline Community Police Station which was conducted in Houston in 1983 and 1984 has concluded that the program had beneficial, statistically significant effects for the area as a whole and, to a lesser extent, for a panel of individuals who resided in the program area before and after the program was conducted.

The cross-sectional, area-level analyses found that living in the program area and being interviewed after program implementation were negatively and significantly associated with scale scores which measured:

- o fear of personal victimization in the area,
- o the perception that area personal crime is a big problem,

*This more probably is the case for businesses in small shopping centers or on commercial strips than for those businesses in large shopping centers where shoppers may fear for their own safety, or for the security of their cars, in the parking lots.

- o the perception that area property crime is a big problem,
- o the perception that area social disorders are a big problem, and
- o the use of defensive behaviors to avoid personal victimization.

The panel analyses which were based on interviews with the same persons at both waves of the survey provided a more reliable test of program effects, since it was possible to use pre-intervention scale scores to control statistically for other factors which might be related to measured changes. These analyses found for the group of individuals in the panel, statistically significant, negative relationships between residence in the program area and scale scores which measured:

- o fear of personal victimization in area, and
- o the perception that area personal crime is a big problem.

Individuals in the panel who reported awareness of the program in the form of recent sightings of police officers in the area appeared to experience a number of program benefits, compared to persons who did not recall such exposure; these included significantly lower scores on scales which measured:

- o fear of personal victimization in area,
- o perceived area personal crime problems, and
- o perceived area social disorder problems.

Compared to persons who did not recall this type of exposure, these persons had significantly higher scores on scales which measured:

- o satisfaction with area, and
- o evaluation of police service.

There were no significant effects associated with recalling brochures, pamphlets or newsletters in the area, and the only significant association between being aware that the station existed in the area and an outcome

variable was with Evaluation of Police Service; persons who knew of the station gave police higher ratings than those who did not know of the station. Recall of visiting and telephoning the station tended to be associated with undesirable scores on outcome variables, probably because the people who contacted the station were more likely to have been victims of crime than were those who made no contact.

Subgroups of residents within the panel who were black or were renters did not share in the program's apparent benefits. When the Wave 1 - Wave 2 differences in their outcome scores were in the desired direction, they were smaller (except in the case of Property Crime Victimization for blacks) than the differences registered by whites and Hispanics or by owners. In some cases blacks experienced differences which were not statistically significant but which were in the opposite direction of those experienced by whites and Hispanics. In one case renters registered an undesirable Wave 1 - Wave 2 difference which was in the opposite direction from the difference registered by owners.

There is a substantial overlap between the blacks and the renting population in Northline, and the community station officers currently are implementing special programs in an attempt to reach these groups.

Non-residential respondents in the program area had significantly lower scores on Fear of Personal Victimization in the Area at Wave 2 than at Wave 1. Otherwise, there were no program effects for these respondents.

RECOMMENDATIONS

Given the conclusions reached in this report, we would recommend that other departments which perceive a need to help citizens feel more secure in their neighborhoods consider establishing community police stations similar to the one which has been described and evaluated here. Because the Northline Park Police Community Station is a complex package of personnel and program components, it is impossible to use evaluation data to specify those aspects of the program which it would be most critical to replicate. Based on our own familiarity with the station, we would suggest that the following elements be given special attention:

1. Personnel. The intelligence, integrity, creativeness, gregariousness, enthusiasm, and willingness to work of the community station officers and their staff were perhaps the most critical elements of the operation. It is probably the case that many different types of personality combinations could do the job well (if somewhat differently), but a key characteristic for any community station officer would be the ability to talk with people. Much of the success in Northline seems attributable to the persuasiveness and infectious enthusiasm of the principal station officer whose verbal skills were essential to the communication of these qualities. While at least one of the Northline officers had all the characteristics mentioned here, other staff members either shared or complemented these traits. The primary officer was a good judge of people and purposely chose other staff members who would be better at some types of program efforts that he perceived himself to be.

Given the nature of their work, the station staff members must be highly self-motivating and capable of working effectively without close

supervision. Some commanders might be tempted to "bury" a lazy street officer in a storefront operation, but such an assignment would bury the station at the same time.

2. Personnel involvement. This station was created by the two officers who currently run it. They found the space, moved the furniture, hung the pictures, advertised themselves to the community, designed the programs, and implemented them. They had no blueprint to follow--no directions from headquarters. As a result of their efforts and the community's enthusiastic response to the opening of the station, they feel proudly proprietary of it. This fact may provide crucial motivation behind the energy they commit to the station. We have no experience with turnover of key personnel in such an operation but suspect it would be important to devise ways of giving new station personnel a sense of ownership of already established programs.

3. Management. This was a happy circumstance in which a very good patrol officer was backed by a very good captain. The captain had the confidence to give the officer a great amount of discretion in developing the station operation and the commitment to provide whatever support was necesssary. While such a successful pairing of program and people need not be unique, neither will it be the rule in large organizations. One uncaring captain could doom several community station operations to failure, either by not making a careful choice of station personnel or by not providing sufficient support for the station operation. Substantial management support is neeeded, especially in the start-up stage as space and furnishings must be found, contracts negotiated, work schedules devised, and programs developed. Given the demands a new station would put on management resources, it is probably a good idea to give each manager the

responsibility for initially starting only one such operation in his or her district. That one could be given all the attention and resources necesssary to make it a model for later stations in the area.

When the department command staff has decided that the first station is adequate to serve as a good model for others in the district, steps could then be taken to develop the additional stations.

4. Supervision. As indicated in the report, this station worked well with a minimum of supervision. The station personnel did not see their sergeant and lieutenant on a regular basis, although they felt they could call on them when they needed assistance. Such a loose structure might not work well in some situations; in this case, it may have succeeded in part because of the autonomy enjoyed by creative and enthusiastic patrol officers. However, if the station officer needed more supervision, or if the captain had several community stations to attend to, more consideration would have to be given to the development of a supportive supervisory structure for the stations. (The Detroit Police Department appears to have worked out a satisfactory arrangement for the management and supervision of its 50 storefront stations.)

5. Programs. There is no way of knowing which of the many Northline programs were most effective in producing the positive outcomes we have attributed to the station. Indeed, it may well be the mix of programs which is effective. In any case, it seems unlikely that there is a "package" of storefront programs which could be transferrred to another station. All of the programs implemented in the Northline area may be worth consideration for use elsewhere, but the success of community station programs likely depends on their match with the needs of the community. The Northline

officers designed their programs after they were familiar with the community.

6. Familiarity with the Community. It appears that getting to know both the characteristics of the area and many of the people who live in it have been important to the success of the Northline station. While it was important to the successful establishment of the station, it is probably also important to the effectiveness of individual officers. To get the program started, the officers who opened the station had to make a lot of community contacts. Officers who will be assigned to the station later will not have the same motivation to learn the community and will have to be encouraged to do so, perhaps through assignment to programs which will necessitate meeting people personally. A program of door-to-door contacts such as that tested in the Golfcrest neighborhood in Houston might be one way of familiarizing the new officer with the neighborhood (see Wycoff and Skogan, 1985).

7. Station Atmosphere. It is important that the station give the impression that it is a place intended primarily to accomodate citizens rather than police officers. The Northline station accomplished this with its open front, comfortable furnishings, and ready welcome for visitors. The only time a citizen was observed to hesitate about entering was when three officers were talking together. Citizens must not be given the feeling, common to traditional police stations, that they are intruding upon "police business." Any effort to combine a police substation, with all its personnel and accompanying paraphenalia, with a storefront operation should reserve a front room of the office, and a front parking lot, solely for use by citizen visitors.

8. Publicity. The community station cannot be effective unless residents know about it, and every means should be made to publicize the existence of the station and its program. The repeated used of large numbers of fliers distributed by the community station staff probably was effective as a means of publicizing the station's opening and its later programs. Good coverage in the local, community paper also was useful.

9. Community involvement. The station staff made good use of existing community institutions as a means of drawing the community into the station program. A local church was used for the monthly meetings which drew crowds too large for the station to accommodate. Neighborhood civic groups were contacted and used as "organizing agents" for the monthly meetings. (The one which turned out the most members for the meeting received a certificate from the station officers.) This strategy appears to have worked well for the whites and home owners who tend to be the members of these groups, but other approaches will have to be developed for groups (in this case, blacks and renters) who are not already affiliated with neighborhood organizations.

10. Salesmanship. The officers had to sell the program to individuals and groups whose support they needed. They did this, in part, through publicity and their own enthusiasm. But they also appear to have done it by offering others the chance to be involved in an adventure. The patrol officer who managed the station rarely asked businesses or organizations for help; rather, he deliberately gave them the "opportunity to do something for the neighborhood." The skills of a good salesperson were in evidence.

Finally, we would recommend that any department considering the development of a community station program take a first-hand look at one already in successful operation. Exemplary storefront stations can be

observed in Houston, Texas; Newark, New Jersey; Santa Ana, California; Detroit, Michigan and perhaps in other cities we have yet to visit. Video tapes or slide programs are available from the Detroit, Houston and Santa Ana departments can provide some sense of the nature of the operation. All of these programs will be described in Skolnick and Bayley (forthcoming) and the Detroit program is described also in Holland (1985). There is, however, no effective substitute for talking directly to the officers who make it work.

A POSTSCRIPT

After hearing about the programs which the Northline Police Community Station staff had developed for neighborhood residents, an official visitor asked Officer Robin Kirk what effect the station had had on him.

"It has given me the opportunity to be nice to people," he said. His partner nodded quick agreement.

Several months later, in the course of "being nice to people," these officers hosted an ice cream social for about sixty neighborhood children--blacks, whites and Hispanics. During the party, an eleven year old black male drew one of the officers to the side and told him about a local fencing operation. As a result of the information, the Houston police recovered $10,000 worth of stolen property.

REFERENCES

Bayly, H.P. 1973. "Chesapeake's Police--Community Relations Mobile Office Concept." Law and Order, February.

Crime Control Digest. 1973. "Birmingham, Alabama." August 24, p. 3.

Fink, Joseph and Lloyd G. Sealy. 1974. The Community and the Police--Conflict or Cooperation? New York: John Wiley & Sons.

Holland, Lawrence H. 1985. "Police and the Community: The Detroit Ministation Experience." FBI Law Enforcement Bulletin, February.

Pate, Antony M., Mary Ann Wycoff, Wesley G. Skogan and Lawrence W. Sherman. 1985. Reducing the Fear of Crime: An Overview of the Houston and Newark Experiences. Washington, D.C.: Police Foundation.

Skolnick, Jerome H. and David Bayley. Forthcoming. Police Innovation.

Tornatzky, Louis G., Joseph M. Wisenbake, Robert L. Green, George W. Logan, Harry P. Pachon, John H. Schweitzer, and Thomas W. Tenbrunsel. 1978. "The Detroit Mini-Station Program: An Evaluation." Journal of Police Science and Administration, Vol. 6, Number 2.

Williams, Marden E. 1973. The Portsmouth Police Story. New York: Exposition Press.

Wycoff, Mary Ann and Wesley G. Skogan. 1985. Citizen Contact Patrol: The Houston Field Test. Technical Report. Washington, D.C.: Police Foundation.

POLICE COMMUNITY STATIONS:

THE HOUSTON FIELD TEST

APPENDICES

APPENDIX A

THE FEAR REDUCTION PROGRAM

THE FEAR REDUCTION PROGRAM

The program described in this report was one of several strategies tested as part of a Fear Reduction Program which was carried out in Houston, Texas, and Newark, New Jersey, in 1983 and 1984. The police departments in these two cities were invited to design and implement strategies to reduce fear of crime. The Police Foundation with funding provided by the National Institute of Justice (NIJ) provided technical assistance to the departments during the planning phase of the program and conducted rigorous evaluations of the strategies which were developed. NIJ also supported a dissemination program, in which the National Conference of Mayors, the Police Executive Research Forum, the National Organization of Black Law Enforcement Executives, and the National Sheriffs' Association sent representatives to observe the strategies in action and report on them to their members. The questions they asked and the written observations they shared with the Houston and Newark departments provided constructive criticism of the program implementation process.

Program Objectives. The overall goal of the program was to find new ways to help citizens gain a realistic picture of the crime problems facing their neighborhoods, reduce excessive fear of crime, encourage greater positive police-citizen cooperation in crime prevention, spark increased awareness among people of the steps which they could take to reduce crime, and help restore their confidence in the police and faith in the future of their communities.

In each city a number of different strategies were developed which addressed these issues. Previous research has found crime to be only one of the causes of fear and declining community morale, so those strategies addressed a broad spectrum of issues. Some focused upon reducing physical disorder, including trash and litter, abandoned buildings, graffiti, and deterioration. Others targeted social disorder, including loitering, harassment, disorderly street behavior, and violations of rules of conudct on mass transit. A number were designed to increase the two-way flow of information between citizens and the police. From the police side this included developing new mechanisms to gather information about community problems often of a seemingly "nonpolice" nature, assisting citizens in organizing to address such problems, and testing new mechanisms to "spread the word" about community programs and the things that individual citizens could do to prevent crime.

Site Selection. Houston and Newark were selected as examples of two different types of American cities. Houston is a relatively young city, with low population density and a developing municipal infrastructure, while Newark is a mature city with high population density and no significant growth. Because they are so different, some of the strategies they developed for the Fear Reduction Project were unique, but most addressed the same underlying problems and many were surprisingly similar. The two cities were also selected because of the capacity of their police departments to design and manage a complex experimental program.

Within each city, "matched" neighborhoods were selected to serve as testing grounds for the strategies. Because Newark has a predominantly black population, five physically similar areas with a homogeneous racial composition were selected. The heterogeneous nature of Houston called for the selection of neighborhoods with a population mix more closely resembling that of the city as a whole. In both cities the selected areas were approximately one square mile in size, and physically separated from each other. Site selection was guided by the 1980 Census, observations of numerous potential sites, and extensive discussions with police crime analysts and district commanders in the cities.

The Task Force Planning Process. In both cities, the program planning process had to design programs which met two constraints: they could be carried out within a one-year time limit imposed by the National Institute of Justice, and they could be supported entirely by the departments--there was no special funding available for these projects.

The planning processes themselves took different forms in the two cities. In Houston, one patrol officer from each of the four participating police districts was assigned full time for two months to a planning Task Force, which was headed by a sergeant from the Planning and Research Division. A civilian member of the Planning and Research Division also served on the Task Force. During the planning period the group met regularly with staff members of the Police Foundation to discuss past research related to the project. They also read studies of the fear of crime, and visited other cities to examine projects which appeared relevant

to fear reduction. By April, 1983, the group had formulated a set of strategies which they believed could be implemented effectively in Houston and had the potential to reduce citizen fear.

Then, during April and May the plan was reviewed and approved by Houston's Chief of Police, the department's Director of Planning and Research, by a panel of consultants assembled by the Police Foundation, and by the Director of the National Institute of Justice.

In Newark, the Task Force included several members of the police department as well as representatives of the Mayor's office, the Board of Education, the New Jersey Administrative Office of the Courts, the Essex County Courts, the Newark Municipal Courts, the Essex County Probation Department and the Graduate School of Criminal Justice of Rutgers University. The group met once or twice a week for a month to discuss the general problems of fear, then broke into several committees to consider specific program possibilities. In April, 1983 the committees submitted lists of proposed programs to the entire task force for approval. These programs were reviewed by the panel of consultants, assembled by the Police Foundation and by the Director of the National Institute of Justice.

Technical Assistance by the Police Foundation. The Police Foundation provided the departments with technical assistance throughout the planning stages of the Fear Reduction Project. Its staff assisted the departments in locating potentially relevant projects operating in other cities, accumulated research on fear and its causes, arranged for members of the Task Forces to visit other departments, and identified consultants who

assisted the departments in program planning and implementation. This activity was supported by the National Institute of Justice.

Strategies Developed by the Task Force. In Houston, strategies were developed to foster a sense that Houston police officers were available to the public and cared about individual and neighborhood problems. Some of the strategies also were intended to encourage citizen involvement with the police and to increase participation in community affairs. The strategies included community organizing, door-to-door police visits, a police-community newsletter, recontacts with crime victims, and a police-community storefront office.

The Newark strategies were directed at the exchange of information and the reduction of social and physical disorder. The police strategies included door-to-door visits, newsletters, police-community storefronts, and the intensified enforcement and order maintenance. In association with the Board of Education, recreational alternatives to street-corner loitering were to be provided. With the cooperation of the courts system, juveniles were to be given community work sentences to clean up deteriorated areas; with the assistance of the municipal government, abandoned or deteriorated buildings were to be demolished and delivery of city services intensified.

Implementation of the Strategies. Responsibility for implementing the strategies in Houston was given to the planning Task Force, which then consisted of a sergeant, four patrol officers, and a civilian member of the department. Each of the patrol officers was directly responsible for the

execution of one of the strategies. They were joined by three additional officers; two from the Community Services Division were assigned to work on the community organizing strategy, and another was assigned to work on the door-to-door contact effort. During the implementation period, two more officers were assigned to the victim recontact program and another to the community organizing strategy.

During the nine-to-twelve month period that the strategies were operational, the original Task Force members assumed total responsibility for implementation. They conducted much of the operational work themselves and coordinated the few other officers from each patrol district who were involved in program implementation. When implementation problems required swift and unique solutions (a condition common during the start up period), the Task Force officers worked directly with the district captains and/or with the sergeant from Planning and Research who headed the Task Force. This sergeant would, in turn, take direct action or work with the Director of Planning and Research or with one of the Deputy Chiefs over the patrol districts and/or with the Assistant Chief in charge of Operations. The amount of responsibility placed on the task force members had some of the disadvantages which can exist when the traditional chain of command is circumvented, but it had the advantage that Task Force members felt ownership of, and pride in, the program they had designed.

In Newark, responsibility for implementing each program component was assigned to one or more officers, who in turn were monitored by the program coordinator and his assistant. Those officers working in particular patrol divisions--those in the community police center and those making door-to-

door contacts--reported formally to the division Captain and informally to the program coordinator, who, at the beginning of the program was still a Lieutenant. This somewhat ambiguous reporting structure created some delays, lack of coordination and misunderstanding during the early months of program implementation; these problems were largely overcome with the cooperative efforts of the parties involved. Officers who implemented the other programs reported directly to the program coordinator, a system which worked effectively throughout the program.

The Overall Evaluation Design. All of the strategies tested in Houston and Newark were to be evaluated as rigorously as possible. Two of them--the victim recontact program in Houston and police-community newsletters in both cities--were evaluated using true experiments, in which randomly selected groups of citizens were either contacted by the program or assigned to a noncontacted control group. The other strategies, including the one reported here, were area-wide in focus, and were evaluated using pre- and post-program area surveys. Surveys were also conducted in a comparison area, in which no new programs were implemented, in each city.

APPENDIX B:

THE NORTHLINE COMMUNITY STATION CRIME INFORMATION PROGRAM

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THE NORTHLINE COMMUNITY STATION CRIME INFORMATION PROGRAM

A report prepared by:
Officer Mike Mikeska
Northline Community Police Station
Houston Police Department
November, 1984

Officers assigned to the Northline Community Station, 7208 Nordling, set up a crime analysis section so major crimes in the area could be monitored more closely. Officers use keymap blowups of the beat and color coded dots to show where crimes have occurred. The daily crime report is produced on the computer by the Community Service Officer and he is responsible for identifying any patterns or suspicious vehicles.

In January 1984 the average number of burglaries was running about 18-20 for 6B20's beat. By late June, the community station officers noticed that the far northeast section of the beat was experiencing an increase in residential burglaries. Checking daily reports, they found repeated references to three Latin American males, driving Ford pickups of various colors, and seen breaking into houses between approximately 8 a.m. and 2:30 p.m. The suspects' M.O. was to drive through the area, pick a house, pull into the driveway and while two suspects would pry open the front door, the driver would wait in the truck. The driver usually would give the suspects in the house about 5 minutes before honking the horn; the two accomplices would then take to the truck whatever they could carry in one trip. They typically stole televison sets, microwave ovens, weapons and, occasionally, household furniture.

Officers from the Community Station began patrolling that area more frequently and also began working overtime in an effort to apprehend the suspects. They informed other officers who worked the beat of the problem. As they rode in the beat, they would tell residents in the most frequently victimized area what to be looking for.

The Station officers began getting information from citizens about suspicious vehicles and they attempted to check out each report. By mid-July, officers already had received approximatley 20 burglary reports for the month, all of which involved three Latin males in Ford pickups. The plates on the vehicles were generally stolen, and the vehicle was usually found to have been stolen.

Station officers had been meeting each month with area civic clubs and they decided to provide a "controlled" information handout to each civic club president with the instruction to give it only to people known to the civic leaders. Officers planned to provide the club presidents with updated information on vehicles and locations and to urge people to continue calling if they saw anything suspicious.

The telephone business at the Community Station increased about 50 percent and officers found themselves busy running calls on suspicious vehicles and incidents. They were getting an average of 3 reports of burglaries or attempted burglaries on each weekday. They received approval from their supervisors at the North Sheperd Station to use several unmarked cars for surveillance work. At the July monthly community meeting officers gave out information about the crimes to the attending public which consisted mainly of residents living in the 6B20 beat. By that time, the burglary count for July had risen to 37 and in several cases, the suspects had shot at house occupants or witnesses in their attempts to get away.

Community Station officers began working overtime three days a week, patrolling the area from 7:00 a.m. until 4:00 p.m. While working surveillance, officers made several arrests for auto thefts and they also cleared approximately 15 other cases for burglaries. During the month of August, 25 cases of burglary were logged which involved three Latin suspects and stolen Ford pickups. Community Station officers went back to their supervisors and asked for additional manpower in the victimized area. The North Sheperd Sub-Station captain assigned the crime analysis section which consisted of four officers plus units that rode 6B20's beat on day shifts and evenings. Officers also obtained three "cool cars" and began saturating the area.

The Community Station officers received information from Northeast Sub-Staton--which works on a different police channel from the North Sheperd Station and which is separated by railroad tracks from the far east side of 6B20's beat--that they too were having a large number of burglaries, apparently committed by three Latin males in Ford pickups.

Also, the Harris County Sheriff's Department had an officer visit the Community Station to discuss the Sheriffs' Department's evidence that three Latins were responsible for approximately 100 county burglaries which had occurred primarily on the weekends.

The Community Station officers distributed more bulletins and also went to rollcalls at the substation to spread the information. Toward the end of August the burglary count reached 50. Officers were unable to lift fingerprints in any of the cases and had no names of suspects. The walk-in and call-in traffic at the Community Station was the highest it had ever been as citizens offered information on the suspects. While officers saturated the area during this period, many cases of various types were cleared, but the three suspects were not apprehended.

On Sunday, October 2, 1984 at approximately 10:00 a.m., the Houston Police Department dispatcher received a call from a citizen in the hardest hit part of the beat who reported the license plate number of a Ford pickup containing three Latin males. The day shift units in the area were alerted since the Community Station was closed on Sunday. The dispatcher ran the plates and the truck came back stolen. The dispatched officers rode in the area awhile before spotting the truck, at which time they were able to apprehend all three suspects and recover stolen property that had been taken about an hour earlier in two burglaries in the county.

The suspects were handled by sergeants in the Burglary and Theft Division at North Sheperd, and out of the three suspects, only one would cooperate. He pointed out the houses that he had broken into but would not tell who he had been with or where the property was sold. All three suspects had been released from Texas Department of Corrections around February, 1984, and had started working together in June. One was on parole until 2001; another, until 1998 and the third, until 1989. The one suspect admitted that they had to steal about $6,000 worth of property a day to make $600 clear to support a $200 a day herion habit, each. The suspects were each filed on for numerous cases of burglary and were transported to the county jail with no bonds.

Officers at the Community Station feel that without the help from people in the community, the suspects in these cases might not have been caught. The participation of the whole community really overwhelmed officers at the Station and for the first time officers were able to see

the reality of one of the underlying goals of the Community Station. Officers feel that the barrier between "us" and "them" has been broken, at least in this section of Houston known as 6B20's beat and Northline Park Community Station.

(signed, Officer Mike Mikeska)

APPENDIX C:

SCALING THE RESIDENTIAL SURVEY DATA

SCALING THE RESIDENTIAL SURVEY DATA

This report describes how analytic scales were developed for the Fear Reduction Project Evaluation's panel sample surveys. These scales measure the central outcomes of interest in this project: perceptions and fear of crime, evaluations of the quality of police service, assessments of neighborhood problems, residential satisfaction, and crime related behaviors. Each measure is a composite of responses to two or more items which were included in the surveys to tap those dimensions. Such multiple-item scales yield more reliable, general, stable measurements of peoples attitudes and experiences than do responses to single survey questions.

CRITERIA

In each case the goal was to arrive at scales with the following properties:

1. Responses to each item should be consistent (all positively correlated). This was established by examining their intercorrelations, after some items were rescaled for directionality of scoring. A summary measure of the overall consistency of responses to a set of items is Cronbach's Alpha, which is an estimate of their joint reliability in producing a scale score for an individual.
2. Item responses should be homogeneous, or single-factored (indicating they all measure "the same thing"). This was established by a principle components factor analysis of the items hypothesized to represent a single dimension. The items were judged homogeneous when

they all loaded only on the first factor (their "principle component").

3. The items should share a substantial proportion of their variance with the hypothesized underlying dimension (perhaps precluding them from being significantly responsive to other conditions or events). This was demonstrated in two ways. Good items were those which evidenced a high correlation with others in the set. This was measured by their item-to-total correlation ("corrected" by excluding them from that particular total). Items were judged useful when, in a principal components factor analysys, the factor on which they fell accounted for a high proportion of their total variance (they had a high "communality").
4. The items on their face should seem related to a problem which is an object of one or more of the demonstration programs (suggesting they could be responsive to those interventions). Things which "scale together" based upon their naturally occurring covariation are not necessarily all useful, if they all should not be affected by the program of interest. The substantive utility of individual items cannot be statistically demonstrated; it is, rather, an argument.

The statistical analyses described above were done using SPSS-X. That system's RELIABILITY procedure generated inter-item correlations, calculated item-to-total correlations, and estimated a reliability coefficient (Cronbach's Alpha) for each set of item responses. FACTOR was used to extract the principal component from sets of items hypothesized to be unidimensional.

The scales were first developed using a random subset of the large Wave 1 survey data set. Then, all conclusions were confirmed and the scaling information presented below was calculated using the entire sample. The final scaling procedures then were duplicated separately for a number of subgroups, to examine whether or not things "went together" in the same fashion among those respondents. The scales were developed using unweighted data.

FEAR OF PERSONAL CRIME

Eight items were included in the survey to represent this general construct. Analysis of the first wave of the data indicated one should be dropped, and that the remaining set was two-factored.

The original items asked about the extent to which stranger assault, rape, and robbery were problems in the area, how worried the respondents were about being robbed, attacked, or being at home when someone broke in ("home invasion"), how safe they felt out alone in the area at night, and if there was a place nearby where they were afraid to walk.

An examination of correlations among these items indicated that worry about home invasion was only moderately correlated with the others, and excluding it from the group would improve the reliability of the resulting scale.

Excluding this item but using all of the others would yield an additive scale with a reliability of .78. However, a factor analysis of the remaining set suggested they were not unidimensional. Rather, three items asking about "how big a problem" specific personal crimes were <u>in the area</u> tapped a different dimension than those asking people how afraid they were and how worried they were about <u>personally</u> being victimized by the same types of crime. These

respondents seem to distinguish between personal risks and their general assessments of area problems. The two clusters of items loaded very distinctly on their unique factors, with high loadings.

Based upon this analysis, the following items were combined to form the "Fear of Personal Victimization in Area" measure:

Q34: How safe would you feel being outside[1] alone in this area at night? (very safe to very unsafe)

Q35: Is there any place in this areas where you would be afraid to go alone either during the day or at night? (yes or no).

Q43: [How worried are you that] someone will try to rob you or steal something from you while you are outside in this area? (very worried to not worried at all)

Q44: [How worried are you that] someone will try to attack you or beat you up while you are outside in this area? (very worried to not worried at all)

These items were added together to form a scale with a reliability of .72. The average item-total correlation of its components was .54, and the first factor explained 56 percent of the total variation in response to the items. Responses to Q35 were dichotomous, and as a result the item had only about two-thirds of the variance of Q43 and Q44, and one-half that of Q34. If such disparities are extreme, the items making up a simple additive scale will have a differential impact upon its apparent content. However, in this case there was no meaningful difference between the simple additive alpha and the alpha for a standardized scale score which equated the variances of its component parts. As a result, a simple additive scale score will be employed. A high score on this scale indicates respondents are fearful.

1. A few people who responded to Q34 that they "never go out" were rescored as "very unsafe" (see below).

The remaining items were combined to form the "Perceived Area Personal Crime Problems" scale:

[...please tell me whether you think it is a big problem, some problem, or no problem here in this area?]

Q114: People being attacked or beaten up by strangers?

Q117: People being robbed or having their money, purses or wallets taken?

Q121: Rape or other sexual assaults?

Because responses to these items all were measured on the same three-position set of response categories, the scale scores were generated by simply adding them together. As they had about the same mean and standard deviation (the rape question was somewhat lower on both), the items all contribute about equally to the total score for each individual. The factor lying behind these items accounted for 65 percent of their total variance. The reliability of the scale is .73. A high score on this issue indicates that these personal crimes were seen as "big problems in the area."

WORRY AND PERCEPTIONS ABOUT PROPERTY CRIME VICTIMIZATION IN AREA

There were five candidate items in this cluster. Three asked "how big a problem" burglary, auto theft, and auto vandalism were in the area, and two "how worried" respondents were about being victimized by burglary and auto theft or vandalism. Other research on concern about victimization or assessments of risk (see Baumer and Rosenbaum, 1981) indicates the distinction between personal and property crimes is a fundamental one, and that perceptions of the two are best gauged separately. (Auto vandalism was experimentally included among a set

of "disorder" items which included other vandalism activities, but empirically it belongs in this cluster of more serious crimes; (see below).

Although all five items clustered together, the following items were combined to for the "Worry About Property Crime Victimization in Area" scales:

Q45: [How worried are you that] someone will try to break into your home while no one is there? (Not worried at all to very worried)

Q47: [How worried are you that] someone will try to steal or damage your car in this area? (Not worried at all to very worried)

These two items were combined to form a scale. They were intercorrelated .43 and formed an additive scale with an Alpha of .60. Because the items employed similar three-category responses and they had about the same means and standard deviations, they were scaled by adding them together. A high score on this scale identifies respondents who are very worried about property crime.

The remaining three items were combined to form another scale, "Perceived Area Property Crime Problems" which, although highly correlated with the previously discussed "Worry about Property Crime" scale, omits, for theoreticial reasons, all emotive references such as "worry" or "fear." The average correlation among these items is .53; the Alpha was .77. The items were:

[...please tell me whether you think is a big problem, some problem, or no problem here in this area.]

Q68: People breaking in or sneaking into homes to steal things?

Q70: Cars being vandalized--things like windows or radio aerials being broken?

Q71: Cars being stolen?

PERCEIVED AREA SOCIAL DISORDER PROBLEMS

This is a concept introduced by Hunter (1978) (as "incivility"), and elaborated by Lewis and Salem (1981) and Skogan and Maxfield (1981). Many of its measures were first developed by Fowler and Mangione (1974). It has great currency in the research literature on the fear of crime. Recently, Wilson and Kelling (1982) have expanded its theoretical significance by linking disorders explicitly to the generation of other serious crimes, and lent it some controversy by recommending that disorders become the direct object of aggressive, neighborhood-based policing. The level of disorder has been shown to have direct consequences for aggregate levels of fear, community cohesion, and residential stability, in urban residential neighborhgoods and public housing projects (Skogan, 1983).

Eight candidate items were analyzed as part of the scale development process. They all focused upon deviant behaviors of varying illegality and seriousness, most of which take place in public locations. They were:

[...please tell me whether you think it is a big problem, some problem, or no problem at all.]

Q18: Groups of people hanging around on corners or in streets.

Q20: People saying insulting things or bothering people as they walk down the street?

Q24: People drinking in public places like on corners or in streets?

Q66: People breaking windows of buildings?

Q67: Graffiti, that is writing or painting on walls or windows?

Q113: Gangs?

Q120: Sale or use of drugs in public places?

Responses to these eight items were all positively intercorrelated (mean r=.40), and they had roughly similar means and variances. A scale "Perceived Area Social Disorder Problems," was formed by adding together responses to them. The principal component factor for these items explained 48 percent of their total variance. This scale has a reliability of .85. A high score on this scale points to areas in which these are seen as "big problems."

An additional six items included in the survey could have been included in a disorder scale. They were:

Q23: Truancy, that is, kids not being in school when they should be?

Q72: The wrong kind of people moving into the neighborhood?

Q119: Pornographic movie theaters or bookshops, massage parlors, topless bars?

Q116: Prostitutes?

Q19: Beggars or panhandlers?

Responses to the these items were consistent with the others, but were excluded from the scale because they probed problems which were not explict foci of any program.

SATISFACTION WITH AREA

Satisfaction with the area was probed by two questions:

Q5: In general, since July of 1982, would you say this area has become a better place to live, gotten worse, or stayed about the same? (better, worse, or about the same)

Q14: On the whole, how do you feel about this area as a place to live? Are you... (very satisfied to very dissatisfied?)

Responses to these two questions were correlated .36, and had similar variances. Added together they formed a scale, "Satisfaction with Area," with a reliability of .50, good for a two-item measure. A high score on this scale identifies respondents who think their area is a good place to live, and has been getting better.

EVALUATIONS OF POLICE SERVICE AND AGGRESSIVENESS

A number of questions in the survey elicited evaluations of police service. Some items focused upon recent, specific police-citizen encounters which were identified in the survey, while others were "generic" and referenced more global opinions. Ten generic items were included in the questionnaire, and they revealed two distinct clusters of opinion: one referring to proactive, aggressive police action, and the other to the quality of services provided citizens and anticipated police demeanor in police-citizen encounters. A question referring to the strictness of traffic law enforcement was inconsistently correlated with most of the items, and had a low (about .10) correlation with the other measures of police aggressiveness; it was excluded completely.

Two general items consistently factored together, evidencing response patterns which differed from others focusing upon the police. Added together, they form a "Police Aggressiveness" measure. They are:

> [...please tell me whether you think it is a big problem, some problem, or no problem here in this area.]
>
> Q21: Police stopping too many people on the streets without good reason in this area?
>
> Q26: Police being too tough on people they stop?

These two items were correlated +.50, and when factor analyzed with the remaining set (see below) formed a significant second factor with loadings of .83 and .86, respectively. They had about the same mean and standard deviation, so they were scaled by adding them together. The scale has a reliability of .66, good for a two-item measure. A high score on this scale identifies people who think these are "big problems."

The remaining items also formed a distinct factor, and make up a second additive measure, "Evaluation of Police Service." They are:

Q50: How good a job do you think [police] are doing to prevent crime? (very good to very poor job)

Q51: How good a job do you think the police in this area are doing in helping people out after they have been victims of crime? (very good to very poor job)

Q52: How good a job are the police in this area doing in keeping order on the streets and sidewalks? (very good to very poor job)

Q57: In general, how polite are the police in this area when dealing with people? (very polite to very impolite)

Q58: In general, how helpful are the police in this area when dealing with people around here? (very helpful to not helpful at all)

Q59: In general, how fair are the police in this area in dealing with people around here? (very fair to very unfair)

The simple additive combination of these items has a reliability of .86, and they were correlated an average of .56. They were single factored, and their principal factor explained 60 percent of the total variation in the items. There was some variation in the response format for these items, but differences in the variances in the items were not great enough to preclude adding them together in simple fashion to form a scale. A high score on this measure points to a favorable evaluation of the police.

PERCEIVED AREA PHYSICAL DETERIORATION PROBLEMS

Itmes in this cluster refer to the prevalance of problems with trash, abandoned buildings, and dirty streets and sidewalks. These are interesting because their frequency presumably reflects the balance of two opposing forces: the pace at which people or businesses create these problems and the efficiency

with which the city deals with them. Identical conditions can result from differing mixes of either activity.

The questions were:

[...please tell me whether you think it is a big problem, some problem, or no problem here in this area?]

Q15: The first one is dirty streets and sidewalks in this area?

Q22: Abandoned houses or other empty buildings in this area?

Q65: Vacant lots filled with trash and junk?

Responses to these questions were moderately intercorrelated (an average of .36), but single-factored. That factor explained 57 percent of the variance in the items. They had similar means and standard deviations as well as sharing a response format, so they were scaled by adding them together. This measure has a reliability of .63. A high score on this scale indicates that physical deterioration is thought to be a problem in the area.

A related survey item (Q69) asking about problems with abandoned cars would scale with these, but that problem was not a target of the clean-up program in Newark.

CRIME PREVENTION EFFORTS

There are a series of anti-crime actions taken by city residents which might be relevant for this evaluation. Four questions in the surveys probed the extent to which respondents took <u>defensive behaviors to protect themselves</u> from personal victimization in public locations. They were asked:

The next questions are about some things people might do when they go out after dark. Now think about the last time you went out in this area after dark.

Q80: Did you go with someone else to avoid crime? (yes or no)

Q81: The last time you went out after dark in this area, did you stay away from certain streets or areas to avoid crime? (yes or no)

Q82: When you last went out after dark in this area, did you stay away from certain types of people to avoid crime? (yes or no)

Q86: In general, how often do you avoid going out after dark in this area because of crime? (never go out to never avoid)

In survey questions like these, a few respondents inevitably respond that they "never go out." With the exception of the disabled this is highly unlikely, and people who answer in this way frequently are fearful and score as high "avoiders" on the other measures. For analytic purposes it proves useful (see Skogan and Maxfield, 1981) to count them along with the others. The "message" they are communicating seems to be that "it's a dangerous place out there," so we have classed them as "precaution takers" and assigned them "yes" responses to these items.

Responses to these four items were very consistent. They were correlated an average of .41, and formed a simple additive scale "Defensive Behaviors" with a reliability of .74. The last item, Q86, was rescored so that its four response categories ranged in value betwen zero and one, like the others. The items then all had similar means and standard deviations. The resulting scale is a simple additive combination of the four.

A second set of behaviors measured in the survey referred to household crime prevention efforts. Several elements of the program were designed to increase the frequency with which people take such measures. Questions in the survey which tapped these activities included:

> The next few questions are about things that some people might do for protection from crime.
>
> Q74: Have any special locks been installed in this home for security reasons? (yes or no)
>
> Q75: Have any special outdoor lights been installed here to make it easier to see what's going on outside your home? (yes or no)
>
> Q76: Are there any timers for turning your lights on and off at night? (yes or no)
>
> Q77: Have any valuables here been marked with your name or some number? (yes or no)
>
> Q78: Have special windows or bars been installed for protection? (yes or no)
>
> Q85: Think about the last time when no one was home for at least a day or two. Did you ask a neighbor to watch your home? (yes or no)

Responses to these questions all were positively intercorrelated. The correlations often were low, however, probably due to the extremely skewed marginal distributions of many of them. For example, less than 20 percent reported having timers, marking their properly, and installing special security windows or bars. Nonparametric measures of association between these items--which are not affected by their skewed marginals--were more robust. Correlations between reports of the more normally distributed activities (39 percent have special locks, 30 percent outdoor lights, and 64 percent have neighbors watch their homes) were somewhat higher, averaging .20-.30. If added together, responses to these items would form a scale with a low reliability.

Also, a factor analysis of the entire set indicated they were not single-factored. Responses to Q75 and Q76, two questions about lighting, "went together" separately. So, in this evaluation analysis we simply added together the number of "yes" responses to the entire set of items, as a count of actions taken and, where relevant, analyzed the adoption of these measures separately.

DISTRIBUTION OF SCALE SCORES

Because they were to be used in multivariate regression analyses, it was important that the distribution of the scale scores described above meet the assumptions of regression. Also, one assumption in ANCOVA (carried out in this project using multiple regression) is that the relationship between pre- and post-test scores is linear, and this is also better determined if the scores themselves are fairly normally distributed. So, scale scores for both waves of each survey were examined for non-normality. Only one score for the Wave 1 panel survey was heavily skewed, (that for "Police Aggressiveness"), and it was logged for use in statistical analysis.

THE REPRODUCEABILITY OF SCALES AMONG SUBPOPULATIONS

Tables 1-3 summarize the reliability for the scales discussed above and present them for a variety of subgroups and area samples used in the evaluation. Table 1 presents the findings separately for Houston and Newark. Table 2 presents scale reliabilities for the major racial and ethnic groups surveyed in Houston--blacks, whites, and Hispanics. (In Newark, only largely black

neighborhoods were involved in the Fear Reduction Project.) Table 3 breaks the data down separately for the ten neighborhoods surveyed.

While the reliabilities presented here fluctuate from place-to-place and group-to-group, the generalizability of the scales used in the evaluation is evident. There is no evidence that special measures must be tailored for any particular group or area; rather, the various reports and analyses based upon these data can employ the same measures throughout.

A NOTE ON CALCULATING SCALE SCORES

There is a scattered amount of missing data for all of these items. There were substantially more missing data for questions dealing with the police than for generic questions about neighborhood conditions, probably reflecting many people's true ignorance of police affairs. Because a number of these scales summarize responses to several questions, if one missing element for a scale led to the complete exclusion of a respondent, the number of cases available for analysis would drop quite substantially. Because these items are single-factored and internally consistent, a better strategy is to let responses to components of a scale which <u>are</u> present "stand in" for occasional missing data. This was accomplished by basing each individual's calculated score on the sum of valid responses, standardized by the number of valid responses (scores = sum of response value/number of valid responses). Neither excluding respondents because of nonresponse nor fabricating data for them in the form of imputed values (such as means or "hot deck" values) is likely to be a superior strategy, in light of our scaling approach to measurement (cf. Kalton, 1983).

Table 1

Wave 1 Scale Reliabilities

All Respondents

Houston - Race Totals

Scale	Black	White	Hispanic
Fear of Personal Victimization in Area	.71	.71	.64
Perceived Area Personal Crime Problems	.76	.82	.79
Worry About Property Crime Victimization in Area	.63	.60	.69
Perceived Area Property Crime Problems	.79	.76	.79
Perceived Area Social Disorder Problems	.81	.82	.84
Satisfaction with Area	.51	.44	.39
Police Aggressiveness	.69	.60	.68
Evaluation of Police Service	.83	.84	.78
Perceived Area Physical Deterioration Problems	.60	.63	.61
Defensive Behaviors to Avoid Personal Crime	.69	.71	.66
(Cases)	(578)	(1091)	(443)

Table 2

Wave 1 Scale Reliabilities

All Respondents

City Totals

Scale	Total	Houston	Newark
Fear of Personal Victimization in Area	.72	.70	.74
Perceived Area Personal Crime Problems	.73	.80	.67
Worry About Property Crime Victimization in Area	.61	.62	.55
Perceived Area Property Crime Problems	.77	.77	.73
Perceived Area Social Disorder Problems	.84	.83	.77
Satisfaction with Area	.50	.44	.43
Police Aggressiveness	.66	.68	.64
Evaluation of Police Service	.86	.83	.84
Perceived Area Physical Deterioration Problems	.63	.62	.52
Defensive Behaviors to Avoid Personal Crime	.73	.69	.77
(Cases)	(4134)	(2178)	(1956)

Table 3

Wave 1 Scale Reliabilities

All Respondents

Area Totals

Scale	North line	Lang-wood	Wood Bayou	Golf Crest	Shady Acres	S-1	S-2	S-4	W-1	N-2
Fear of Personal Victimization in Area	.71	.69	.71	.68	.70	.74	.75	.74	.73	.72
Perceived Area Personal Crime Problems	.79	.80	.78	.83	.74	.68	.66	.57	.66	.72
Worry About Property Crime Victimization in Area	.65	.65	.56	.52	.67	.60	.69	.59	.63	.48
Perceived Area Property Crime Problems	.81	.78	.80	.71	.76	.77	.76	.72	.72	.74
Perceived Area Social Disorder Problems	.81	.81	.83	.84	.85	.73	.77	.77	.80	.74
Satisfaction with Area	.45	.48	.51	.42	.42			.44	.45	.45
Police Aggressiveness	.74	.66	.70	.65	.61	.71	.62	.71	.52	.60
Evaluation of Police Service	.86	.79	.83	.84	.80	.85	.82	.82	.85	.84
Perceived Area Physical Deterioration Problems	.67	.58	.62	.59	.57	.64	.52	.36	.56	.39
Defensive Behaviors to Avoid Personal Crime	.70	.67	.68	.71	.65	.73	.75	.78	.80	.76
(Cases)	(398)	(378)	(506)	(526)	(370)	(398)	(340)	(441)	(402)	(375)

APPENDIX D:

SCALING THE NON-RESIDENTIAL SURVEY DATA

SCALING THE NONRESIDENTIAL SURVEY DATA

This appendix describes how analytic scales were developed for the Fear Reduction Project Evaluation's nonresidential sample surveys. These scales measure the central outcomes of interest in this project: perceptions and fear of crime, evaluations of the quality of police service, assessments of neighborhood problems, and satisfaction with business conditions in the area. As in other components of this evaluation, outcomes were measured by a composite of responses to two or more items which were included in the surveys to tap those dimensions. The item combination which was finally used to represent each outcome was determined by examining responses to the first, pre-test, surveys conducted in all areas of Houston and Newark. Scaling decisions were then verified on the post-test surveys. The pre-intervention survey with 414 business establishments was used to determine the empirical relationship between responses to survey items. They were intercorrelated and factor analyzed, and the results of those analyses informed our final scaling decisions. However, the scales also were formed based upon past research, to maintain consistency with other surveys conducted as part of the Fear Reduction evaluation, and to maintain their conceptual unity. Always, the programmatic relevance of each item played an important role in determining whether or not it would be included in the final scales.

FEAR OF PERSONAL VICTIMIZATION IN AREA

A number of items were included in the survey to represent this general construct. After examining the pre-intervention data, three measures of various forms of fear of crime were developed. The following items were combined to form a measure of "Fear of Personal Victimization in Area:

Q26: How safe would you feel while working here alone during the day? (very safe to very unsafe)

Q27: How about while working here after dark? How safe would you feel if you were to work here after dark? (very safe to very unsafe)

Q28: How safe would you feel being outside alone in this area after dark? (very safe or very unsafe)

Q42: How worried are you that someone will try to rob you or steal something from you here in this establishment? (very worried or not very worried at all)

Q43: What about outside of this establishment? How worried are you that someone will try to rob you or steal something from you somewhere else in this area? (very worried or not very worried at all)

These items were added together to form a scale with a reliability of .84. The average item-total correlation of its components was .51, and the first factor explained 61 percent of the total variation in response to the items. There was no meaningful difference between the additive alpha and the alpha for a standardized scale score which equated the variances of its component parts (also .84). Therefore, a simple additive scale was employed. A high score on the measure indicates respondents were fearful of personal victimization in and around their establishments.

Two other items were combined to form a measure of the "Perceived Concern About Crime" expressed by employees and patrons of the establishments, as reported by our respondents. They were:

Q29: In the last month, how frequently have you heard employees express concern about their personal security in this area? (very frequently to never?)

Q30: In the last month, how frequently have you heard people who come here express concern about their personal security in this area? (very frequently to never)

Responses to these items all were measured on the same four-position set of response categories. As they had about the same mean and standard deviation, the items contribute about equally to the total score for each individual. The correlation between responses to the two items was .54, and the reliability of the resulting scale was .70. These items factored separately from the previous measure of personal fear.

Two survey questions were posed to measure "Worry About Property Crime in the Area;" they asked "how worried" respondents were about being victimized by burglary and vandalism. Other research on concern about victimization or assessments of risk (see Baumer and Rosenbaum, 1981) indicates the distinction between personal and property crimes is a fundamental one, and that perceptions of the two are best gauged separately.

Q44: [How worried are you that] someone will try to break into this place to steal something? (not worried at all to very worried)

Q45: [How worried are you that] someone will try to vandalize this place? (Not worried at all to very worried)

These two items were combined to form a multiple item scale; they were substantially intercorrelated (.72) and formed an additive scale with an Alpha of .84. A high score on this measure identifies respondents who are worried about area burglary and vandalism. Another question asked, "How big a problem"

burglary of business was in the area. Responses to this item are analyzed separately.

PERCEIVED AREA SOCIAL DISORDER PROBLEMS

Six candidate items for this cluster were analyzed as part of the scale development process. They all focused upon deviant behaviors of varying illegality and seriousness, most of which takes place in public locations. They were:

> [...please tell me whether you think it is a big problem, some problem, or no problem at all.]
>
> Q15: People saying insulting things or bothering people as they walk down the street?
>
> Q18: People drinking in public places, like on corners or in streets?
>
> Q19: People breaking windows of buildings?
>
> Q16: Graffiti, that is, writing or painting on walls or windows?
>
> Q14: Gangs?
>
> Q25: Sale or use of drugs in public places?

Responses to these items were all positively intercorrelated (mean r=.39). They had roughly similar means and variances, so the scale was formed by adding together responses to them. The principal component factor for these items explained 50 percent of their total variance. This scale has a reliability of .80. A high score on this measure points to areas in which these are seen as "big problems."

In addition, several items included in the survey could have been included in a disorder scale. They were:

Q17: Truancy, that is, kids no being in school when they should be?

Q24: Prostitutes?

Q13: Beggars or panhandlers?

Responses to these items were consistent with the others, but were excluded from the scale because they probed problems which were not the explicit focus of any of the Fear Reduction programs.

Two items were combined to form a measure of "Perceived Area Physical Deterioration Problems." They were:

Q20: [How big a problem here in this area?] Abandoned stores or other empty buildings? (No problem to big problem)

Q23: [How big a problem here in this area?] Dirty streets and sidewalks? (no problem to big problem)

Responses to these two items were correlated .44, and combined they formed an additive scale with a reliability of .61, good for a two-item measure. A high score on this measure identifies respondents who thought that these forms of physical decay were "big problems" in their area.

SATISFACTION WITH AREA

Two measures of satisfaction with neighborhood conditions were developed. The first probed general satisfaction with the area:

Q7: On the whole, how do you feel about this area as a place for this establishment? Are you (very satisfied to very dissatisfied)

Q8: Since July of 1982, would you say this area has generally become a better place to be located, gotten worse, or stayed about the same?

Responses to these two questions were correlated .34, and had similar variances. Added together they formed a scale with a reliability of .48, only marginally acceptable. A high score on this measure identifies respondents who think their area is a good place to work, and has been getting to be a better place to be located.

A second measure points directly to perceived changes in the business environment in the recent past. Respondents were asked if, "since July of 1982" (the onset of the program):

Q9: ...has the number of people who come here increased, decreased, or stayed about the same?

Q12: What about the amount of business done here? Compared to last year, has that increased, decreased, or stayed about the same?

Responses to these items were correlated .58, and formed an additive scale with a reliability of .73, very high for a 2-item scale. These two items factored separately from the previous set measuring general perceptions of the area.

EVALUATION OF POLICE SERVICE

A number of questions in the survey gathered evaluations of police service. Some items focused upon recent, specific encounters between the police and those interviewed in the nonresidential survey, while others were "generic" and referenced more global opinions. Six generic items were included in the questionnaire, and they revealed one distinct cluster of opinion concerning the quality of services provided citizens and anticipated police demeanor in police-citizen encounters.

Q46: How good a job are the police in this area doing to prevent crime to businesses and other establishments? (very good to very poor job)

Q47: How good a job do you think the police are doing in helping busineses and other establishments out after they have been victims of crime? (very good to very poor job)

Q50: How good a job are the police in this area doing in keeping order on the streets and sidewalks? (very good to very poor job)

Q53: In general, how polite are the police in this area when dealing with people in businesses and other establishments? (very polite to very impolite)

Q54: In general, how helpful are the police in this area when dealing with people in business and other establishments? (very helpful to not helpful at all)

Q55: In general, how fair are the police in this area in dealing with people in business and other establishments? (very fair to very unfair)

The simple additive combination of these items has a reliability of .89, and they were correlated an average of .57. They were single factored. There was some variation in the wording of the response format for these items, but differences in the variances in the items were not great enough to preclude adding them together in simple fashion. A high score on this measure points to a favorable evaluation of the police.

THE REPRODUCEABILITY OF SCALES AMONG AREAS

Table 1 summarizes the reliabilities for the scales discussed above, and presents them for the area samples used in the evaluation. The non-residential survey samples for individual areas were quite small, so the reliabilities presented there fluctuate from place-to-place. However, the generalizability of the scales used in the evaluation is evident. The only notable exception is the general area satisfaction measure for the Langwood area in Houston, and the

two items which go into it will be analyzed separately for that area. There is no evidence in Table 1 that other special measures must be tailored for any particular area; rather, the various reports and analyses based upon this data can employ the same measures throughout.

A NOTE ON CALCULATING SCALE SCORES

There is a scattered amount of missing data for all of these items. There were substantially more missing data for questions dealing with the police than for generic questions about neighborhood conditions, probably reflecting many people's true ignorance of police affairs. Because a number of these scales summarize responses to several questions, if one missing element for a scale led to the complete exclusion of a respondent, the number of cases available for analysis would drop quite substantially. Because these items are single-factored and internally consistent, a better strategy is to let responses to components of a scale which <u>are</u> present "stand in" for occasional missing data. This was accomplished by basing each individual's calculated score on the sum of valid responses, standardized by the number of valid responses (score = sum of responses values/number of valid responses). Neither excluding respondents, because of nonresponse nor fabricating data for them in the form of imputed values (such as means or "hot deck" values) is likely to be a superior strategy, in light of our scaling approach to measurement (cf, Kalton, 1983).

SCALE RELIABILITY SUMMARY

Non-Residential Survey

Scale	All Areas		South 1		West 1		South 4		Northline		Langwood		Golfcrest		Shady Acres	
	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2
Fear of Personal Victimization in Area	.84	.84	.83	.79	.80	.85	.86	.90	.81	.82	.80	.74	.84	.87	.85	.86
Evaluation of Police Service	.89	.86	.90	.86	.88	.87	.92	.91	.86	.89	.84	.80	.87	.84	.63	.86
Perceived Social Disorder Problems	.80	.79	.64	.78	.71	.79	.74	.65	.76	.55	.81	.51	.85	.83	.65	.71
Business Change	.73	.78	.61	.82	.68	.65	.33	.85	.80	.77	.76	.76	.82	.83	.54	.62
Satisfaction With Area	.48	.54	.57	.43	.69	.31	.67	.72	.54	.57	.00	.68	.44	.53	.35	.44
Worry About Property Crime	.84	.80	.97	.93	.88	.72	.92	.78	.76	.84	.86	.94	.84	.66	.90	.77
Employee-Patrol Concern	.70	.81	.82	.99	.66	.57	.84	.82	.68	.78	.54	.82	.67	.79	.56	.40
(N)*	(414)	(283)	(34)	(47)	(26)	(28)	(35)	(32)	(44)	(41)	(37)	(27)	(67)	(66)	(39)	(42)

* Ns vary slightly from scale to scale; figure here is for fear scale

APPENDIX E:

RESIDENTIAL AREA-LEVEL RESULTS

TABLE 1-E

Wave One - Wave Two Outcome Measures

All Respondents

Fear of Area Personal Victimization

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.77	1.54	1.69	1.65
(sd)	(.55)	(.58)	(.56)	(.61)
[N]	[406]	[460]	[389]	[403]
Sigf.	$p < .001$		$p < .25$	
Q34 Unsafe Alone*				
Mean	2.78	2.42	2.79	2.68
(sd)	(.98)	(.97)	(1.04)	(1.12)
[N]	[405]	[460]	[387]	[396]
Sigf.	$p < .001$		$p < .10$	
Q35 Place Fear to Go				
Mean	.54	.46	.54	.60
(sd)	(.50)	(.50)	(.50)	(.49)
[N]	[399]	[457]	[376]	[394]
Sigf.	$p < .01$		$p < .05$	
Q43 Worry robbery				
Mean	1.97	1.71	1.78	1.73
(sd)	(.74)	(.73)	(.72)	(.79)
[N]	[405]	[458]	[385]	[401]
Sigf.	$p < .001$		$p < .25$	
Q44 Worry assault				
Mean	1.78	1.55	1.59	1.59
(sd)	(.75)	(.69)	(.71)	(.74)
[N]	[405]	[460]	[384]	[399]
Sigf.	$p < .001$		$p < .75$	

Note: One-tailed t-tests of significance

*Rescored so high score indicates fear

TABLE 2-E

Wave One - Wave Two Outcome Measures

All Respondents

Perceived Area Personal Crime Problems

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.61	1.28	1.44	1.38
(sd)	(.61)	(.47)	(.57)	(.55)
[N]	[398]	[452]	[372]	[394]
Sigf.	$p < .001$		$p < .10$	
Q114 Stranger Assault a big problem				
Mean	1.53	1.27	1.48	1.39
(sd)	(.70)	(.54)	(.70)	(.66)
[N]	[387]	[444]	[352]	[373]
Sigf.	$p < .001$		$p = < .05$	
Q117 Robbery a big problem				
Mean	1.77	1.34	1.54	1.48
(sd)	(.76)	(.59)	(.71)	(.72)
[N]	[384]	[443]	[353]	[377]
Sigf.	$p < .001$		$p < .25$	
Q121 Rape a big problem				
Mean	1.51	1.24	1.23	1.22
(sd)	(.69)	(.54)	(.54)	(.54)
[N]	[344)	[442]	[333]	[361]
Sigf.	$p <.001$		$p < .50$	

Note: One-tailed t-tests of significance

TABLE 3-E

Wave One - Wave Two Outcome Measures

All Respondents

Worry About Area Property Crime Victimization

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	2.20	2.04	1.92	1.85
(sd)	(.65)	(.68)	(.67)	(.72)
[N]	[406]	[460]	[387]	[401]
Sigf.	$p < .001$		$p < .10$	
Q45 Burglary worry				
Mean	2.39	2.15	2.09	1.94
(sd)	(.73)	(.73)	(.76)	(.82)
[N]	[405]	[460]	[387]	[399]
Sigf.	$p < .001$		$p < .005$	
Q47 Auto theft worry				
Mean	1.99	1.94	1.76	1.75
(sd)	(.76)	(.79)	(.78)	(.82)
[N]	[393]	[452]	[364]	[355]
Sigf.	$p < .25$		$p < .50$	

Note: One-tailed t-tests of significance

TABLE 4-E

Wave One - Wave Two Outcome Measures

All Respondents

Perceived Area Property Crime Problems

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.98	1.67	1.60	1.55
(sd)	(.66)	(.63)	(.60)	(.59)
[N]	[402]	[457]	[380]	[397]
Sigf.	$p < .001$		$p < .25$	
Q68 Burglary problem				
Mean	2.16	1.79	1.82	1.71
(sd)	(.74)	(.74)	(.78)	(.76)
[N]	[392]	[450]	[361]	[384]
Sigf.	$p < .001$		$p < .05$	
Q70 Auto vandalism problem				
Mean	1.88	1.54	1.48	1.47
(sd)	(.78)	(.71)	(.69)	(.71)
[N]	[392]	[452]	[364]	[381]
Sigf.	$p < .001$		$p < .50$	
Q71 Auto theft problem				
Mean	1.90	1.69	1.48	1.44
(sd)	(.79)	(.75)	(.72)	(.72)
[N]	[388]	[450]	[356]	[380]
Sigf.	$p < .001$		$p < .25$	

Note: One-tailed t-tests of significance

TABLE 5-E

Wave One - Wave Two Outcome Measures

All Respondents

Perceived Area Social Disorder Problems

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.56	1.45	1.40	1.39
(sd)	(.47)	(.46)	(.46)	(.47)
[N]	[406]	[459]	[387]	[402]
Sigf.	$p < .001$		$p < .40$	
Q18 Groups hanging around on corners				
Mean	1.83	1.62	1.63	1.57
(sd)	(.80)	(.76)	(.80)	(.77)
[N]	[391]	[457]	[374]	[388]
Sigf.	$p < .001$		$p < .25$	
Q20 People saying insulting things				
Mean	1.41	1.28	1.27	1.25
(sd)	(.68)	(.58)	(.59)	(.60)
[N]	[387]	[456]	[375]	[385]
Sigf.	$p < .005$		$p < .40$	
Q24 Drinking in public place				
Mean	1.81	1.64	1.53	1.52
(sd)	(.75)	(.77)	(.73)	(.77)
[N]	[390]	[454]	[375]	[386]
Sigf.	$p < .001$		$p < .50$	
Q66 Breaking Windows				
Mean	1.46	1.38	1.39	1.41
(sd)	(.68)	(.62)	(.64)	(.68)
[N]	[397]	[455]	[363]	[388]
Sigf.	$p < .05$		$p < .40$	

TABLE 5-E, continued

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Q67 Graffiti				
Mean	1.39	1.35	1.29	1.33
(sd)	(.60)	(.60)	(.57)	(.62)
[N]	[393]	[459]	[370]	[385]
Sigf.	$p < .25$		$p < .25$	
Q118 Gangs				
Mean	1.28	1.20	1.29	1.21
(sd)	(.55)	(.50)	(.58)	(.50)
[N]	[375]	[448]	[355]	[380]
Sigf.	$p < .025$		$p < .025$	
Q120 Sale or use of drugs in public places				
Mean	1.80	1.69	1.48	1.39
(sd)	(.82)	(.76)	(.75)	(.69)
[N]	[351]	[439]	[321]	[353]
Sigf.	$p < .05$		$p < .10$	

Note: One-tailed t-tests of significance

TABLE 6-E

Wave One - Wave Two Outcome Measures

All Respondents

Satisfaction With Area

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	2.39	2.54	2.51	2.60
(sd'	(.65)	(.64)	(.61)	(.60)
[N]	[406]	[460]	[389]	[403]
Sigf.	$p < .001$		$p < .025$	
Q5 Area getting better				
Mean	1.79	2.03	1.82	1.94
(sd)	(.64)	(.67)	(.60)	(.60)
[N]	[393]	[440]	[371]	[382]
Sigf.	$p < .001$		$p = < .005$	
Q14 Satisfied with the area				
Mean	2.96	3.00	3.14	3.22
(sd)	(.89)	(.83)	(.81)	(.77)
[N]	[404]	[460]	[385]	[398]
Sigf.	$p < .25$		$p < .10$	

Note: One-tailed t-tests of significance

TABLE 7-E

Wave One - Wave Two Outcome Measures

All Respondents

Evaluations of Police Service

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	3.22	3.40	3.23	3.37
(sd)	(.61)	(.63)	(.63)	(.71)
[N]	[402]	[452]	[372]	[388]
Sigf.	$p < .001$		$p < .005$	
Q50 Good job at preventing crime				
Mean	3.32	3.62	3.29	3.56
(sd)	(.90)	(.94)	(.96)	(1.01)
[N]	[388]	[440]	[348]	[365]
Sigf.	$p < .001$		$p = < .001$	
Q51 Good job of helping victims				
Mean	3.34	3.51	3.14	3.36
(sd)	(.90)	(.96)	(1.05)	(1.14)
[N]	[350]	[401]	[288]	[282]
Sigf.	$p < .01$		$p < .01$	
Q52 Good job keeping order on street				
Mean	3.36	3.54	3.46	3.63
(sd)	(.89)	(.96)	(.88)	(.97)
[N]	[391)	[441]	[341]	[350]
Sigf.	$p <.005$		$p < .01$	

TABLE 7-E, continued

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Q57 Polite in dealing with people				
Mean	3.23	3.34	3.20	3.27
(sd)	(.72)	(.67)	(.78)	(.79)
[N]	[364]	[408]	[312]	[311]
Sigf.	$p < .025$		$p < .25$	
Q58 Helpful in dealing with people				
Mean	3.01	3.20	3.12	3.22
(sd)	(.73)	(.70)	(.74)	(.73)
[N]	[369]	[408]	[306]	[325]
Sigf.	$p < .001$		$p = < .05$	
Q59 Fair in dealing with people				
Mean	3.10	3.19	3.16	3.22
(sd)	(.62)	(.59)	(.64)	(.65)
[N]	[364]	[414]	[289]	[314]
Sigf.	$p < .025$		$p < .25$	

Note: One-tailed t-tests of significance

TABLE 8-E

Wave One - Wave Two Outcome Measures

All Respondents

Police Aggressiveness

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.17	1.16	1.15	1.11
(sd)	(.45)	(.40)	(.40)	(.32)
[N]	[386]	[455]	[363]	[375]
Sigf.	$p < .40$		$p < .10$	
Q21 Stop too many without good reason				
Mean	1.14	1.16	1.10	1.09
(sd)	(.45)	(.45)	(.37)	(.34)
[N]	[376]	[451]	[340]	[359]
Sigf.	$p < .40$		$p = < .40$	
Q26 Too tough on people they stop				
Mean	1.21	1.16	1.23	1.14
(sd)	(.52)	(.45)	(.56)	(.44)
[N]	[353]	[437]	[293]	[337]
Sigf.	$p < .10$		$p < .025$	

Note: One-tailed t-tests of significance

TABLE 9-E

Wave One - Wave Two Outcome Measures

All Respondents

Defensive Behaviors to Avoid Personal Victimization

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	.58	.42	.44	.47
(sd)	(.34)	(.36)	(.34)	(.35)
[N]	[405]	[460]	[387]	[403]
Sigf.	$p < .001$		$p < .25$	
Q80 Go with escort*				
Mean	.52	.41	.41	.43
(sd)	(.50)	(.49)	(.49)	(.49)
[N]	[403]	[460]	[385]	[402]
Sigf.	$p < .001$		$p < .40$	
Q81 Avoid certain areas*				
Mean	.64	.45	.43	.49
(sd)	(.48)	(.50)	(.50)	(.50)
[N]	[401]	[460]	[387]	[399]
Sigf.	$p < .001$		$p < .05$	
Q82 Avoid types of people				
Mean	.74	.52	.53	.58
(sd)	(.44)	(.50)	(.50)	(.49)
[N]	[401]	[460]	[385]	[400]
Sigf.	$p < .001$		$p < .10$	
Q86 Avoid going out after dark				
Mean	2.12	1.99	1.97	2.13
(sd)	(.87)	(1.04)	(.87)	(1.20)
[N]	[405]	[460]	[384]	[402]
Sigf.	$p < .025$		$p < .025$	

Note: One-tailed t-tests of significance
*Rescored so high score indicates taking precaution

TABLE 10-E

Victimization by Crimes in the Area

All Respondents

Percent Victimized in Past Six Months	Northline Program Area Wave 1	Wave 2	Shady Acres Comparison Area Wave 1	Wave 2
All Incidents				
Percent Victims	48	46	39	40
Sigf.	$p < .70$		$p < .50$	
Personal Crimes (1)				
Percent Victims	27	23	17	18
Sigf.	$p < .20$		$p < .95$	
Property Crimes (2)				
Percent Victims	36	32	31	29
Sigf.	$p < .30$		$p < .80$	
Included Above:				
Burglary: (3)				
Percent Victims	12	10	16	10
Sigf.	$p < .50$		$p < .20$	
Motor Vehicle Crime: (4)				
Percent Victims	16	16	10	13
Sigf.	$p < .99$		$p < .10$	
Other Theft: (5)				
Percent Victim	19	13	12	13
Sigf.	$p < .05$		$p < .80$	
Number of Cases	(406)	(460)	(389)	(403)

Chi-square tests of significance

Note: 1 includes V13-V19
2 includes V1-V6, V8-V10, V12
3 includes V1 and V2
4 includes V8-V10
5 includes V3-V5, V12

APPENDIX F:

RESIDENTIAL PANEL RESULTS

TABLE 1-F

Wave One - Wave Two Outcome Measures

Panel Respondents Only

Scale Score	Northline Program Area Wave 1	Wave 2	Shady Acres Comparison Area Wave 1	Wave 2
Fear of Area Personal Victimization				
Mean	1.80	1.56	1.70	1.65
(sd)	(.55)	(.56)	(.56)	(5.8
[N]	[239]		[181]	
Sigf.	$p < .001$		$p < .12$	
Perceived Area Personal Crime Problems				
Mean	1.61	1.27	1.40	1.33
(sd)	(.62)	(.44)	(.55)	(.51)
[N]	[230]		[169]	
Sigf.	$p < .001$		$p < .07$	
Perceived Area Property Crime Problems				
Mean	1.95	1.67	1.56	1.50
(sd)	(.68)	(.62)	(.56)	(.57)
[N]	[238]		[171]	
Sigf.	$p < .001$		$p < .13$	
Worry About Area Property Crime Victimization				
Mean	2.18	2.06	1.92	1.87
(sd)	(.66)	(.67)	(.66)	(.69)
[N]	[239]		[179]	
Sigf.	$p < .01$		$p < .19$	

TABLE 1-F, continued

Scale Score	Northline Program Area Wave 1	Northline Program Area Wave 2	Shady Acres Comparison Area Wave 1	Shady Acres Comparison Area Wave 2
Perceived Area Social Disorder Problems				
Mean	1.55	1.41	1.38	1.38
(sd)	(.47)	(.42)	(.47)	(.45)
[N]	[239]		[179]	
Sigf.	$p < .001$		$p \approx .50$	
Defensive Behaviors to Avoid Personal Crime				
Mean	.58	.46	.42	.48
(sd)	(.33)	(.37)	(.34)	(.35)
[N]	[239]		[179]	
Sigf.	$p < .001$		$p \approx .04$	

Table 1-F continued

Police Community Stations

Wave One - Wave Two Outcome Measures

Panel Respondents Only

Proportion Victimized	Northline Program Area Wave 1	Wave 2	Shady Acres Comparison Area Wave 1	Wave 2
All Types				
Mean	.49	.48	.36	.41
(sd)	(.50)	(.50)	(.48)	(.49)
[N]	[239]		[181]	
Sigf.	$p < .40$		$p < .16$	
Personal Crimes				
Mean	.27	.30	.17	.20
(sd)	(.45)	(.46)	(.37)	(.40)
[N]	[239]		[181]	
Sigf.	$p < .22$		$p < .14$	
Household Crimes				
Mean	.35	.30	.27	.28
(sd)	(.48)	(.56)	(.45)	(.45)
[N]	[239]		[181]	
Sigf.	$p < .11$		$p = < .40$	

T-tests for significance of paired measures. N is the number of pairs, or the number of panel respondents.

Table 1-F continued

Police Community Stations

Wave One - Wave Two Outcome Measures
(continued)

Panel Respondents Only

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Focus on Property Crime				
Mean	.61	.81	.52	.45
(sd)	(1.27)	(1.25)	(1.22)	(1.05)
[N]	[235]		[146]	
Sigf.	$p < .04$		$p < .32$	
Evaluation of Police Service				
Mean	3.22	3.46	3.29	3.40
(sd)	(.64)	(.63)	(.69)	(.70)
[N]	[233]		[168]	
Sigf.	$p < .001$		$p < .25$	
Police Aggressiveness				
Mean	1.13	1.11	1.15	1.11
(sd)	(.39)	(.34)	(.40)	(.33)
[N]	[227]		[161]	
Sigf.	$p < .28$		$p = < .15$	
Satisfaction with Area				
Mean	2.41	2.56	2.48	2.54
(sd)	(.65)	(.70)	(.62)	(.58)
[N]	[239]		[181]	
Sigf.	$p < .002$		$p < .14$	

T-tests for significance of paired measures. N is the number of pairs, or the number of panel respondents.

Table 2-F

Relation Between Residence in Treatment or Control Areas
and Post-Intervention Outcome Measures
Controlling for the Pre-Test and Other Explanatory Factors*

Explanatory Factors	Outcome Measures: Fear of Area Personal Victimization		Outcome Measures: Perceived Area Personal Crime Problems	
	Beta	(Sigf.)	Beta	(Sigf.)
live in target area	-.10	(.03)	-.11	(.04)
pretest scale score	.40	(.001)	.23	(.001)
R^2_{adj} =	.20		.07	
[N]	[415]		[396]	

Note: All independent variables were measured using the pre-intervention survey only.

*Includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

Table 2-F continued

Relation Between Residence in Treatment or Control Areas
and Post-Intervention Outcome Measures
Controlling for the Pre-Test and Other Explanatory Factors*

Explanatory Factors	Outcome Measures: Perceived Area Property Crime Problems		Outcome Measures: Worry About Property Crime Victimization	
	Beta	(Sigf.)	Beta	(Sigf.)
live in target area	.02	(.68)	.05	(.35)
pretest scale score	.20	(.001)	.28	(.001)
R^2_{adj} =			.16	
[N]	[406]		[413]	

Note: All independent variables were measured using the pre-intervention survey only.

*Includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

Table 2-F continued

Relation Between Residence in Treatment or Control Areas
and Post-Intervention Outcome Measures
Controlling for the Pre-Test and Other Explanatory Factors*

Explanatory Factors	Outcome Measures: Satisfaction With Area		Outcome Measures: Perceived Area Social Disorder Problems	
	Beta	(Sigf.)	Beta	(Sigf.)
live in target area	.07	.19	-.05	.28
pretest scale score	.28	.001	.41	.001
R^2_{adj} =	.11		.18	
(N)	(415)		(414)	

Note: All independent variables were measured using the pre-intervention survey only.

*Includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

Table 2-F continued

Relation Between Residence in Treatment or Control Areas
and Post-Intervention Outcome Measures
Controlling for the Pre-Test and Other Explanatory Factors*

Explanatory Factors	Outcome Measures: Evaluations of Police Service		Outcome Measures: Police Aggressiveness(Log)	
	Beta	(Sigf.)	Beta	(Sigf.)
live in target area	.09	.06	-.00	.94
pretest scale score	.35	.001	.33	.001
R^2_{adj} =	.17		.16	
(N)	(399)		(385)	

Note: All independent variables were measured using the pre-intervention survey only.

*Includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

Table 2-F continued

Relation Between Residence in Treatment or Control Areas
and Post-Intervention Outcome Measures
Controlling for the Pre-Test and Other Explanatory Factors*

Explanatory Factors	Outcome Measures: Defensive Behaviors To Avoid Personal Crime	
	Beta	(Sigf.)
live in target area	-.00	.95
pretest scale score	.18	.001
R^2_{adj} =	.17	
[N]	[414]	

Note: All independent variables were measured using the pre-intervention survey only.

*includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

TABLE 3-F

Relationship Between Program Area of Residence
and Reports of Victimization

Panel Respondents Only

Type of Victimization	Correlation (and significance) with Program Area Residence: No Controls r	(sigf)	Control for Pretest r	(sigf)	Control for Pretest and Thirteen Other Factors* r	(sigf)	[N]
All types:	.06	(.19)	.04	(.42)	-.00	(.96)	[415]
Personal Victimization	.10	(.04)	.08	(.10)	.07	(.18)	[415]
Property Victimization	.01	(.77)	-.00	(.99)	-.05	(.35)	[415]

Notes:
- Correlation is Pearson's r;
- Victimization measure is a dichotomy
- "Pretest" is victimization during 6 months prior to Wave 1 study
- All correlations are for the same subset of respondents with complete data on all measures
- All control factors measured using Wave 1 survey

*includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, knowledge of local crime victims, and the pretest.

APPENDIX G:

WAVE 1 "FEAR OF PERSONAL VICTIMIZATION" SCORES BY DEMOGRAPHIC GROUP

APPENDIX G

"FEAR OF PERSONAL VICTIMIZATION" SCORES
AT WAVE 1 BY DEMOGRAPHIC GROUPS
PROGRAM AND COMPARISON AREAS

(All Respondents)

Demographic Group	Program Area (Northline) Wave 1	Comparison Area (Shady Acres) Wave 1
Male	1.62	1.54
Female	1.92	1.84
Black	1.70	1.56
White	1.82	1.71
Hispanic	1.70	1.73
Asian-Pacific Islander	1.63	1.67
Owner	1.80	1.78
Renter	1.72	1.62
Not High School	1.72	1.79
High School Graduate	1.79	1.61
Under $15,000 Income	1.75	1.75
Over $15,000 Income	1.79	1.64
15-24 years	1.75	1.59
25-49 years	1.75	1.66
50-98 years	1.83	1.77
No Children at Home	1.75	1.68
One or More Children at Home	1.81	1.69
One Adult in Household	1.74	1.68
Two Adults	1.79	1.72
Three or More Adults	1.74	1.53
Single	1.76	1.68
Married	1.79	1.69
Work Full-Part Time	1.79	1.63
Other	1.78	1.79
Resident 0-2 years	1.73	1.63
3-5 years	1.68	1.66
6-9 years	1.90	1.72
10+ years	1.84	1.79

APPENDIX H:

RECALLED PROGRAM EXPOSURE EFFECTS RESULTS

TABLE 1-H

Relationship Between Self-Reported Program Exposure and Outcome Measures

N16-17: Call and Visit Storefront

Panel Respondents in Program Area Only

Correlation (and significance level) between recall exposure measure and outcome scores controlling for other factors

Scale Score Outcome	Simple correlation only		Partial correlation controlling for pretest		Partial correlation controlling for sixteen factors**		[N]
	r	(sigf)	r	(sigf)	r	(sigf)	
Fear of Area Personal Victimization	.11	(.08)	.07	(.28)	.06	(.38)	[237]
Perceived Area Personal Crime Problems	.06	(.37)	.06	(.36)	.05	(.43)	[235]
Worry About Area Property Crime Victimization	-.02	(.81)	-.04	(.59)	-.02	(.74)	[237]
Perceived Area Property Crime Problems	.11	(.08)	.10	(.11)	.12	(.07)	[236]
Satisfaction With Area	-.02	(.75)	.02	(.79)	-.07	(.31)	[237]
Perceived Area Social Disorder Problems	.14	(.04)	.11	(.11)	.17	(.01)	[236]
Evaluations of Police Service	.10	(.11)	.09	(.15)	.02	(.77)	[237]
Police Aggressiveness (Log)	.07	(.25)	.02	(.81)	-.02	(.72)	[225]
Defensive Behaviors to Avoid Personal Crime	.12	(.08)	.10	(.14)	.10	(.14)	[237]
Household Crime Prevention Measures	.23	(.001)	.20	(.01)	.17	(.01)	[237]

**includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

Dependent variable scored 0 (neither called or visited), 1 (called or visited), or 2 (called and visited).

TABLE 2-H

Relationship Between Self-Reported Program Exposure and Outcome Measures

Q64: Aware of Area Police Office

Panel Respondents in Program Area Only

Correlation (and significance level) between recall exposure measure and outcome scores controlling for other factors

Scale Score Outcome	Simple correlation only		Partial correlation controlling for pretest		Partial correlation controlling for sixteen factors**		[N]
	r	(sigf)	r	(sigf)	r	(sigf)	
Fear of Area Personal Victimization	-.05	(.48)	-.11	(.08)	-.12	(.08)	[227]
Perceived Area Personal Crime Problems	-.12	(.08)	-.14	(.04)	-.11	(.11)	[220]
Worry About Area Property Crime Victimization	-.11	(.09)	-.14	(.04)	-.07	(.30)	[227]
Perceived Area Property Crime Problems	-.18	(.01)	-.18	(.01)	-.12	(.07)	[226]
Satisfaction With Area	.17	(.01)	.18	(.01)	.11	(.11)	[227]
Perceived Area Social Disorder Problems	-.14	(.04)	-.15	(.02)	-.08	(.27)	[227]
Evaluations of Police Service	.29	(.001)	.29	(.001)	.21	(.01)	[222]
Police Aggressiveness (Log)	.14	(.04)	.12	(.09)	.08	(.27)	[216]
Defensive Behaviors to Avoid Personal Crime	.06	(.39)	.03	(.67)	-.02	(.79)	[227]
Household Crime Prevention Measures	.14	(.03)	.13	(.05)	.10	(.14)	[227]

**includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

TABLE 3-H

Relationship Between Self-Reported Program Exposure and Outcome Measures

Q42: Aware of Brochures. Pamphlets, Newsletters

Panel Respondents in Program Area Only

Correlation (and significance level) between recall exposure measure and outcome scores controlling for other factors

Scale Score Outcome	Simple correlation only		Partial correlation controlling for pretest		Partial correlation controlling for sixteen factors**		[N]
	r	(sigf)	r	(sigf)	r	(sigf)	
Fear of Area Personal Victimization	.14	(.03)	.14	(.03)	.11	(.10)	[237]
Perceived Area Personal Crime Problems	.06	(.32)	.06	(.38)	.09	(.20)	[235]
Worry About Area Property Crime Victimization	-.13	(.04)	-.13	(.05)	-.08	(.25)	[237]
Perceived Area Property Crime Problems	-.03	(.67)	-.03	(.68)	.04	(.53)	[236]
Satisfaction With Area	.12	(.06)	.12	(.06)	.04	(.53)	[237]
Perceived Area Social Disorder Problems	-.03	(.64)	-.02	(.74)	.02	(.71)	[237]
Evaluations of Police Service	.02	(.76)	.00	(.96)	-.05	(.43)	[231]
Police Aggressiveness (Log)	.01	(.87)	-.01	(.84)	-.02	(.71)	[225]
Defensive Behaviors to Avoid Personal Crime	.17	(.01)	.16	(.02)	.13	(.28)	[237]
Household Crime Prevention Measures	.10	(.14)	.07	(.29)	.03	(.62)	[237]

**includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

TABLE 4-H

Relationship Between Self-Reported Program Exposure and Outcome Measures

Q60-61: Saw Police Officer Recently

Panel Respondents in Program Area Only

Scale Score Outcome	Correlation (and significance level) between recall exposure measure and outcome scores controlling for other factors: Simple correlation only		Partial correlation controlling for pretest		Partial correlation controlling for sixteen factors**		[N]
	r	(sigf)	r	(sigf)	r	(sigf)	
Fear of Area Personal Victimization	-.26	(.001)	-.26	(.001)	-.24	(.001)	[237]
Perceived Area Personal Crime Problems	-.22	(.001)	-.22	(.001)	-.23	(.001	[228]
Worry About Area Property Crime Victimization	-.11	(.10)	-.11	(.10)	-.09	(.18)	[237]
Perceived Area Property Crime Problems	-.04	(.56)	-.04	(.57)	-.04	(.58)	[236]
Satisfaction With Area	.26	(.001)	.26	(.001)	.26	(.001)	[237]
Perceived Area Social Disorder Problems	-.14	(.03)	-.16	(.01)	-.15	(.02)	[237]
Evaluations of Police Service	.33	(.001)	.34	(.001)	.28	(.001)	[231]
Police Aggressiveness (Log)	.08	(.25)	.03	(.46)	-.02	(.82)	[225]
Defensive Behaviors to Avoid Personal Crime	-.14	(.03)	-.13	(.05)	-.12	(.07)	[237]
Household Crime Prevention Measures	.02	(.80)	.00	(.98)	-.00	(.94)	[237]

**includes indications of age, race, sex, income education, length of residence, marital status, household organization and size, renter status, building size, personal victimization, knowledge of local crime victims, and the pretest.

APPENDIX I:

DIFFERENTIAL IMPACT ANALYSIS RESULTS

APPENDIX I

Regression Analysis of Input of Program Area of Residence Upon Subgroups

	Blacks		Hispanics		Female		Victims		Age		Live Alone		High School Grads		Renters	
Wave 2 Outcome	Sign	Sigf	Sign	Sigf	Sign	Sigf	Sign	Sigf	Sign	Sigf	Sign	Sigf	Sign	Sigf	Sign	Sigf
Fear of Area Personal Victimization	+	.08	-	.56	-	.70	-	.04	+	.10	+	.12	-	.34	-	.83
Perceived Area Personal Crime Problems	+	.01	-	.07	-	.82	-	.58	-	.53	+	.21	-	.17	+	.09
Worry About Area Property Crime Victimization	+	.01	-	.42	-	.99	-	.20	-	.06	+	.67	-	.51	+	.05
Perceived Area Property Crime Problems	+	.001	-	.06	-	.91	+	.83	-	.16	+	.50	-	.64	+	.18
Perceived Area Social Disorder Problems	+	.001	-	.03	+	.48	-	.96	-	.30	+	.05	+	.44	+	.02
Satisfaction With Area	-	.001	+	.37	-	.73	-	.69	+	.06	-	.01	+	.52	-	.001
Evaluations of Police Service	-	.01	+	.64	-	.19	+	.36	-	.75	-	.24	+	.27	-	.17
Police Aggressiveness	+	.01	-	.05	+	.43	-	.67	+	.53	+	.07	-	.42	-	.36
Defensive Behaviors to Avoid Personal Crime	-	.65	-	.36	+	.96	-	.51	+	.01	+	.10	+	.19	+	.30
Household Crime Prevention Measures	+	.54	-	.70	-	.49	-	.12	+	.10	+	.17	-	.03	-	.77
Total Victimization*	+	.15	-	.04	+	.35	-	.18	+	.87	+	.60	-	.58	+	.91
Personal Victimization*	+	.71	-	.24	+	.48	-	.13	-	.50	+	.94	-	.29	-	.68
Property Victimization*	+	.06	-	.05	+	.90	+	.15	+	.88	+	.65	-	.57	+	.51

Note: "N" approximately 420 for all analyses

*Dichotomy--victim or non-victim

Regression analysis includes pretest, area of residence, subgroup membership, and an area-subgroup interaction term. This table reports the sign associated with the interaction term and its significance.

APPENDIX J:

NON-RESIDENTIAL RESULTS

TABLE 1-J

Wave One - Wave Two Outcome Measures

Non-Residential Survey

Fear of Area Personal Victimization

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	2.59	2.21	2.45	2.12
(sd)	(.68)	(.74)	(.63)	(.65)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .01$		$p < .025$	
Q26 Fear working during the day				
Mean	2.24	1.95	1.79	1.41
(sd)	(.93)	(.95)	(.77)	(.54)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .10$		$p < .01$	
Q27 Fear Working at night				
Mean	2.98	2.49	2.92	2.44
(sd)	(1.08)	(1.19)	(.90)	(.98)
[N]	[45]	[41]	[39]	[43]
Sigf.	$p < .05$		$p < .025$	
Q28 Fear outside after dark				
Mean	3.30	2.56	3.18	3.00
(sd)	(.85)	(1.10)	(.94)	(1.01)
[N]	[44]	[41]	[39]	[42]
Sigf.	$p < .001$		$p < .25$	
Q42 Worry about robbery in establishment				
Mean	2.24	2.05	2.18	1.86
(sd)	(.71)	(.77)	(.68)	(.76)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .25$		$p < .05$	
Q43 Worry about robbery outside in area				
Mean	2.24	2.00	2.15	2.00
(sd)	(.68)	(.71)	(.67)	(.68)
[N]	[45]	[41]	[39]	[44]
	$p < .10$		$p < .25$	

Note: One-tailed significance t-tests for small samples

TABLE 2-J

Wave One - Wave Two Outcome Measures

Non-Residential Survey

Worry About Area Property Crime Victimization

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	2.01	2.05	2.22	2.00
(sd)	(.70)	(.75)	(.65)	(.65)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .50$		$p <$	
Q44 Worry about burglary of establishment				
Mean	2.11	2.20	2.28	2.14
(sd)	(.78)	(.78)	(.65)	(.73)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .40$		$p < .25$	
Q45 Worry about vandalism of establishment				
Mean	1.91	1.90	2.15	1.86
(sd)	(.79)	(.83)	(.71)	(.70)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .50$		$p < .05$	

Note: One-tailed significance t-tests for small samples

TABLE 3-J

Wave One - Wave Two Outcome Measures

Non-Residential Survey

Perceived Area Property Crime Problems

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Q21 Burglary of establishments a problem				
Mean	2.09	1.80	1.95	1.75
(sd)	(.92)	(.87)	(.82)	(.84)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .10$		$p < .25$	

Note: One-tailed significance t-tests for small samples

TABLE 4-J

Wave One - Wave Two Outcome Measures

Non-Residential Establishments

Perceived Area Social Disorder Problems

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.54	1.43	1.33	1.42
(sd)	(.50)	(.43)	(.35)	(.39)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .25$		$p < .25$	
Q15 People saying insulting things				
Mean	1.64	1.51	1.29	1.37
(sd)	(.81)	(.68)	(.56)	(.66)
[N]	[44]	[39]	[38]	[41]
Sigf.	$p < .25$		$p < .40$	
Q18 Drinking in public place				
Mean	1.60	1.42	1.60	1.89
(sd)	(.78)	(.68)	(.79)	(.75)
[N]	[45]	[40]	[38]	[44]
Sigf.	$p < .25$		$p < .10$	
Q19 Breaking Windows				
Mean	1.64	1.55	1.58	1.43
(sd)	(.85)	(.71)	(.73)	(.62)
[N]	[42]	[40]	[36]	[44]
Sigf.	$p < .40$		$p < .25$	

TABLE 4-J, continued

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Q16 Graffiti				
Mean	1.38	1.27	1.23	1.27
(sd)	(.68)	(.59)	(.54)	(.50)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .25$		$p < .40$	
Q14 Gangs				
Mean	1.28	1.20	1.10	1.18
(sd)	(.55)	(.52)	(.31)	(.45)
[N]	[43]	[39]	[38]	[44]
Sigf.	$p < .40$		$p < .25$	
Q25 Sale or use of drugs in public places				
Mean	1.62	1.53	1.22	1.31
(sd)	(.81)	(.76)	(.48)	(.66)
[N]	[39]	[38]	[37]	[39]
Sigf.	$p < .40$		$p < .40$	

Note: One-tailed significance t-tests for small samples

TABLE 5-J

Wave One - Wave Two Outcome Measures

Non-Residential Survey

Employee and Patron Concern About Crime

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	2.71	2.21	2.27	1.94
(sd)	(1.08)	(1.01)	(.90)	(.85)
[N]	[45]	[40]	[39]	[44]
Sigf.	$p < .025$		$p < .05$	
Q29 Frequency employees express concern				
Mean	2.51	2.03	2.32	1.79
(sd)	(1.26)	(1.01)	(1.04)	(.95)
[N]	[37]	[39]	[38]	[42]
Sigf.	$p < .05$		$p < .025$	
Q30 Frequency patrons express concern				
Mean	2.80	2.35	2.36	2.05
(sd)	(1.20)	(1.17)	(1.03)	(1.07)
[N]	[45]	[40]	[39]	[43]
Sigf.	$p < .05$		$p < .10$	

Note: One-tailed significance t-tests for small samples

TABLE 6-J

Wave One - Wave Two Outcome Measures

Non-Residential Survey

Changes in Business Conditions

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	1.90	1.94	2.06	2.16
(sd)	(.79)	(.78)	(.64)	(.62)
[N]	[45]	[41]	[39]	[43]
Sigf.	$p < .50$		$p < .25$	
Q9 Number of people coming is increasing				
Mean	1.96	2.00	2.18	2.09
(sd)	(.82)	(.81)	(.64)	(.72)
[N]	[45]	[41]	[39]	[43]
Sigf.	$p < .50$		$p < .40$	
Q8 Amounts of business done here increasing				
Mean	1.84	1.87	1.95	2.23
(sd)	(.90)	(.89)	(.89)	(.75)
[N]	[43]	[39]	[38]	[43]
Sigf.	$p < .50$		$p < .10$	

Note: One-tailed significance t-tests for small samples

TABLE 7-J

Wave One - Wave Two Outcome Measures

Non-Residential Survey

General Satisfaction with the Area

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	2.41	2.50	2.70	2.81
(sd)	(.64)	(.69)	(.57)	(.57)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .40$		$p < .25$	
Q7 Satisfaction with area				
Mean	3.12	3.10	3.36	3.48
(sd)	(.96)	(.94)	(.90)	(.79)
[N]	[45]	[41]	[39]	[44]
Sigf.	$p < .50$		$p < .40$	
Q8 Area getting better in last year				
Mean	1.64	1.92	2.05	2.14
(sd)	(.53)	(.66)	(.51)	(.63)
[N]	[45]	[40]	[39]	[44]
Sigf.	$p < .025$		$p < .25$	

Note: One-tailed significance t-tests for small samples

TABLE 8-J

Wave One - Wave Two Outcome Measures

Non-Residential Establishments

Evaluations of Police Service

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Scale Score				
Mean	3.34	4.03	3.46	3.85
(sd)	(.76)	(.91)	(.64)	(1.02)
[N]	[45]	[41]	[38]	[44]
Sigf.	$p < .001$		$p < .10$	
Q46 Good job at preventing crime to business/ establishments				
Mean	3.22	3.46	3.60	3.22
(sd)	(1.28)	(1.16)	(.95)	(1.29)
[N]	[41]	[41]	[38]	[41]
Sigf.	$p < .25$		$p = < .10$	
Q47 Good job of helping business/ establishment victims				
Mean	3.22	3.26	3.19	3.05
(sd)	(1.29)	(1.16)	(1.09)	(1.28)
[N]	[40]	[38]	[36]	[40]
Sigf.	$p < .50$		$p < .40$	
Q50 Good job keeping order on street				
Mean	3.38	3.88	3.49	3.48
(sd)	(1.03)	(.93)	(.96)	(1.01)
[N]	[42]	[41]	[37]	[40]
Sigf.	$p < .025$		$p < .50$	

TABLE 8-J, continued

	Northline Program Area		Shady Acres Comparison Area	
	Wave 1	Wave 2	Wave 1	Wave 2
Q53 Polite in dealing with establishments				
Mean	3.50	3.41	3.62	3.40
(sd)	(.66)	(.88)	(.49)	(.73)
[N]	[44]	[39]	[34]	[42]
Sigf.	$p < .40$		$p < .10$	
Q54 Helpful in dealing with establishments				
Mean	3.24	3.00	3.54	2.92
(sd)	(.90)	(.84)	(.51)	(.84)
[N]	[42]	[38]	[33]	[39]
Sigf.	$p < .25$		$p = < .001$	
Q55 Fair in dealing with establishments				
Mean	3.55	3.42	3.54	3.25
(sd)	(.68)	(.68)	(.51)	(.65)
[N]	[40]	[40]	[33]	[36]
Sigf.	$p < .25$		$p < .025$	

Note: One-tailed significance t-tests for small samples

TABLE 9-J

Victimization by Crimes in the Area

Non-Residential Establishments

Percent Victims in Past Six Months	Northline Program Area Wave 1	Northline Program Area Wave 2	Shady Acres Comparison Area Wave 1	Shady Acres Comparison Area Wave 2
Robbery or Attempted Robbery				
No	80	88	92	93
Yes	20	12	8	7
[N]	[45]	[41]	[39]	[44]
	$p < .50$		$p < 90$	
Burglary or Attempted Burglary				
No	64	63	56	50
Yes	36	37	44	50
[N]	[45]	[41]	[39]	[44]
	$p < .95$		$p < 70$	
Vandalism				
No	64	73	85	80
Yes	36	27	15	20
[N]	[45]	[41]	[39]	[44]
	$p < .70$		$p < 70$	

Note: One-tailed significance t-tests for small samples

APPENDIX K:

THE NEWSLETTER: DESCRIPTION AND SAMPLE COPY

NEWSLETTER DESCRIPTION

Size and Format. The newsletter included four pages, exclusive of crime statistics, which were printed on a single 11" by 14" sheet, which was folded to produce four 7" x 11" pages. There were two columns per page, and a variety of spatial arrangements were used for stories which might occupy one-third or more of a single column or take two columns on the top or bottom half of a page.

The title, "Community Policing Exchange," had a subheading, "Published by the Houston Police Officers Serving your Neighborhood." Print was black on off-white stock. A variety of type sizes and styles were used for story headings. Stories were separated horizontally by lines. The final appearance was a clean attractive one that tried to draw the reader's attention to items the Task Force wanted to emphasize.

Production. The Task Force worked as a group to identify general items of itnerest, sometimes finding them in newsletters from other cities, and writing others from local source materials. Officers Herb Armand, Epperson, Jackson, Kirk and Tomlinson would write the items about their patrol neighborhoods, and these were then edited into a consistent style by Sergeant Fowler, Officer Alan Tomlinson and Ms. Mara English.

Publication Dates. The original timetable for the evaluation of the newsletter called for the first newsletter to be published in June, 1983, with the evaluation coming in January, 1984, after the distribution of six issues. The stasrt-up for the newsletter took much longer than initially scheduled, with the first newsletter being mailed in mid-November, followed by issues in December, Janaury, February and March.

Table 1

Percentage Distribution of Houston Newsletter Content
(Based on Column Inches)

Type of Content	Percent of Content	
Good News (Successful Prevention)	8%	
Crime Prevention Advice		
Personal Crime	8%	
Property Crime	21%	29%
Personal and Property Crime	0%	
Departmental Information		
Related to Fear Reduction	12%	
Not Related to Fear Reduction	16%	21%
Advice or Information		
Related to Crime	16%	
Not Related to Crime	12%	24%
Safety advice	12%	
Encouraging people to get involved	1%	
Offering police services to citizens	0%	
Greetings	4%	
Total*	99%*	

*Does not equal 100% because of rounding.

Table 2

Recorded Crime Presented in Houston Newsletters

Issue	1	2	3	4	5
Date	Nov 1983	Dec 1983	Jan 1984	Feb 1984	March 1984
Period Covered (days)	August (31)	Sept-Oct (61)	Nov-Dec (61)	Jan-Feb 6 (37)	Feb 7-23 (16)
Personal Crimes	5	15	16	1	2
Property Crimes	20	24	29	29	7
Auto Theft	0	4	21	30	15
Total	25	43	66	60	24

Community Policing Exchange

PUBLISHED BY THE HOUSTON POLICE OFFICERS SERVING YOUR NEIGHBORHOOD

H.P.D. reaches out with Community Newsletter

Welcome to the first edition of the Houston Police Department's **COMMUNITY POLICING EXCHANGE.** Please take the time to read the information assembled in this newletter. It's for your benefit. This information has been gathered by police officers working in your neighborhood who want to keep you informed about crime activity occurring in your neighborhood, crime prevention tips, and neighborhood news.

The purpose for providing this type information is to give a clearer understanding of what is going on in your neighborhood. We hope that this information will assist you and your neighbors in deciding if you should become more actively involved in looking out for each other's well being. Remember by ourselves, police can only react to crime, we need an involved citizenry to prevent it.

A community that employs crime prevention techniques, is alert to suspicious behavior and circumstances, and reports this information to the police, will be a far safer place to live than one that does not. Alert and responsive citizens, who are willing to become involved, can maximize the efficiency and effectiveness of the police in preventing crime and apprehending criminals.

Living with success

The most effective action against crime is citizen action. The police, by themselves, can only have limited success in dealing with neighborhood problems that contribute to fear.

We are often unaware of the success stories that happen every day when citizens confront problems in their neighborhoods. Through this newsletter, we will tell you of these successes.

Take a young man living in the Golfcrest neighborhood. He noticed suspicious activity in a nearby backyard and strange comings and goings to the nearby house. He suspected that drug dealing was going on and notified his local beat officer. After investigation, it was found that drugs were being manufactured. Arrests were made and the problem eliminated.

This is but one of the success stories from neighborhoods all over the city. Citizen action can make a difference. Tell us about your success story so we can let others know what has happened. Call our special number or drop us a line. Sergeant Steve Fowler, 221-0711 or Community Policing Exchange, 33 Artesian Street, Houston, Texas 77002. We'll write about these in each issue.

Community Comments

Lee P. Brown, Chief of Police

Policing the community involves selection of options for action in a variety of complex urban situations. The police must select options for action, based on an understanding of community priorities. It is equally important for the police to clearly state those values and beliefs which lay the foundation for priority-setting.

Values are those standards and beliefs which guide the operation of the Police Department. The values set forth the philosophy of policing in Houston and the committments made by the Department to high standards of policing. For values to be meaningful they must be widely circulated so that all members of the community are aware of them. Department values must incorporate and reflect citizen's expectations, desires, and preferences. The community's contributions in expressing their values are subsequently manifested in the Department's administrative policies.

For the Houston Police Department, several values need to be carefully reflected throughout its operations. These values are as follows:

- Police must involve the community in all aspects of policing which directly impacts the quality of community life.
- The Police Department believes that it has a responsibility to react to criminal behavior in a way that emphasizes prevention and that is marked by vigorous law enforcement.
- The Police Department believes that it must deliver its services in a manner that preserves and advances democratic values.
- The Department is committed to delivering police services in a manner which will best reinforce the strengths of the city's neighborhoods.
- The Department is committed to allowing public input in the development of its policies which directly impacts neighborhood life.
- The Department is committed to understanding neighborhood crime problems from the community's perspective and collaborate with the community by developing strategies that deal with neighborhood crime.

Bicycle safety tips

Nearly half the entire population of the United States rides bicycles, whether for recreation, transportation, or keeping in shape. There are as many adult bike riders as children. Obeying traffic laws and safety rules will make bicycling safer, more enjoyable, and will prevent accidents.

- Always ride in the same direction as other traffic. Stay close to the right edge of the roadway, except when passing or making a left turn. Be careful when passing a standing vehicle or one proceeding in the same direction.
- Whenever a usable path for bicycles has been provided, bicycles must use the path and not the roadway.
- Bicycles should not be used to carry more persons at one time than the number for which it is designed and equipped, except that an adult may carry a child securely attached to his person in a backpack or sling.
- Use caution at intersections and railroad crossings.
- Keep at least one hand on the handlebars at all times. If you plan to carry books, packages, or other items, you should add a front or rear carrier to your bicycle. If you carry items, you must drive with both hands on the handlebars.
- A bike flag and a rearview mirror are added safety precautions.
- When operating a bicycle, you must never attach yourself or your bicycle to any vehicle on the roadway.
- You must always stop before reaching a school bus that has stopped to load or unload passengers.
- Weaving from one lane to another is both illegal and dangerous.
- Don't make a U-turn without first looking carefully to see if it is safe to do so. On some streets U-turns are not permitted.
- You must never drive at a speed faster than that which is reasonable and safe. Use hand signals.
- Wear light-colored clothing or apply reflective tape to your clothing or the bicycle handlebars, frame or fenders. It will help you to be seen and may keep you from getting hit. Some riders use arm and leg lights.
- Watch for people getting into and out of parked cars, and for cars pulling into traffic from a curb or driveway.

Parents should be aware of the responsibilities that they must assume when their children ride bicycles. These responsibilities range all the way from selection of a proper bicycle for the child to seeing that the child learns and obeys all the traffic laws.

Be alert to suspicious circumstances

Anything that seems even slightly out of place for your area, or for the time of day, may mean criminal activity. In your neighborhood or business complex, you are the expert. You know if there is someone in the area that doesn't belong.

Some of the most obvious things to watch for and report:

- A stranger entering your neighbor's house when it is unoccupied may be a burglar.
- A scream heard anywhere may mean robbery or rape.
- Offers of merchandise at ridiculously low prices could mean stolen property.
- Anyone removing accessories, license plates, or gasoline from a vehicle should be reported.
- Anyone peering into parked cars may be looking for a car to steal or for valuables left displayed in the car.
- The sound of breaking glass or loud explosive noises could mean an accident, housebreaking, or vandalizing.
- Persons loitering around schools, parks, secluded areas, or in the neighborhoods could be sex offenders.
- A person running, especially if carrying something of value, could be leaving the scene of a crime.
- The abandoned vehicle parked on your block may be a stolen car.
- Persons being forced into vehicles, especially if juveniles or female, may mean a possible kidnapping.
- Apparent business tranactions conducted from a vehicle, especially around schools or parks, with juveniles involved, could mean possible drug sales.

H.P.D. community program implemented

Northline Park area...

As residents of the Northline Park Area, you are probably concerned with making your neighborhood a safer place to live. The Police Department is aware that every citizen in Houston would like to feel a sense of safety in their neighborhood. With this thought in mind, the Department has devised a police strategy that will soon be implemented in the Northline Park Area. The Department will be opening a Police Community Station in your area that will be staffed by two Police Officers, two Community Service Officers, and one Civilian (who will serve as an aide to the police officers and help coordinate activities out of the Community Station). The station will be located at 7208 Nordling in the Fontana Shopping center across from Durkee Elementary School.

We would like to introduce some of the police officers that work in the Northline Park area. During the day, Officer C.M. Campbell and Officer D.D. Roberts will be working your area. During the evening hours Officer T.R. Cunningham, C. Daniels, and G. Schaull will be working your area along with the Community Station Officers, Robin Kirk and Mike Mikeska. The night shift Officers working the area are R.N. Holley, R.W. Breeding and R.R. Hopkins.

If anyone has any questions about the Community Station, or would like to volunteer to work in the station, please contact Officer Robin Kirk or Mike Mikeska at 691-CARE. An open house at the Community Station is slated for November 13, 1983.

Protecting a precious resource

The child trusts him. He buys the child candy, takes the child to movies, gives the child his time when no one else will. He is the child's special friend.

The child does not want to lose his friend. The child will do anything to keep him. Besides, he is a grown-up who knows what is right and what is wrong.

Child pornographers can destroy precious moments of childhood. When a camera is held by a pornographer, the child will be haunted by the experience for the remainder of his life.

According to the Texas Department of Human Resources, studies show that a majority of those who are sexually abused as children will become child molesters as adults. The wreckage of the life of a sexually abused child is devastating and society pays the price.

Anyone from a stranger to a close friend or family member can be a sexual abuser of children. The Crime Stoppers Advisory Council for the month of November is concentrating its efforts on the prevention and apprehension of child pornographers in Texas.

Parents, family members and friends are encouraged to become informed on ways to prevent children from becoming involved with the child pornographers and sexual abusers, and learn to recognize the symptoms of a child under a pornographer's influence.

Persons with information on child pornographers are asked to call their local Crime Stoppers program or the toll-free Texas Crime Stopper's hotline at 1-800-252-TIPS anytime, day or night.

Improving your neighborhood

The main purpose of City and governmental agencies is to serve the citizens. Those who work in agencies are willing and well prepared to help. A valuable resource to those who are working toward neighborhood improvement is the information and assistance that these bodies can provide.

Listed below are some of the City departments that are most directly involved in neighborhood - related activities. You will notice that some of these departments also provide speakers on topics of neighborhood interest.

The **Neighborhood Revitalization Division** of the City Planning Department assists neighborhood groups in efforts to improve their neighborhoods. The Division provides data and information to groups: develops information sharing workshops; maintains a resource file of persons, agencies, and programs available to assist groups; and helps groups to develop comprehensive plans and strategies for improving their neighborhoods.

The **Mayor's Citizen's Assistance Office** located in City Hall, distributes a booklet listing City services and information about each service. This information makes it easier for you to request these services by phone. The Mayor's Citizen's Assistance Office refers requests for service to the proper City division or department for you. The Mayor's Citizen's Assistance Office, after referring your complaint to the appropriate City department, will contact you later to let you know what action has been taken. It also arranges for speakers for community groups.

The Community Services Division of the **Police Department** provides speakers to talk on subjects related to police-community matters.

The Public Education Section of the **Fire Department** offers a program that includes films, slides, lectures, and demonstrations on life and fire safety. The Special Services Section offers fire safety and home inspections upon request.

The **Public Works Department** provides for and maintains roads, drainage, sewer disposal and water for the City of Houston as some of its duties. Additional functions include the overseeing of all construction on City properties and the Street Repair Division maintains city streets and cleans and recuts roadside ditches and mows street rights-of-way. Repairs for sewer lines are handled by the Water Quality Section.

The **Traffic and Transportation Department** installs and maintains traffic signals, traffic signs and street signs throughout the City. Blind intersections, signs and signals in need of maintenance and requests for new traffic controls should be reported to them.

The resources listed are just sampling of the resources available to neighborhood groups. In your search for assistance you are certain to uncover other resources as you go along. Special thanks to the Neighborhood Revitalization Division of City Planning Department for providing this information.

Citizens fight back

The key to minimizing crime in any community is citizen involvement. A community that employs crime prevention techniques, is alert to suspicious behavior and circumstances, and reports this information to the police, will be a far safer place to live than one that doesn't. Alert and responsive citizens, who are willing to become involved, can maximize the efficiency and effectiveness of the police in preventing crime and apprehending offenders.

In July of 1983, officers received a call to an apartment complex in your area. The complainant stated to the officers that he heard his front patio door open, looked out of his window, and saw an unknown person stealing property off his patio. The suspect then proceeded to another apartment and was attempting to commit the same offense. The complainant at this time stopped the suspect, preventing him from taking any property belonging to his neighbor. The involvement of a concerned citizen prevented a neighbor from becoming a victim and losing his personal belongings.

The Police Department recognizes that there are other incidents where a citizen has performed an act which was a deterrent to crime. If you know of any instances where the act of a citizen's involvement deterred a criminal act, please contact us and the article will be published in this Newsletter. We are asking for your assistance and support in acquiring this information for these success stories. Our office is located at 33 Artesian, Planning and Research Division, telephone number 221-0711, c/o Sergeant Steve Fowler.

Crime prevention tips

After reviewing the crime reports for your area, we were able to determine which crime prevention tips would be most helpful to you as residents and business owners. A number of thefts occurring in your area involve "Pigeon Dropping." This type of theft is often performed by a "Con Artist," a smooth-talking criminal whose aim is to separate you from your money through trickery and deceit. The Pigeon Drop is an old and well-known confidence game, perpetrated mainly on elderly, trusting and unsuspecting citizens. They may stop you on the street, call you on the phone, or ring your door bell. They may pretend to be repairmen, building inspectors, bank examiners or any other identity. There are many different kinds of confidence games; they can occur at any time of the year and can be avoided if the intended victim (pigeon) recognizes the confidence game and refused to participate.

- Beware of friendly strangers offering goods or services at low rates.
- Be suspicious of telephone calls from persons claiming to be bank officials who ask you to withdraw money from your account for any reason. Legitimate banks communicate in writing on business transactions.

Protect your car

A million cars were stolen in the United States last year. Millions more were burglarized or vandalized. Before you become one of the statistics, learn how to fight back.

According to the FBI, most cars are stolen by "amateurs."–And they are stolen because they are easy to steal!

Your first defense against auto theft is to lock your car and protect your keys. Did you know that most cars are stolen because they were left unlocked or the keys were still in the ignition?

Although you can't make your car impossible to steal (a professional thief can get it if he really wants it), you can make it tough.

Take these tips:

- Store spare keys in your wallet, not in the car.
- Replace standard door lock buttons with the slim, tapered kind.
- In the driveway, park your car with the front toward the street, so anyone tampering with the engine can be seen more easily.

OFFICE OF THE CHIEF OF POLICE
61 RIESNER STREET
HOUSTON, TEXAS 77002

APPENDIX L:

MISSING DATA ANALYSIS

Table L

A Comparison of Including All Cases Versus
Excluding Missing Value Cases

b (and sigf.) For Area-Treatment Interaction

	Signs of Crime				Citizen Contact Patrol			
	All Cases		Exclude Missing Value		All Cases		Exclude Missing Value	
	b	Sigf.	b	Sigf.	b	Sigf.	b	Sigf.
Fear of Personal Victimization in Area	.03	.61	-.01	.91	-.12	.02	-.12	.03
Perceived Area Personal Crime Problems	.15	.01+	.12	.05	-.14	.01	-.14	.01
Worry About Property Crime Victimization in Area	-.11	.08	-.12	.09	-.11	.10	-.11	.10
Perceived Area Property Crime Problems	-.04	.47	-.04	.51	-.21	.01+	-.21	.01
Perceived Area Social Disorder Problems	-.06	.22	-.05	.35	-.15	.01+	-.14	.01
Satisfaction with Area	-.17	.01+	-.20	.01+	.13	.02	.11	.05
Evaluation of Police Service	.00	.96	.01	.87	.09	.13	.06	.32
Police Aggressiveness	-.06	.92	-.04	.09	-.04	.04	-.03	.13
Perceived Area Physical Deterioration Problems	.06	.27	.04	.51	-.09	-.08	-.10	.06
Defensive Behaviors to Avoid Personal Crime	-.02	.48	-.04	.20	-.03	.32	-.04	.26
Household Crime Prevention Measures	.52	.01+	.45	.01+	-.19	.10	-.29	.02
Total Victimization	.08	.08	.07	.19	-.15	.01+	-.15	.01+
Property Victimization	.04	.35	.05	.32	-.15	.01+	-.16	.01+
Personal Victimization	.08	.04	.07	.10	-.06	.08	-.06	.11
[N]	[1711]		[1457]		[1893]		[1718]	

Note: Controls for 18 covariates; panel analysis also controls for pretest and pre-intervention victimization. Missing data coded to medians and mid-range values.

APPENDIX M:

NON-RESIDENTIAL ESTABLISHMENTS IN THE PROGRAM AND COMPARISON AREAS, WAVE 2

APPENDIX M-1

NON-RSIDENTIAL ESTABLISHMENTS IN THE PROGRAM AREA, WAVE 2

The 41 establishments in the non-residential sample in the program area including the following:

American Legion Post	1
Appliance sales/repair	1
Automobile/truck repair	3
Bar/lounge	1
Beauty/barber shop	2
CPA firm	1
Check cashing service	1
Church	1
Dairy	1
Dental laboratory	1
Grocery store	5
Hardware/lumber	2
Hospital	1
Laundry	1
Liquor store	1
Machine shop	1
Moving and storage	1
Paint and dry wall	1
Plumbing wholesaler	1
Plastics manufacturer	1
Portable buildings	1
Refuse equipment, sales and service	1
Restaurant	1
Restaurant, fast food	1
Service station	3
Used cars	1
Used tires	1
Warehouse (mini) storage	1
Welding shop	1

APPENDIX M-2

NON-RESIDENTIAL ESTABLISHMENTS IN THE COMPARISON AREA, WAVE 2

The 44 establishments in the non-residential sample in the comparison area included the following:

Automotive equipment warehouse	1
Automobile/truck repair	5
Carpet cleaners	1
Church	1
Computing service	1
Construction contracting	4
Electrical contracting	1
Engravers/printers	2
Florist	1
Furniture sales	1
Graphic arts equipment	1
Grocery store	1
Heating and air conditioning sales and service	1
Industrial field services	1
Janitorial service	1
Landscape architect	1
Laundry self-service	2
Lubrication equipment	1
Machine shop	1
Mobile home sales	1
Plumbing contractors	2
Property Management	1
Retail sales (general household merchandise)	1
Restaurant	1
Saw sharpening	1
Service station	2
Sheet metal construction	1
Steel storage equipment	1
Tool and die	1
Truck rental	1
Union office	1
Used car sales	1